

THE ENRON COLLAPSE

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**Creative Accounting, Wrong Economics
or Criminal Acts?**

**A LOOK INTO THE ROOT CAUSES OF THE
LARGEST
BANKRUPTCY IN U.S. HISTORY**

Drs. Dirk J. Barreveld

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The ENRON Collapse
Creative Accounting, Wrong Economics or Criminal Acts?

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Preface

The downfall of ENRON is without any doubt one of the most shocking affairs in the U.S. business world over the last years. ENRON, a company admired for its innovation, its aggressive market approach and its phenomenal growth rate went down the drain within a matter of days. How could such a thing happen? Why did former vice Chairman J. Clifford Baxter commit suicide? Why was massive shredding of company documents necessary? Why is former chairman Kenneth Lay allegedly selling off all his properties?

For ENRON the sky was the limit. Only a few months earlier it announced a growth in its revenue from \$ 40 billion in 1999 to no less than \$ 100 billion in the year 2000. The plans unfolded in its annual report over the year 2000 promised even more: *"Our performance and capabilities cannot be compared to a traditional energy peer group. Our results put us in the top tier of the world's corporations. We have a proven business concept that is eminently scalable in our existing businesses and adaptable enough to extend to new markets."* How hollow do these words sound only a few months after they were printed.

ENRON's auditors, Arthur Andersen, stated at the end of ENRON's annual report over the year 2000: *"In our opinion, management's assertion that the system of internal control of ENRON Corp. and its subsidiaries as of September 31, 2000, 1999 and 1998 was adequate to provide reasonable assurance as to the reliability of financial statements and the protection of assets from unauthorized acquisition, use or disposition is fairly stated, in all material respects, based upon current standards of control criteria."*

Did Arthur Andersen know what happened? It is difficult to criticize a company that makes huge profits, that stands in the limelight. As auditor you are careful not to lose such a client, that would be bad publicity. Especially in American business circles companies that make huge profits tend to be right, whatever they do. Profit is the name of the game. The shareholder is the champion of the ring. Keep him happy at all times.

The downfall of ENRON highlights a number of simmering problems under the surface of the American business world, such as how wise it is to invest pension funds in company stock. Another issue is the lack of safety nets for those who lost all their investments, especially the elderly for whom it might be impossible to find a new job, soon they will join the millions of poor Americans without a house and without medical insurance, living on hand-outs from charity organizations. A happening such as ENRON's downfall is completely beyond their control. Is it fair to punish them like that?

It is certainly not farfetched to assume that ENRON is not the only company that uses 'innovative' or 'creative' accounting systems in the American business world. How many more are there? Stocks play an extremely important role in American society, what if more ENRON's are found? Are American stocks overvalued? Japan teaches us what happens if stocks are overvalued. The Tokyo Stock Exchange lost in the last fourteen years 75 percent of its value. It plunged the Japanese economy in a never-ending crisis, which is still not solved. Its overvalued stocks were purchased with money borrowed with overvalued real estate as collateral. The situation has put the Japanese banking system in a position of technical bankruptcy and slowly strangles the Japanese business society to a grinding halt.

In other words the ENRON scandal opens a possibility to correct what is wrong and to prevent worse. But is America going to listen? Add to this the huge outstanding credits as a result of over-relying on credit cards and the huge negative trade balance and it might be clear

that the United States might be in for rough financial years in the near future.

This book deals with the sudden demise of ENRON and the possible consequences for the American society. This book does *not* deal with the question who is to blame for the debacle, that is a matter for the courts and is something that might take many years to solve. I have tried not merely to describe what went on in the Enron collapse, but also to explain how and why things happen. Descriptive detail and much factual information have been culled from newspapers, journals, books, websites and webpages. Although there are no acknowledgements in the text, this book could never have been written but for the superb reporting of the Enron issue in such papers as *New York Times*, the *Washington Post*, the *Financial Times*, the *Wall Street Journal*, *The Economist*, *Newsweek*, *Times*, *Forbes* and *Fortune* magazines.

Drs. Dirk J. Barreveld
Cebu, Philippines
March, 2002

INTRODUCTION

The difference between dreams and reality are in the case of ENRON quite clear if one compares the present situation with what ENRON's top-management wrote to its shareholders on February 23, 2001, the date on which the company's annual report over the year 2000 was published. Assuming that Chairman Kenneth L. Lay and Chief Executive Officer Jeffrey K. Skilling were *not* dreaming they were way off knowing what really happened in their company. They wrote:

"TO OUR SHAREHOLDERS

Enron's performance in 2000 was a success by any measure, as we continued to

outdistance the competition

and solidify our leadership in each of our major businesses. In our largest business, wholesale services, we experienced an enormous increase of 59 percent in physical energy deliveries. Our retail energy business achieved its highest level of total contract value. Our newest business, broadband services, significantly accelerated transaction activity, and our oldest business, the interstate pipelines, registered increased earnings. The company's net income reached a record \$ 1.3 billion in 2000.

Enron has built unique and strong businesses that have tremendous opportunities for growth. These businesses—wholesale services, retail energy services, broadband services and transportation services—can be

significantly expanded within their very large existing markets and extended to new markets with enormous growth potential. At a minimum, we see our market opportunities company-wide tripling over the next five years.

Enron is laser-focused on earnings per share and we expect to continue strong earnings performance. We will leverage our extensive business networks, market knowledge and logistical expertise to produce high-value bundled products for an increasing number of global customers.

Competitive Advantages

Our targeted markets are very large and are undergoing fundamental changes. Energy deregulation and liberalization continue, and customers are driving demand for reliable delivery of energy at predictable prices. Many markets are experiencing tighter supply, higher prices and increased volatility, and there is increasing interdependence within regions and across commodities. Similarly, the broadband industry faces issues of overcapacity and capital constraint even as demand increases for faster, flexible and more reliable connectivity. Enron is in a unique position to provide the products and services needed in these environments. Our size, experience and skills give us enormous competitive advantages. We have:

- Robust networks of strategic assets that we own or have contractual access to, which give us greater flexibility and speed to reliably deliver widespread logistical solutions.
- Unparalleled liquidity and market-making abilities that result in price and service advantages.
- Risk management skills that enable us to offer reliable prices as well as reliable delivery. Innovative technology such as EnronOnline to deliver products and services easily at the lowest possible cost.

These capabilities enable us to provide high-value products and services other wholesale service providers cannot. We can take the physical components and repackage them to suit the specific needs of customers. We treat term, price and delivery as variables that are blended into a single, comprehensive solution. Our technology and fulfillment systems ensure execution. In current market environments, these abilities make Enron the right company with the right model at the right time.

The Astonishing Success of EnronOnline

In late 1999 we extended our successful business model to a web-based system, EnronOnline. EnronOnline has broadened our market reach, accelerated our business activity and enabled us to scale our business beyond our own expectations. By the end of 2000, EnronOnline had executed 548,000 transactions with a notional value of \$336 billion, and is now the world's largest web-based eCommerce system.

With EnronOnline, we are reaching a greater number of customers more quickly and at a lower cost than ever. It's a great new business generator, attracting users who are drawn by the site's ease of use, transparent, firm prices and the fact that they are transacting directly with Enron. In 2000 our total physical volumes increased significantly as a direct result of EnronOnline.

EnronOnline has enabled us to scale quickly, soundly and economically. Since its introduction, EnronOnline has expanded to include more than 1,200 of our products. It also has streamlined our back-office processes, making our entire operation more efficient. It has reduced our overall transaction costs by 75 percent and increased the productivity of our commercial team by five-fold on average. We are not sitting still with this important new business tool—in September 2000 we released EnronOnline 2.0, which added even more customer functionality and customization features and attracted more customers.

Enron Wholesale Services

The wholesale services business delivered record physical volumes of 51.7 trillion British thermal units equivalent per day (Tbtue/d) in 2000, compared to 32.4 Tbtue/d in 1999. As a result wholesale services income before interest, minority interests and taxes (IBIT) increased 72 percent to \$2.3 billion. Over the past five years, as physical volumes have increased, wholesale IBIT has grown at a compounded average annual rate of 48 percent, and we have had 20 consecutive quarters of year-over-year growth. We have established core wholesale businesses in both natural gas and power in North America and Europe, where we are market leaders.

In North America, we deliver almost double the amount of natural gas and electricity than the second tier of competitors. Our network of 2,500 delivery points provides price advantages, flexibility and speed-to-market in both natural gas and power. Natural gas, our most developed business, has seen substantial volume growth throughout the United States and Canada. In 2000 our physical natural gas volumes were up 77 percent to 24.7 billion cubic feet per day (Bcf/d). Physical power volumes were up 52 percent to 579 million megawatt-hours (MWh).

We are building a similar, larger network in Europe. In 2000 we marketed 3.6 Bcf/d of natural gas and 53 million MWh in this market, a vast increase over 1999. As markets open, we tenaciously pursue the difficult, early deals that break ground for subsequent business. We are the only pan-European player, and we are optimizing our advantage to conduct cross-border transactions.

We are extending Enron's proven business approach to other markets, and integrating EnronOnline into all our businesses as an accelerator. Our growth rates are rising in areas such as metals, forest products, weather derivatives and coal. We expect these businesses to contribute to earnings even more significantly in 2001.

Enron Energy Services

Our retail unit is a tremendous business that experienced a break-out year in 2000. We signed contracts with a total value of \$16.1 billion for customers' future energy expenditures, almost double the \$8.5 billion signed in 1999. We recorded increasing positive earnings in all four quarters in 2000, and the business generated \$103 million of recurring IBIT. Energy and facilities management outsourcing is now a proven concept, and we have established a profitable deal flow, which includes extensions of contracts by many existing customers. Price volatility in energy markets has drawn fresh attention to our capabilities, increasing demand for our services. No other provider has the skills, experience, depth and versatility to offer both energy commodity and price risk management services, as well as energy asset management and capital solutions. In 2001 we expect to close approximately \$30 billion in new total contract value, including business from our newest market, Europe.

Enron Broadband Services

We have created a new market for bandwidth intermediation with Enron Broadband Services. In 2000 we completed 321 transactions with 45 counterparties. We are expanding our broadband intermediation capabilities to include a broad range of network services, such as dark fiber, circuits, Internet Protocol service and data storage. Our opportunities are increasing commensurately.

Part of the value we bring to the broadband field is network connectivity—providing the switches, the network intelligence and the intermediation skills to enable the efficient exchange of capacity between independent networks. We operate 25 pooling points to connect independent third-parties—18 in the United States, six in Europe and one in Japan. At least 10 more are scheduled to be completed in 2001.

Enron also has developed a compelling commercial model to deliver premium content-on-demand services via the Enron Intelligent Network. Content providers want to extend their established businesses

and offer viewers at home an additional convenient way to choose and receive entertainment. Enron provides the wholesale logistical services that bridge the gap between content providers and last-mile distributors. Full-length movies-on-demand service has been successfully tested in four U.S. metropolitan markets.

Enron Transportation Services

The new name of our gas pipeline group accurately reflects a cultural shift to add more innovative customer services to our efficient pipeline operation. To serve our customers more effectively, we are increasingly incorporating the web into those relationships. Customers can go online to schedule nominations and handle inquiries, and they can transact for available capacity on EnronOnline. The pipelines continued to provide strong earnings and cash flow in 2000. Demand for natural gas is at a high in the United States, and we're adding capacity to take advantage of expansion opportunities in all markets. New capacity is supported by long-term contracts.

Strong Returns

Enron is increasing earnings per share and continuing our strong returns to shareholders. Recurring earnings per share have increased steadily since 1997 and we're up 2 percent in 2000. The company's total return to shareholders was 89 percent in 2000, compared with a negative 9 percent returned by the S&P 500. The 10-year return to Enron shareholders was 1,415 percent compared with 383 percent for the S&P 500.

Enron hardly resembles the company we were in the early days. During our 15-year history, we have stretched ourselves beyond our own expectations. We have metamorphosed from an asset-based pipeline and power generating company to a marketing and logistics company whose biggest assets are its well-established business approach and its innovative people.

Our performance and capabilities cannot be compared to a traditional energy peer group. Our results put us in the top tier of the world's corporations. We have a proven business concept that is eminently scalable in our existing businesses and adaptable enough to extend to new markets.

As energy markets continue their transformation, and non-energy markets develop, we are poised to capture a good share of the enormous opportunities they represent. We believe wholesale gas and power in North America, Europe and Japan will grow from a \$660 billion market today to a \$1.7 trillion market over the next several years. Retail energy services in the United States and Europe have the potential to grow from \$180 billion today to \$765 billion in the not-so-distant future. Broadband's prospective global growth is huge—it should increase from just over \$17 billion today to \$1.4 trillion within five years.

Taken together, these markets present a \$3.9 trillion opportunity for Enron, and we have just scratched the surface. Add to that that the other big markets we are pursuing—forest products, metals, steel, coal and air-emission credits—and the opportunity rises by \$830 billion to reach nearly \$4.7 trillion.

Our talented people, global presence, financial strength and massive market knowledge have created our sustainable and unique businesses. EnronOnline will accelerate their growth. We plan to leverage all of these competitive advantages to create significant value for our shareholders.

Kenneth L. Lay
Chairman

Jeffrey K. Skilling
President and
Chief Executive Officer"

SOME REMARKS

Enron's market analysis, in combination with its performance over the last years, shows clearly that it was active in an extremely promising field. The company's position relative to its competitors was such that it had a substantial lead in its markets. Add to this the huge increases in revenue from 1999 to 2000 and it is clear that Enron's problems were certainly not in the field of prices. It could easily have raised its prices for its services somewhat in order to improve its financial situation. In other words basically there was no reason to resort to 'creative' accounting to save the company. Enron's management clearly lost control over its company. Such a conclusion is no surprise, it happens all the time that fast growing businesses surpass the maximum span of control of its founding managers.

We will first take a look at what kind of company Enron really was. Next we will discuss the process of the downfall, what happened in the course of the year 2001. In chapter 3 we will look at what caused the company to collapse. In chapter 4 we will discuss Enron's behavior in the political field. As we know now Enron became a huge contributor to political parties and candidates. What did Enron want in return? Chapter 5 is dedicated to the famous Powers Report. The last chapters will be dedicated to the fall-out of the Enron collapse, such as possible effects on stock-supported pension plans and the ins and outs of a society depending to a great extent on credits and stocks. Is there any link with the Japanese situation where overvalued real estate was used as collateral for overvalued stocks? A situation that has eroded 75 percent of Japanese stock values over the last fourteen years and has put the Japanese banks in a position of technical bankruptcy and slowly strangles the Japanese economy into a grinding halt.

1

THE 7TH LARGEST US COMPANY

Kenneth L. Lay created Enron in July 1985 as the result of a merger between Houston Natural Gas and InterNorth, a natural gas company based in Omaha, Nebraska. The new company, an interstate and intrastate natural gas pipeline company, could avail over 37,000 miles of pipe. Right from the start the new company focused on innovations in the energy market. Soon the company's business became to create value and opportunities for third parties. This was done by combining financial resources, access to physical commodities, and market knowledge to create innovative solutions to challenging industrial problems. Initially the company focused on natural gas and electricity, but later ventured into retail energy and bandwidth products.

It is difficult to define Enron in one sentence but the closest might be: *it made commodity markets so that it could deliver physical commodities to its customers at a predictable price.* It is difficult, too, to talk about Enron without using the word 'innovative'. Most of the things the company did venture into had never been done before. The company was a staunch supporter of open, competitive wholesale markets, and it played a leading role in creating them. Enron initiated the wholesale natural gas and electricity markets in the United States, and it helped to build similar markets in Europe and elsewhere. Recently it embarked on making markets in other industries that need a more efficient way to deliver commodities and manage risk, such as metals, forest products, bandwidth capacity and steel. Its passion had enabled it

to manage even weather risk. Fortune surveys have named Enron the most innovative company in America for six years in a row.

Enron's four business units—Wholesale Services, Energy Services, Broadband Services and Transportation Services—offered a wide range of physical, transportation, financial and technical solutions to thousands of customers around the world. The following details of Enron's activities are based on the company's annual report over the year 2000, its expectations for the near future and its website. At the time of publishing its last annual report the company was full of optimism, nothing pointed to troubles that, only a few months later, would end in the largest bankruptcy in American history. Everything was still bright, the company's market opportunities were endless, sky rocketing profits were expected, and shareholders could not dream about a better investment than in Enron stocks.

ENRON WHOLESALE SERVICES

Wholesale services were Enron's largest and fastest growing business, with sustainable growth opportunities in each of its markets. In 2000 income before interest, minority interests and taxes (IBIT) rose 72 percent to \$3.2 billion, with record physical energy volumes of 5.7 trillion British thermal units equivalent per day (Tbtue/d)—a 59 percent increase over 1999.

For the past five years, wholesale services earnings had grown at an average compounded growth rate of 48 percent annually, and Enron's position grew stronger. Customers transacted with Enron because it offered products and services few others could match. With its flexible networks and unique capabilities in risk management and finance, the company delivered the widest range of reliable logistical solutions at predictable prices.

Enron delivered more than two times the natural gas and power volumes, as did its nearest energy-marketing competitor. Entering markets as early as possible in combination with liquidity and price transparency have been important factors in determining Enron's posi-

tion in the market. Breakthrough technology applications, such as EnronOnline, have accelerated the company's market penetration. Enron's approach had made the company the most successful energy marketer in the two largest deregulating energy markets, North America and Europe. The company expected to achieve similar leadership positions as it extended its business approach to new regions, products and industries.

Enron's business has especially flourished with EnronOnline. Launched in November 1999, EnronOnline handled 548,000 transactions in 2000 with a gross notional value of \$336 billion. EnronOnline was unquestionably the largest web-based eCommerce site in the world and dwarfed all other energy marketing web sites combined. By the fourth quarter of 2000, it accounted for almost half of Enron's transactions over all business units. EnronOnline had pushed productivity through the roof: Transactions per commercial person rose to 3,084 in 2000 from 672 in 1999. EnronOnline Version 2.0, launched in September 2000, had attracted even more users.

Enron North America

In North America, Enron's physical natural gas volumes increased 77 percent to 24.7 billion cubic feet per day (Bcf/d) in 2000 from 13.9 Bcf/d in 1999. Power deliveries increased 52 percent to 579 million megawatt-hours (MWh) from 381 million MWh the year before.

EnronOnline has been a runaway success in North America. It accounted for 74 percent of North American volume transacted in 2000, and created liquidity on a scale never seen before. It is a dynamic business accelerator: It took nearly a decade for Enron's daily gas transactions to reach 13.9 Bcf in 1999. Just 12 months later, EnronOnline had helped to practically double daily transactions to 24.7 Bcf.

EnronOnline magnified the success of Enron's existing business, which springs from the scale and scope of its established networks. Enron touched more parts of North America's energy system than any other merchant does, with access to upwards of 2,500 distinct delivery

points each day. The widespread delivery options and possibilities of Enron's networks give it a price and service advantage. The networks and presence in nationwide energy markets also enabled it to capture and distribute massive amounts of information about real-time market supply and demand, grid constraints and bottlenecks. When the market moves, Enron was able to conduct business while competitors were still fact-finding.

Enron's people also made a difference. The company was able to attract the best and the brightest and placed them in an entrepreneurial atmosphere in which they could thrive. With its intellectual capital, the company developed premium high-margin structured products that drew on its liquidity and market knowledge. A good example was the gas-marketing-services hub in Chicago, which was launched, with People's Energy in March 2000. Known as Enovate, this venture optimized People's 30 Bcf a year of Chicago-area storage capacity and related transportation. It played a role in increasing Enron's gas volumes in the central United States by 156 percent, the largest increase in the company's 2000 North American physical volumes.

Enron continuously assessed the necessity of adding or owning assets in a region. Sometimes it was less expensive to own an asset than to replicate the asset in the market through contracting and market-making. Enron developed generation plants to sell merchant power to high-demand markets, including proposed facilities in California, Florida, Texas, Louisiana and Georgia. But as liquidity increases, asset ownership may no longer be necessary. The company planned to sell Houston Pipe Line Company, and Louisiana Resources Company now held by Bridgeline Holdings, L.P., and a joint venture in which Enron retained an interest. Additionally, in the second quarter of 2001 Enron expected to close the sale of five of the six electricity peaking generation units in operation. The result is the same earnings power with less invested capital.

Mexico's move toward liberalizing its energy markets should gain intensity and speed with its new government. Increased cross-border

electricity transactions between Mexico and the United States seem inevitable. Enron's activities in Mexico seek to optimize both the Mexican electricity market and cross-border activity between the two countries.

Enron also was active in South America, where it owned and developed assets to help create an energy network.

Enron Europe

Enron was rapidly extending its marketing approach into the deregulating European markets, focusing on the U.K., the Continent and the Nordic region. The Continent is still in the early stages of liberalization. Although the European Union has mandated liberalization of the power and natural gas markets, each country is responding at its own pace. The velocity of transactions is rising on the Continent, however, and Enron expected to raise the level of liquidity to make the markets work.

The company's business throughout Europe was growing rapidly. Natural gas and power volumes more than doubled to 10.3 trillion British thermal units equivalent per day (Tbtue/d) in 2000 from 4.1 Tbtue/d in 1999. Enron enjoyed several competitive advantages in Europe: The company was the only pan-European player; it had a proven business strategy; it entered the market early to build a presence; and it had attracted a talented and skilled local work force.

Enron's cross-border capabilities were becoming increasingly important as markets interconnected. U.K. gas could now be transported to Belgium, and subsequently to the rest of the Continent, giving the company the opportunity to develop innovative transactions on both sides of the border. The resulting increase in price volatility had nearly doubled U. K. gas prices, which, along with more volatile electricity prices ahead, had significantly improved demand for the U.K. risk management products Enron offered, both now and over the long term.

Just as in North America, EnronOnline was increasing Enron's reach and volumes in Europe and was a prime driver of liquidity. Its simple contracts, multi-currency capabilities, transparent and competitive prices and easy accessibility had won EnronOnline rapid acceptance. In the U. K., power and gas volumes more than doubled, with power rising to 113 million MWh in 2000, and gas volumes climbing 119 percent to reach 3.2 Bcf/d. Several market factors were likely to create more business for the company. The U.K.'s New Electricity Trading Agreements, which replaced the existing U.K. power pool, were scheduled to be implemented by the second quarter of 2001. The agreements would result in increased price volatility, and Enron was well-positioned to help customers manage this risk. Additionally, lower power prices were shrinking profit margins for U.K. merchant power plants, which increasingly needed to turn to market intermediaries such as Enron to hedge their fuel and power prices.

On the Continent, Enron's power volumes increased to 50 million MWh in 2000 from 7 million MWh in 1999. The company was transacting at all major country interconnections, benefiting from cross-border opportunities. The company closed its first-ever transaction in France and was an active player in Germany and Switzerland. Enron was beginning to partner with utilities to offer comprehensive portfolio management services, such as its agreement to purchase and distribute power jointly with Swiss Citypower AG, which controls 19 percent of the Swiss electricity market.

In Spain, electricity demand is growing faster than anywhere else in Europe, and there are limited import and export capabilities. Enron was responding to this opportunity by developing a 1,200-megawatt plant in Arcos, south of Seville, that should close financing in 2001.

Continental gas liquidity is just starting to increase. The company's volumes grew to 472 million cubic feet per day (MMcf/d) in 2000 from 53 MMcf/d in 1999. While the market was in its early stages, Enron had managed to increase weekly transactions from about 5 to 100 over the course of a year. In October Enron initiated the first gas

supply deal in Germany to the local utilities of Heidelberg, Tuebingen and Bensheim. The company was also delivering natural gas to some large users in the Netherlands and France.

Enron continued to set records in the Nordic region, where it was the largest power marketer. Electricity volumes increased nearly 150 percent to reach 77 million MWh in 2000 from 31 million MWh in 1999. Enron's Oslo office was the base for its European weather risk management business.

As more Nordic companies outsource energy supply and management, Enron's products and services—including advanced technology applications—were eagerly sought. In December Enron entered into a two-year portfolio management agreement with UPM-Kymmene Corp., one of the world's largest forest products companies. Enron intended to assist UPM-Kymmene in optimizing its Nordic power portfolio of approximately 14 terawatt hours.

Enron Japan

Enron Japan formally opened its Tokyo office in October 2000. Japan represents an enormous opportunity: its electricity rates are the highest in the world, and electricity consumption is second only to the United States. The company has attracted top talent to develop wholesale and joint venture possibilities, and has introduced its first product for large electricity users—three- to five-year contracts that will reduce electricity bills immediately by up to 10 percent the first year, with the possibility of further reductions in subsequent years. The first contracts were signed in early 2001.

Through joint ventures with several Japanese companies, Enron was exploring merchant plant opportunities to support its market-making activities, including inside-the-fence power generation. Under consideration were a number of sites, which might be fueled by gas, liquefied natural gas or coal.

Enron Australia

Enron's market-making ability had been successfully extended to Australia, where Enron was a leading provider of logistical solutions in the country's power market. During 2000 Enron introduced its weather risk management product in the region, offering temperature-based products in Sydney, Melbourne, Hong Kong, Tokyo and Osaka. The Sydney office also provided a strategic platform for the extension of Enron's coal, metals and broadband businesses, as well as providing support for Enron's operations in the Asia Pacific region.

Extending to New Markets

Enron's durable business approach, which had driven its success in the natural gas and electricity markets, was eminently applicable to other markets and geographical regions. While the company remained focused on increasing earnings and opportunities in gas and power, it was also extending the company's method to large, fragmented industries and products, where intermediation could make markets more efficient and responsive to customer needs. Enron expected these new businesses to contribute to earnings in 2001.

Enron Metals was launched in July 2000 when Enron acquired the world's leading merchant of non-ferrous metals, MG plc. Together, MG and Enron were a powerful team. Enron's financial resources and eCommerce abilities added a new dimension to MG's widespread physical merchant skills and excellent customer relationships. The early results were right on target, with physical volumes up 31 percent in 2000.

Enron metals opened an additional door to large energy customers. Cominco Ltd., a zinc producer and an Enron Metals customer in Vancouver, British Columbia, worked with Enron to halt zinc production for six weeks and sell its power into the Northwestern power market, where it was needed. Enron North America protected Cominco by structuring a fixed-price swap to guarantee the sale price of power, and Enron Metals arranged to supply a portion of the zinc required to ful-

fill Cominco's obligations. Cominco's profit from the deal exceeded the annual profit it makes from producing zinc.

Enron Credit was a new business with strong market potential. Enron had leveraged its internal risk management processes and systems to create a real-time, market-based online credit evaluation system. The idea was simple: existing credit ratings and scoring mechanisms were not market-based and could not respond in real time to credit events. This meant creditors had to figure out their credit risk exposure on their own. Enron Credit posted the cost of credit as a simple interest rate for more than 10,000 companies on its web site, www.enroncredit.com. Enron Credit also gave corporations the ability to hedge their credit risk via a bankruptcy product.

Coal intermediation moved to a new level in 2000. The industry had been radically affected by the worldwide deregulation of the electricity industry. Like natural-gas-fueled generation, coal-burning generators require flexible forms and risk-management protection. Enron was able to provide unrivaled logistical support. The company's coal business had led to participation in sea and land logistics as well.

Weather had never been better for Enron. Its weather risk management business was up about five-fold to 1,629 transactions in 2000 from 321 transactions the year before. As in all its markets Enron brought in cross-commodity capabilities in regard to its weather products. For instance, Enron closed a three-year precipitation transaction that provided financial compensation linked to natural gas prices for precipitation falls below a pre-determined minimum. The weather unit worked with several other Enron groups to transfer Enron's risk, ultimately transacting with 10 external companies in three markets (natural gas, weather products and insurance). The bundled end-product resulted in an effective hedge for the customer.

Crude Oil Enron averaged crude oil deliveries of 7.5 Tbtue/d to 240 customers in 46 countries. The company had introduced the first-ever 24x7 commodity market of a West Texas Intermediate crude product on EnronOnline, allowing its customers to respond to market-

changing effects at any time, day or night. Enron also concluded its biggest physical jet fuel contract, providing 100,000 barrels for one year at the flexible and market-based prices that the customer needed.

LNG. Enron was establishing a liquefied natural gas (LNG) network to create merchant LNG opportunities and bring more gas to areas of the world that need it. The company's LNG-related assets in operation and development in the Caribbean and the Middle East formed part of this network. Enron resources supplied LNG from the Middle East and Asia and marketed it in the United States.

Forest Products. Enron had offered pulp, paper and lumber financial products for several years, and was marketing physical volumes. In 2000 the company acquired Garden State Paper Co., which gave it access to 210,000 tons of newsprint a year and four recycling centers in key markets. In January 2001 Enron agreed to purchase a newsprint mill and related assets in Canada. With this acquisition, the company would become the seventh-largest producer of newsprint in North America, giving it the physical liquidity necessary to quickly grow this business. Enron's Clickpaper.com was powered by the EnronOnline platform but was totally customized for the forest products industry. It offered more than 100 financial and physical products and featured news and information tailored specifically to forest products industry customers.

Steel. In some markets, such as steel, Enron believed that it could run its network with minimal assets. The industry suffered from overcapacity, but lacked a market mechanism to efficiently market the surplus. Enron intended to offer a core commodity baseline product that could be indexed against almost all other products in this \$330 billion industry. The outlook was promising—the company recently transacted its first steel swap. In 2001 the company intended to build liquidity, improve pricing efficiency and gain contractual access to the physical product to provide comprehensive logistical support.

Enron Global Assets

Enron Global Assets managed and optimized Enron's assets outside North America and Europe. Enron had a solid portfolio of asset-based businesses. However, with the higher returns available in the company's other businesses, it expected to divest some interests in a number of these assets. The remaining asset businesses would continue to focus on performance and complementing the market-making and services business.

Enron Wind Corp.

The economics of wind power were more promising than ever, creating significant growth for Enron Wind. Technological advancements and lower costs associated with today's larger, more efficient wind turbines have made wind power costs competitive with fossil fuel-generation for the first time. This cost competitiveness, together with government policies supporting renewable energy in most key markets and growing consumer demand for green energy, had fueled 30 percent annual growth over the past five years.

With focused efforts in the world's three key wind power markets—Germany, Spain and the United States—Enron Wind completed 2000 with revenues of approximately \$460 million. Strong growth in both the United States and Europe would account for a projected sales increase of approximately 100 percent in 2001.

ENRON ENERGY SERVICES

Enron Energy Services was the retail arm of Enron, serving business users of energy in commercial and industrial sectors. Enron's comprehensive energy outsourcing product had proven an exceptionally effective way for companies to reduce their costs, manage risks of energy price volatility, improve their energy infrastructure and focus resources on their core businesses.

Enron Energy Services recorded its first profitable quarter as expected at the end of 1999, and continued to grow rapidly through 2000, with increasing profits in all four quarters of 2000 and aggregate recurring income before interest and taxes (IBIT) of \$103 million for the year. The value of Enron's contracts in 2000 totaled more than \$16 billion, increasing Enron Energy Services' cumulative contract value to more than \$30 billion since late 1997.

This success reflected growing acceptance of Enron's energy outsourcing product—acceptance that had meant an increasing rate of new contracting. Enron's retail energy success in 2000 also reflected the company's strong emphasis on contract execution and implementation and on excellence in customer service. Additionally, 2000 was marked by increased activity in Europe—an untapped market for energy outsourcing.

Enron was positioned to dramatically increase its profitability in 2001. Retail energy earnings would be fueled by the rapid growth of its U. S. and European businesses and the strong execution and extension of existing contracts.

Market Volatility

The U.S. energy sector experienced unprecedented challenge and opportunity in 2000. In national terms, steady movement toward a functioning deregulated energy marketplace continued. More than half the country's population was scheduled to be able to choose their electricity supplier by 2004. The ongoing energy crisis in California had focused everyone's attention on the complexities of incomplete deregulation, the risks of unreliable supply and the costs of unmanaged energy demand. Enron provided commercial and industrial energy customers with the solutions they needed, bringing reliability and price-risk management to a market otherwise fraught with uncertainty.

The volatility of energy prices across the country had heightened the value of energy management and increased the demand for retail services. With Enron's capabilities—energy commodity and price risk

management capabilities, energy asset management and capital solutions—the company remained the only firm with the skill, experience, depth and versatility to provide a comprehensive solution to address uncertain, rapidly changing markets.

Customer Relationships

The core of Enron's retail business was developing long-term, multi-year relationships with its customers. The value at contract signing was only a part of the potential value that could be realized when satisfied customers seek to add additional Enron services to their contracts.

Of the \$16 billion in total contract value signed in 2000, approximately \$ 3 billion came from expansion of existing contract relationships. For example, in 1998, Enron signed a five-year contract, \$250 million contract with World Color Press, which later merged with Quebecor Printing. In 2000 based on Quebecor World's satisfaction, the relationship was extended and expanded to a 10-year, \$1 billion agreement including not only commodity supply, but also overall energy management, including the design and implementation of improvements in energy asset infrastructure in more than 60 facilities operated by Quebecor World.

Enron valued long-term customer relationships, and the health of these relationships could not be left to luck, instinct or vague impressions. Enron's Customer Satisfaction Program continually captured the company's performance against expectations and benchmarks those results. Further, it was designed to ensure identification and resolution—including prompt escalation to the executive level if needed—of any issue that might arise.

Medium-size Business Market

In the first three years of U.S. operation, Enron Energy Services had been squarely focused on Fortune 1000 customers. But U.K. -based Enron Direct had successfully penetrated the immense medium-size

business market, proving that it could sell energy to smaller enterprises in a truly open retail market.

Since gaining regulatory approval in February 1999 through the end of 2000, Enron Direct had acquired more than 130,000 gas and power customers, and continued to grow at a substantial rate. The profitability of these smaller accounts came from Enron's long-term price risk management capability and Enron Direct's low-cost sales channels. The company's high expectations for medium-size businesses were reflected by the rapid expansion of the European operation. *Enron Directo* was active in Madrid, Spain, and similar businesses would be launched in other countries as well.

It was Enron's strong belief that the company was uniquely positioned to benefit both in the United States and Europe from the world's steady shift toward deregulated energy markets. Enron intended to continue to provide sensible market solutions for the effective management of energy costs, and would continue to build a dynamic global retail business to drive company profits and sustain its reputation for innovation.

ENRON BROADBAND SERVICES

Enron Broadband Services made excellent progress executing its business plan in 2000. The build-out of Enron's 18,000-mile global fiber network was near completion, bandwidth intermediation transaction volume was growing exponentially, and the company was testing the first commercially sound premium content-on-demand service. Clearly, the Enron business model was working in the broadband market.

Enron Broadband Services' goals were:

- Deploy the most open, efficient global broadband network, the Enron Intelligent Network
- Be the world's largest marketer of bandwidth and network services.

- Be the world's largest provider of premium content delivery services.

The Enron Intelligent Network

Enron expected to be the first to provide broadband connectivity on a global basis through the Enron Intelligence Network (EIN). The EIN operated as a "network of networks," providing switching capacity between independent networks for low-cost scalability. The company would continue to add pooling points, which physically interconnected third parties' networks and served as reference points for bandwidth contracts. Enron operated 25 pooling points: 18 in the United States, and one each in Tokyo, London, Brussels, Amsterdam, Paris, Dusseldorf and Frankfurt. The company expected to add at least 10 more in 2001.

EIN's embedded intelligence provided by Enron's proprietary Broadband Operating System (BOS) gave Enron unique, powerful multi-layer network control. The Enron BOS enabled the EIN to:

- Dynamically provision bandwidth in real time.
- Control quality and access to the network for Internet Service Providers.
- Control and monitor applications as they stream over the network to ensure quality and avoid congested routes.

The BOS automated the transaction process all the way from the initial request for capacity to provisioning, electronic billing and funds transfer. With the BOS, Enron had created the first scalable, fully integrated transaction processing option for delivering bandwidth capacity.

BANDWIDTH INTERMEDIATION

Enron exceeded its expectations by delivering more than 72,000 terabytes of network services in 2000, demonstrating rapidly growing industry acceptance of the flexible services. The company was creating

the risk management building blocks to manage almost every element of the network in addition to bandwidth: dark fiber, circuits, Internet Protocol (IP) services (transporting data packets according to IP standards) and storage capacity.

To date the company has transacted with 45 counter parties, including U.S. and international telecommunications carriers, marketers and resellers and network service providers. In 2001 the company expected to deliver 570,000 terabytes as it grew both the breadth and the depth of its network and products. As of today Enron offers 32 bandwidth-related products on EnronOnline.

Enron's ability to provide bandwidth-on-demand at specified service levels and guaranteed delivery enabled customers to access capacity without necessarily building, buying or expanding their own networks. Enron's bundled intermediation package includes IP transport overland, under sea, and via satellite, at both fixed and peak-usage terms. For example, Enron worked with i2 Technologies, a global provider of intelligent Business solutions, to connect with customers in six cities, including four overseas, i2 has provisioned local-loop and long-haul capacity through Enron, and has low-cost access to its network as if it were its own, but it now has the flexibility to quickly add or discard capacity as day-to-day needs change.

Data storage was a \$30 billion-per-year business, and Enron knew customers would like to purchase it on as-needed basis. In January 2001 Enron completed its first data storage transactions with a leading provider of managed storage services, StorageNetworks, and a large retailer, Best Buy. Best Buy was buying off-site storage capacity to save money and gain flexibility to accommodate changing storage needs.

Content Services

In April 2000 Enron signed an agreement with an U.S. video rental retailer to deliver movies over the Enron Intelligent Network. The trial service was up and running in Seattle; Portland, Ore.; Salt Lake City and New York City. Additionally, Enron had established relationships

with other high-visibility content providers. Over the next two or three years, the company planned to deliver on-demand not only movies but sports, educational content, games, music and applications not yet imagined.

Market Innovator

Enron's innovative approach was as valuable in broadband as it was in energy. The company's proven intermediation skills were creating new value for the industry and giving it a flexibility it had never enjoyed. Enron had combined its business model with readily available technologies to deliver premium content over the Enron Intelligent Network in a very compelling commercial model. The company was not tied to any particular technology. It used the best solution at the best time for its customers, delivering the most reliable product at the lowest cost in the marketplace.

ENRON TRANSPORTATION SERVICES

The Gas Pipeline Group formally changed its name in September 2000 to Enron Transportation Services to emphasize its ability to deliver innovative solutions to its customers. These emerging services augmented the company's core competency: operating interstate pipelines safely and efficiently. In 2000 Enron continued its record of strong returns with consistent earnings and cash flow. Income before interest and taxes reached \$391 million, up from \$380 million in 1999. Cash flow from operations rose to \$415 million in 2000 from \$370 million in 1999. Throughput remained relatively unchanged in 2000 at 9.13 billion cubic feet per day (Bcf/d), compared to 9.18 Bcf/d the previous year.

Together Enron's interstate pipelines spanned approximately 25,000 miles with a peak capacity of 9.8 Bcf/d. The company transported 15 percent of U.S. natural gas demand. It connected to the major supply basins in the United States and Canada, and it continued to increase capacity from those basins to its major markets. Enron

added 840 million cubic feet per day (MMcf/d) over the past two years, and nearly 1 Bcf/d was scheduled to enter service in the next three years. At the same time, the company's expense per MMcf/d had declined by 26 percent from 1992 to today.

Enron Transportation Services pipelines had brought to market a variety of new products and services specifically tailored to address customer needs. Northern Natural Gas, for example, had used interruptible storage products that extended its capacity to meet the growing demand for services to manage physical positions. Transwestern Pipeline Company was offering shippers increased service flexibility by accessing third-party storage. Across all pipelines, web-based applications had been introduced to allow customers to better manage transactions and allow the pipelines to maximize their capacity offerings. Northern Natural Gas, Transwestern Pipeline and Florida Gas Transmission began to sell available capacity on EnronOnline in 2000 to give customers the convenience of eCommerce transacting.

Northern Natural Gas

Northern Natural Gas, Enron's largest pipeline, had approximately 16,500 miles of pipeline extending from the Permian Basin in Texas to the Great Lakes, providing extensive access to major utilities and industrials in the Upper Midwest. The pipeline had market area peak capacity of 4.3 Bcf/d. It interconnected with major pipelines, including Great Lakes, Transwestern, El Paso, Northern Border and Trailblazer, to offer excellent northern, southern and western flow capabilities. Ninety-five percent of market area capacity was contracted through 2003.

Market area demand was expected to increase considerably with the development of approximately 2,000 megawatts of gas-fired generation over the next three years. The pipeline had developed innovative and flexible services to meet the transportation, storage and balancing needs of power producers. It completed construction in October 2000 of a link to 445 megawatts of peaking power operated by Great River

Energy in Minnesota. The link would transport up to 120 MMcf/d of gas.

Transwestern Pipeline

Transwestern operated approximately 2,500 miles of pipe with 1.7 Bcf/d of peak capacity. With pipeline originating in the San Juan, Permian and Anadarko Basins, Transwestern could move gas east to Texas or west to the California border. To respond to increased gas demand in California, Transwestern Pipeline added compressor facilities near Gallup, New Mexico, in May 2000 to increase mainline capacity by 140 MMcf/d to the California border. The new capacity was completely subscribed under long-term contracts. In 2000 the pipeline also added several major interconnects to tap into growing markets east of California.

The Transwestern system was fully subscribed for western deliveries through December 2005 and for eastern deliveries through December 2002. The system had the potential to quickly increase throughput capacity. An expansion project was expected to be filed this year and completed in 2002.

Florida Gas Transmission

Florida Gas Transmission served the rapidly growing Florida peninsula and connected with 10 major pipelines. It had maintained a competitive position by staging expansions to keep pace with demand as it grows. With current peak capacity of 1.5 Bcf/d, Florida Gas Transmission would add 600 MMcf/d of capacity when its Phase IV and Phase V expansions were completed. The Fort Myers extension, part of a 200 MMcf/d Phase IV expansion, went into service on October 1, 2000, and the remainder was scheduled to go into service in May 2001. The 400-MMcf/d Phase V expansion had received preliminary approval from the Federal Energy Regulatory Commission and was expected to be completed in April 2002.

The 4,795-mile pipeline was evaluating supply connections to two proposed liquefied natural gas facilities.

Northern Border Partners, L. P.

Northern Border Partners, L.P. is a publicly traded partnership (NYSE: NBP), of which Enron was the largest general partner. Northern Border Partners owns a 70 percent general partner interest in Northern Border Pipeline, which extends 1,214 miles from the Canadian border in Montana to Illinois. The Pipeline, a low-cost link between Canadian reserves and the Midwest market, has a peak capacity of 2.4 Bcf/d and is fully contracted under long-term agreements with an average term of six years. Its Project 2000 extension—34 miles of pipe from Manhattan, Illinois, to a point near North Hayden—will provide 544 MMcf/d to industrial markets in Indiana with a targeted in-service date of late 2001.

Late in 2000, Northern Border Pipeline settled its rate case, allowing it to switch from a cost-of-service tariff to a stated-rate tariff, which will provide rate certainty to customers, increase competitiveness and allow flexibility in services provided.

Northern Border Partners also owns interests in gathering systems in the Power River and Wind River Basins in Wyoming, and recently signed a letter of intent to purchase Bear Paw LLC, which has extensive gathering and processing operations in the Powder River Basin and the Williston Basin. The partnership also owns Black Mesa Pipeline, a 273-mile coal-water slurry pipeline running from Kayenta, Arizona, to Mohave Power Station in Laughlin, Nevada.

Portland General Electric

The sale of Portland General Electric (PGE) to Sierra Pacific Resources had been delayed by the effect of recent events in California and Nevada on the buyer. In 2000 the Portland, Oregon-based electricity utility performed well in the face of regional wholesale price volatility. IBIT rose approximately 12 percent to \$341 million. Total electricity

sales reached 38.4 million megawatt-hours (MWh) compared to 31.9 million MWh in 1999. Enron intended to continue to drive performance while pursuing the utility sale.

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FINANCES AT THE BEGINNING OF 2001

ENRON'S ANNUAL REPORT FOR 2000

Enron's net income for the year 2000 was \$979 million compared to \$893 million in 1999 and \$703 million in 1998. Net income before items impacting comparability was \$1,266 million, \$957 million and \$698, respectively, in 2000, 1999 and 1998. Diluted earnings per share were \$1,12 for 2000, \$1,10 for 1999 and \$ 1,01 or 1998.

Enron's business is divided into five segments and Exploration and Production (Enron Oil & Gas Company) through August 16, 1999. Total revenues for the company amounted to \$100 billion for the year 2000, compared to \$ 40 billion for 1999.

Table 1. Income before interest, minority interests and income taxes (IBIT) for each of Enron's operating segments (in millions).

Year	2000	1999	1998
• Transportation and Distribution	\$ 732	\$ 685	\$ 637
• Wholesale Services	2,260	1,1317	968
• Retail Energy Services	165	(68)	(119)
• Broadband Services	60)	-	-
• Exploration and Production	-	65	128

• Corporate and Other	(615)	(4)	(32)
Income before interest, minority interests and taxes:	\$ 2,482	\$ 1,995	\$ 1,582

Transportation and Distribution

Transportation and Distribution consists of Enron's Transportation Services and Portland General. Transportation Services includes Enron's interstate natural gas pipelines, primarily Northern Natural Gas Company (Northern), Transwestern Pipeline Company (Transwestern), Enron's 50 % interest in Florida Gas Transmission Company (Florid Gas) and Enron's interest in Northern Border Partners, L.P. and EOTT Energy Partners, L.P. (EOTT).

Wholesale Services

Wholesale Services includes Enron's wholesale businesses around the world. Wholesale Services operates in developed markets such as North America and Europe, as well as developing or newly deregulating markets including South America, India and Japan.

Retail Energy Services

Enron, through its subsidiary Enron Energy Services, LLC (Energy Services), is extending its energy expertise and capabilities to end-use retail customers in the industrial and commercial business sectors to manage their energy requirements and reduce their total energy costs.

Broadband Services

Enron's broadband services business (Broadband Services) provides customers with a single source for broadband services, including bandwidth intermediation and the delivery of premium content.

Corporate and Other

Corporate and Other includes Enron's investment in Azurix Corp. (Azurix), which provides water and wastewater services, results of Enron Renewable Energy Corp. (EREC), which develops and constructs wind-generated power projects, and the operations of Enron's methanol and MBTE plants as well as overall corporate activities of Enron.

Table 2. Enron Corp. and Subsidiaries Consolidated Income Statement (in billions).

Year	2000	1999	1998
• Revenues	\$ 100.8	\$ 40.1	\$ 31.3
• Costs and Expenses	98.8	39.3	29.9
• Income before Interest, Minority Interests and Income Taxes	2	2	1.5
• Net Income	1	1	0.7

Table 3. Average number of Common Shares (in millions).

Year	2000	1999	1998
• Basic	736	705	642
• Diluted	814	769	695

Table 4. Total Assets.

Year	2000	1999
• Current Assets	\$ 31	\$ 7
• Investments and Other Assets	23	15
• Property, Plant and Equipment	12	11
Total Assets	\$ 66	\$ 33

Table 5. Liabilities and Shareholder's Equity.

Year	2000	1999
• Total Current Liabilities	\$ 28	\$ 8
• Long Term Debt	9	7
• Total Deferred Credits and Other Liabilities	14	6
• Minority Interests	2	2
• Company Obligated Preferred Securities of Subsidiaries	1	1
• Shareholders Equity	12	9
Total Liabilities and Shareholders' Equity	\$ 66	33

NOTE

According to table (3) "current assets" increase from \$ 7 billion in 1999 to \$ 31 billion in 2000. This enormous increase is due to three facts: (1) an increase in trade receivables; (2) increase of assets from price risk management activities; and (3) a sharp increase in deposits. At the same time Enron's "current liabilities" and its "deferred credits and other liabilities" increased enormously, but not as much as its "current assets". Then there is the enormous rise in revenue, from \$40 billion in 1999 to \$100 in 2001, while at the same time net income hardly increases. In other words the extra activities did not contribute to the net income, that is very odd indeed. In fact Enron's profit margin (net profit versus total revenue) decreased from 2 to 1 percent. This situation in itself should have been scrutinized. A situation like this should arouse suspicion, you really do not have to be an accountant for such a conclusion. Auditor Arthur Andersen totally disregards this issue.

In its various explanations Enron focuses specifically on numerous details but the company does not spent any time on the big issues: what are the "current assets" and what are the "current liabilities," and

how are these valued? And why did the enormous (250 percent!) increase in revenue not contribute anything to the net income. Enron is extremely good in making simple issues extremely complicated. In other words in order to find out what went wrong it is certainly not so that Enron's annual report is, as is often alleged, a difficult story to read.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

A quite interesting paragraph in Enron's annual report is the statement concerning management's responsibility for financial reporting:

"The following financial statements of Enron Corp. and subsidiaries (collectively, Enron) were prepared by management, which is responsible for their integrity and objectivity. The statements have been prepared in conformity with generally accepted accounting principles and necessarily include some amounts that are based on the best estimates and judgements of management. The system of internal controls of Enron is designed to provide reasonable assurance as to the reliability of financial statements and the protection of assets from unauthorized acquisition, use or disposition. This system is augmented by written policies and guidelines and the careful selection and training of qualified personnel. It should be recognized, however, that there are inherent limitations in the effectiveness of any system of internal control. Accordingly, even an effective internal control system can provide only reasonable assurance with respect to the preparation of reliable financial statements and safeguarding of assets. Further, because of changes in conditions, internal control system effectiveness may vary over time.

Enron assessed its internal control system as of December 31, 2000, 1999 and 1998, relative to current standards of control criteria. Based upon this assessment, management believes that its system of internal controls was adequate during the periods to provide reasonable assurance as to the reliability of financial statements and the protection of assets against unauthorized acquisition, use or disposition.

Arthur Andersen LLP was engaged to audit the financial statements of Enron and issue reports thereon. Their audits included developing an overall understanding of Enron's accounting systems, procedures and internal controls and conducting tests and other auditing procedures sufficient to support their opinion on the financial statements. Arthur Andersen LLP was also engaged to examine and report on management's assertion about the effectiveness of Enron's system of internal controls. The Reports of Independent Public Accountants appear in this Annual Report.

The adequacy of Enron's financial controls and the accounting principles employed in financial reporting are under the general oversight of the Audit Committee of Enron Corp.'s Board of Directors. No member of this committee is an officer or employee of Enron. The independent public accountants have direct access to the Audit Committee, and they meet with the committee from time to time, with and without financial management present, to discuss accounting, auditing and financial reporting matters."

SIGNIFICANT ACCOUNTING POLICIES IN USE BY ENRON

Consolidation Policy and Use of Estimates

The accounting and financial reporting policies of Enron Corp. and its subsidiaries conform to generally accepted accounting principles and prevailing industry practices. The consolidated financial statements include the accounts of all subsidiaries controlled by Enron Corp. after the elimination of significant inter-company accounts and transactions.

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

"Enron" is used from time to time herein as a collective reference to Enron Corp. and its subsidiaries and affiliates. The businesses of Enron are conducted by its subsidiaries and affiliates whose operators are managed by their respective officers.

Cash Equivalents

Enron records as cash equivalents all high liquid short-term investments with original maturities for three months or less.

Inventories

Inventories consist primarily of commodities, priced at market as such inventories are used in trading activities.

Depreciation, Depletion and Amortization

The provision for depreciation and amortization with respect to operations other than oil and gas producing activities is computed using the straight-line or regulatory mandated method, based on estimated economic lives. Composite depreciation rates are applied to functional groups of property having similar economic characteristics. The cost of utility property units retired, other than land, is charged to accumulated depreciation.

Provisions for depreciation, depletion and amortization of proved oil and gas properties are calculated using the units-of-production method.

Income Taxes

Enron accounts for income taxes using an asset and liability approach under which deferred assets and liabilities are recognized based on anticipated future tax consequences attributable to differences between financial statement carrying amounts of assets and liabilities and their respective tax bases.

Earnings per Share

Basic earnings per share are computed upon the weighted-average number of common share outstanding during the periods. Diluted earnings per share is computed based upon the weighted-average number of common shares outstanding plus the assumed issuance of common shares or all potentially dilutive securities. All share and per share amounts have been adjusted to reflect the August 13, 1999 two-for-one stock split.

Accounting for Price Risk Management

Enron engages in price risk management activities for both trading and non-trading purposes. Instruments utilized in connection with trading activities are accounted for using the mark-to-market method. Under the mark-to-market method of accounting, forwards, swaps, options, energy transportation contracts utilized for trading activities and other instruments with third parties are reflected at fair value and are shown as "Assets and Liabilities from Price Risk Management Activities" in the Consolidated Balance Sheet. These activities also include the commodity risk management component embedded in energy outsourcing contracts. Unrealized gains and losses from newly originated contracts contract restructuring and the impact of price movements are recognized as "Other Revenues." Changes in the asset and liabilities from price risk management activities result primarily from changes in the valuation of the portfolio of contracts, newly originated transactions and the timing of settlement relative to the receipt of cash or certain contracts. The market price used to value these transactions reflect management's best estimate considering various factors including closing exchange and over-the-counter quotations, time value and volatility factors underlying the commitments.

Financial instruments are also utilized for non-trading purposes to hedge the impact of market fluctuations on assets, liabilities, production and other contractual commitments. Hedge accounting is utilized in on-trading activities when there is a high degree of correlation

between price movements in the derivative and the item designated as being hedged. In instances where the anticipated correlation of price movements does not occur, hedge accounting is terminated and future changes in the value of the financial instruments are recognized as gains or losses. For the hedged items sold, the value of the financial instrument is recognized in income. Gains and losses on financial instruments used for hedging purposes are recognized in the Consolidated Income Statement in the same manner as the hedged item.

The cash flow impact of financial instruments is reflected as cash flow from operating activities in the Consolidated Statement of Cash Flows.

Accounting for Development Activity

Development costs related to projects, including costs of feasibility studies, bid preparation, permitting, licensing and contract negotiation, are expensed as incurred until the project is estimated to be probable. At that time, such costs are capitalized or expensed as incurred, based on the nature of the costs incurred. Capitalized development costs may be recovered through reimbursements from joint venture partners or other third parties or classified as part of the investment and recovered through the cash flows from that project. Accumulated capitalized project development costs are otherwise expensed in the period that management determines it is probable that the costs will not be recovered.

Environmental Expenditures

Expenditures that relate to an existing condition caused by past operations, and do not contribute to current or future revenue generation, are expensed. Environmental expenditures relating to current or future revenues are expensed or capitalized as appropriate based on the nature of the costs incurred. Liabilities are recorded when environmental assessments and/or clean-ups are probable and the costs can be reasonably estimated.

Computer Software

Direct costs of materials and services consumed in developing or obtaining software, including payroll and payroll-related costs for employees who are directly associated with and who devote time to the software project are capitalized. Costs may begin to be capitalized once the application development stage has begun. All other costs are expensed as incurred. Enron amortizes the costs on a straight-line basis over the useful life of the software. Impairment is evaluated based on changes in the expected usefulness of the software. At December 31, 2000 and 1999, Enron has capitalized, net of amortization, \$381 million and \$240 million, respectively of software costs covering numerous systems, including trading and settlement, accounting, billing, and upgrades.

Investment in Unconsolidated Affiliates

Investments in unconsolidated affiliates are accounted for by the equity method, except for certain investments resulting from Enron's merchant investment activities, which are included at market value in "Other Investments" in the Consolidated Balance Sheet. Where acquired assets are accounted for under the equity method based on temporary control, earnings or losses are recognized only for the portion of the investment to be retained.

Sale of Subsidiary Stock

Enron accounts for the issuance of stock by its subsidiaries in accordance with the Securities and Exchange Commission's Staff Accounting Bulletin (SAB) 51. SAB 51 allows for Enron to recognize a gain in the amount that the offering price per share of a subsidiary's stock exceeds Enron's carrying amount per share.

Foreign Currency Translation

For international subsidiaries, asset and liability accounts are translated at year-end rates of exchange and revenue and expenses are translated at average rates prevailing during the year. For subsidiaries whose functional currency is deemed to be other than the U.S. dollar, translation adjustments are included as a separate component of other comprehensive income and shareholders' equity. Currency transaction gains and losses are recorded income.

During 1999, the exchange rate for the Brazilian real to the U.S. dollar declined, resulting in a non-cash foreign currency translation adjustment reducing the value of Enron's assets and shareholders' equity by approximately \$600 million.

Reclassification

Certain reclassifications have been made to the consolidated financial statements for prior years to conform with the current presentation.

REPORTS OF INDEPENDENT PUBLIC ACCOUNTANTS

Enron's auditor and independent public account was Arthur Andersen LLP, one of the five largest accountancy firms in the world. Enron was an important client for Andersen, they paid the auditing firm yearly some \$50 million in auditing and consulting fees. Arthur Andersen LLP reported its findings in two statements to the Shareholders and Board of Directors of Enron:

"We have examined management's assertion that the system of internal control of Enron Corp. (an Oregon corporation) and subsidiaries as of December 31, 2000, 1999 and 1998 was adequate to provide reasonable assurance as to the reliability of financial statements and the protection of assets from unauthorized acquisition, use or disposition, included in the accompanying report on Management's Responsibility for Financial Reporting. Management is responsible for

maintaining effective internal control over the reliability of financial statements and the protection of assets against unauthorized acquisition, use or disposition. Our responsibility is to express an opinion on management's assertion based on our examination.

Our examinations were made in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included obtaining an understanding of the system of internal control, testing and evaluating the design and operating effectiveness of the system of internal control and such other procedures as we considered necessary in the circumstances. We believe that our examinations provide a reasonable basis for our opinion.

Because of inherent limitations in any system of internal control, errors or irregularities may occur and not be detected. Also, projections of any evaluation of the system of internal control to future periods are subject to the risk that the system of internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assertion that the system of internal control of Enron Corp. and its subsidiaries as of December 1, 2000, 1999 and 1998 was adequate to provide reasonable assurance as to the reliability of financial statements and the protection of assets from unauthorized acquisition, use or disposition is fairly stated, in all material respects, based upon current standards of control criteria."

Arthur Andersen LLP
Houston, Texas
February 23, 2001

"We have audited the accompanying consolidated balance sheet of Enron Corp. (an Oregon corporation) and subsidiaries as of December 31, 2000 and 1999, and the related consolidated statements of income, comprehensive income, cash flows and changes in shareholders' equity for each of the three years in the period ended December 31, 2000. These financial statements are the responsibility of Enron Corp.'s man-

agement. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Enron Corp. and subsidiaries as of December 31, 2000 and 1999, and the results of their operations, cash flows and changes in shareholders' equity for each of the three years in the period ended December 31, 2000, in conformity with accounting principles generally accepted in the United States.

As discussed in Note 18 to the consolidated financial statements, Enron Corp. and subsidiaries changed its method of accounting for costs of start-up activities and its method of accounting for certain contracts involved in energy trading and risk management activities in the first quarter of 1999."

Arthur Andersen LLP
Houston, Texas
February 23, 2001

NOTE

After the collapse of Enron, late 2001, the statements of Enron's management and of Arthur Andersen were difficult to believe; they proved to be hollow words. Did they really know nothing that was about to

happen a few months later? What kind of systems was in place? What kind of examinations did Arthur Andersen carry out? Andersen's fee for auditing and consulting allegedly was \$50 million per year, for that kind of money you can do quite a lot of work, but was any done? Or was it all just a matter of window dressing? One thing is sure the systems 'in place' did not work at all, neither as far as Enron was concerned, nor as far as Andersen was concerned.

Stock markets have become in the United States a symbol of progress, of economic achievement. Only profits and share values do count, the shareholder has become a holy cow. Criticizing a company that is highly traded at the New York Stock Exchange has become for an auditor equal to commercial suicide, reducing the auditing to "rubber stamping" a company's accounting systems.

In the early months of 2001, at the time Enron's annual report for the year 2000 was published, the sky was blue for Enron. Nothing indicated or predicted the dark months ahead, ending with the company's total collapse before the end of the year.

3

THE COLLAPSE OF AN ENERGY GIANT

January 2001. At the start of 2001 Enron's stocks were a much-favored item at the New York Stock Exchange, 13 of Enron's 18 analysts rated the stock a buy. The stock price was around \$80. There was nothing to worry about.

February 5, 2001. Behind the screens, however, a few start to worry. In a meeting on February 5, 2001, senior officials of Arthur Andersen's head office in Chicago, Enron's auditors, expressed their worries about the accounting practices of their client. Enron was no longer a problem that Arthur Andersen's Houston office had kept to itself. Key issue was how to account for losses piling up in an off-the-books partnership between Enron and a firm called LJM. The manager of LJM was none other than Enron's chief financial officer, Andrew Fastow. Andersen knew that Enron's debts to LJM were rising to a level that required public disclosure no matter who was in charge. Such a disclosure, however, would have sent Enron's stock into a dive. But no disclosure was made in the company's next quarterly report. Why not?

Andersen's executives discussed whether or not it would be wise to drop Enron as client. Enron was paying Andersen some \$52 million in auditing and consulting fees and it was expected that this amount could double within one year. The meeting was followed by an e-mail to a wider audience. However, nothing happened. To drop a company

such as Enron, a company that made furore at the New York Stock Exchange, a company that doubled its revenue within one year would provoke nasty questions. Such a move, at that time, might cause serious commercial problems for Arthur Andersen, one of the largest auditing firms in the world. As we saw in the previous chapter there was no word whatsoever from Arthur Andersen in their auditing statement in Enron's annual report for 2000, a document that was published only a few weeks later.

February 12, 2001. On February 12, 2001, Enron announces the appointment of Jeffrey Skilling as the new Chief Executive Officer of the company. Skilling, a self-described "brilliant" 47-year old executive, with a masters degree in Business Administration from Harvard Business School, who says he has never suffered any kind of failure, succeeded Kenneth Lay, the founder of Enron, as CEO. Lay remained chairman of the company. Some say, in hindsight, this was an early attempt from Lay to distance him from the things to come.

March 5, 2001. The first warning in the press about Enron came early March 2001 from Fortune Magazine's Bethany McLean. In an article titled "*Is Enron Overpriced?*" McLean tried to find out what kind of company Enron actually was. How does it make its money? Why does the company make it so difficult to look behind the screens? Her issue of 'lack of clarity' is supported by a few analysts, but most is of the opinion that the stock makes money, in fact return on shares at that time stood at 89%, so why bother? The market can't get enough of Enron: earnings increased 25% and revenues more than doubled, to over \$100 billion. The critics are gushing: Enron has built unique franchises in very large markets, that is where they make their money.

Enron shares were hovering at that time around \$80, 55 times trailing earnings, more than 21 times the multiple of a competitor like Duke Energy, more than twice that of the S&P 500. But during a 'revival meeting' with analysts in Houston, in January 2001, Enron

managers stated that the stock should actually be valued at \$126, or more than 50% above the value at that time.

The attitude of most analysts was to follow the wind. In the 'American Stock Exchange Society' it is dangerous to have a different opinion, even if that opinion is well founded, you are out before you know. Stock and stock-trading have become a cult in the United States, CNN spends a considerable amount of time displaying and discussing the daily or hourly ups and downs of the world stock exchanges, as if there is nothing else of any importance. Europe's BBC is far more even-handed in these matters, but stock ownership in Europe is not as widespread as in the U.S. There were skeptics, but not many, most were afraid because of the lack of clarity.

April 2001. During the month of March 2001 Enron's stocks drop to a level of \$50. In April the stock climbed initially to 60 but later in the month the decline resumed.

May 2001. Enron's vice chairman Clifford Baxter complains within the company of "inappropriateness" of Enron's partnership deals. Two other Enron executives support him in his claims. Baxter resigns.

June 2001. Enron's stocks drop to a level of \$44.

August 14, 2001. CEO Jeffrey Skilling announces he was leaving the company after having served as CEO for six months only. Skilling explained that he left voluntary, blaming unspecified personal reasons for his behavior. It was even weirder. By leaving in a hurry Skilling forfeited a \$ 20 million severance package and had to pay back a \$2 million loan that Enron would have forgiven had he stuck around until the end of 2001.

During Skilling's reign Enron's once tight relationship with Wall Street deteriorated fast. While Wall Street was once willing to take the company's word on financial performance, it no longer did. The little

information Enron gave to analysts made it impossible to build independent models. Enron's major business, the trading and marketing of energy, was relatively new and extremely complicated. There was confusion about the relationship between Enron's reported earnings, which reflect changes in the value of its energy-trading portfolio, and the actual cash coming in. In the first half of the year, Enron reported net income of \$810 million and cash flow from operations of negative \$1.3 billion

There were rumors that some insiders had sold already 1.75 million shares in the first few months of 2001. Among the biggest sellers: Lay, who had sold 408,000 shares at prices ranging from \$81 in the fall of 2000 to \$43 in July 2001. Other sellers included two executives who had resigned: new business unit head Lou Pai and broadband chief Kenneth Rice. According to Enron the sales were related to pending expiration of options.

August 15, 2001. Enron's chairman Kenneth Lay receives an anonymous letter from Sheron Watkins, Enron's vice president for corporate affairs. Watkins wrote, among others: *"I am incredibly nervous that we will implode in a wave of accounting scandals."* Watkins, an accountant, used to work for chief financial officer Andrew Fastow before she was promoted to vice president. She learned Enron was losing money on two equity investments: network-equipment supplier Avici lost 98% of its value, and another, New Power, an energy retailer that had Kenneth Lay on the board, dropped more than 80%. Both firms were backed by Enron stock, their downfall would drag Enron along. None of this, as far as she knew, was being reflected in Enron's public filings.

Watkins wrote her one-page letter to Kenneth Lay on the day after CEO Skilling quit. The letter said what many executives knew but no one had the courage to say. Nothing happened.

August 16, 2001. At a company-wide meeting, Lay invites anyone troubled by Skilling's departure to meet with him. With the help of a

friend Watkins drafts a six-page memo outlining some of the Enron deals she considered controversial. In her letters Watkins expressed her fear that the company “would implode in a wave of accounting scandals.” She claimed that Enron had hidden billions of dollars in debts and operating losses inside private partnerships and complex accounting schemes that were intended to jack-up the company’s image and support its inflated stock. She made an appointment with the chairman.

August 20/21, 2001. Lay sells 98,000 Enron shares; he earns 2 million dollar in the deal. At the same time he urges Enron personnel to buy shares in the company.

August 22, 2001. Watkins meets with Lay and hands over her six-page memo. Lay promised to have a team of lawyers review the controversial deals. But he decided to use Enron’s law firm, Vinson & Elkins, despite Watkins unease about a conflict of interest. The same law firm had been paid for work on some of the same controversial transactions. But Lay pushed through. Soon another memo, this time from employee Margaret Ceoni, dealing with the same issues, reached Lay’s desk.

September 26, 2001. Initially Enron stocks are trading at a level of \$25, later in the month they rise to \$40.

October 12, 2001. Andersen lawyer Nancy Temple issues the following e-mail:

“It might be useful to consider reminding the engagement team of our documentation and retention policy. It would be helpful to make sure that we have complied with the policy. Let me know if you have any questions. Nancy.”

A massive effort went underway within Arthur Andersen to destroy documents that had anything to do with Enron. The shredding did not stop until November 9, when another e-mail—sent from Andersen headquarters in Chicago—directed staff to stop destroying documents.

October 16, 2001. Enron announces in a press release:

“Non-recurring charges totaling \$1.01 billion after-tax, or \$(1.11) loss per diluted share, were recognized for the third quarter of 2001. The total net loss for the quarter, including non-recurring item, was \$(618) million, or \$(0.84) per diluted share”

“After a thorough review of our business, we have decided to take these charges to clear away issues that have clouded the performance and earnings potential of our core energy businesses.”

The non-recurring charges consisted of:

- \$287 million related to asset impairments recorded by Azurix Corp. These impairments primarily reflected Azurix’s planned disposition of its North American and certain South American service-related businesses;
- \$180 million associated with the restructuring of Broadband Services, including severance costs, loss on sale of inventory and an impairment to reflect the reduced value of Enron’s content services business; and
- \$544 million related to losses associated with certain investments, principally Enron’s interest in The New Power Company, broadband and technology investments, and early termination during the third quarter of certain structured finance arrangements with a previously disclosed entity.

Enron’s stocks nose-dive to \$12 a share.

October 22, 2001. The Securities and Exchange Commission (SEC) requests information from Enron concerning two partnerships organized by the company's chief financial officer Andrew Fastow. Enron's most notable transaction with the partnership, LJM2 Co-Investment LP, involved the partnership's purchase of 55 million Enron shares in exchange for a note, with the aim of hedging against certain technology investments. When the value of Enron's stock and the investments dropped, Enron repurchased the shares at the lower price and cancelled the partnership's note.

Enron notes in a press release that its internal and external auditors and attorneys reviewed the related party arrangements, the Board was fully informed of and approved these arrangements, and they were disclosed in the company's SEC filings. "We believe everything that needed to be considered and done in connection with these transactions was considered and done," Kenneth Lay said.

October 31, 2001. Enron announces that the Board has appointed a Special Committee, to be chaired by newly elected board member William Powers Jr., to examine and take any appropriate actions with respect to transactions between Enron and entities connected to related parties.

Enron also announces that the SEC had opened a formal investigation into certain of the matters that were the subject of recent press reports and that previously were the subject of its informal inquiry.

Enron's stock continues to plunge.

November 8, 2001. Arthur Andersen receives a subpoena from the SEC to shed light on its auditing of Enron.

November 8, 2001. Enron provides additional information to the SEC about various related party and off-balance sheet transactions in which the company was involved.

The company also announces in a press release dated November 8, 2001 that it would restate prior years' financial statements to reflect its review of current information concerning the transactions discussed below. After taking into account Enron's previously disclosed adjustment to shareholders' equity in the third quarter of 2001, these restatements have no effect on Enron's current financial position. Based on this review, Enron has determined that:

- the financial activities of Chewco Investments, L.P. (Chewco), a related party which was an investor in Joint Energy Development Investments Limited Partnership (JEDI), should have been consolidated beginning in November 1997;
- the financial activities of JEDI, in which Enron was an investor and which was consolidated into Enron's financial statements during the first quarter of 2001, should have been consolidated beginning in 1997; and
- the financial activities of a wholly-owned subsidiary of LJM1, which engaged in structured transactions with Enron that were designed to permit Enron to mitigate market risks of an equity investment in Rhythms NetConnections, Inc., should have been consolidated into Enron's financial statements beginning in 1999.

Enron's current assessment indicated that the restatement will include a reduction to reported net income of approximately \$96 million in 1997, \$113 million in 1998, \$250 million in 1999 and \$132 million in 2000, increases of \$17 million for the first quarter of 2001 and \$5 million for the second quarter and a reduction of \$17 million for the third quarter of 2001. These changes to net income are the result of the retroactive consolidation of JEDI and Chewco beginning in November 1997, the consolidation of the LMJ1 subsidiary for 1999 and 2000 and prior year proposed audit adjustments. The consolidation of JEDI and Chewco also will increase Enron's debt by approximately \$711 million in 1997, \$561 million in 1998, \$685 million in

1999 and \$628 million in 2000. The restatement will, according to Enron, have no negative impact on the company's reported earnings for the nine-month period ending September 2001.

November 12, 2001. An attempt to merge Enron with Dynegy Inc. fails. In addition, Standard & Poor's, Moody's Investors Service and Fitch, Inc. downgrades Enron's long-term debt to below investment grade.

November 30, 2001. Enron's stocks drops to \$0.26 per share.

December 2, 2001. Enron files for Chapter 11 bankruptcy protection in a U.S. Bankruptcy Court in New York. Enron's plunge from a high of \$90.75 per share in August 2000, to \$0.26 only on November 30, 2001, was complete.

"While uncertainty during the past few weeks has severely impacted the market's confidence in Enron and its trading operations, we are taking steps to help preserve capital, stabilize our businesses, restore the confidence of our trading counter-parties, and enhance our ability to pay our creditors," said Kenneth Lay, Enron Chairman and CEO in a statement.

Lay also announced austerity measures and a massive lay-off of personnel, especially in Enron's head office in Houston, Texas.

Enron sought bankruptcy protection for itself and 14 subsidiaries, including Enron North America Corp., its wholesale energy trading business; Enron Energy Services, the company's retail energy marketing operations; Enron Transportation Services, the holding company for Enron's pipeline operations; Enron Broadband Services, the company's bandwidth trading operation; and Enron Metals & Commodity Corp.

Not included in the filing were Northern Natural Gas Pipeline, Transwestern Pipeline, Florida Gas Transmission, EOTT, Portland General Electric and numerous other Enron international entities.

As part of the reorganization process, Enron also filed suit against Dynegy Inc. in the same court, alleging breach of contract in connection with Dynegy's wrongful termination of its proposed merger with Enron and seeking damages of at least \$10 billion. Enron's lawsuit also seeks the court's declaration that Dynegy is not entitled to exercise its option to acquire an Enron subsidiary that indirectly owns Northern Natural Gas Pipeline. Proceeds from the lawsuit would benefit Enron's creditors.

January 15, 2002. The New York Stock Exchange suspends trading in Enron shares.

January 17, 2002. Enron Board discharges Arthur Andersen in all capacities.

January 23, 2002. Kenneth Lay resigns by e-mail as Enron's Chairman of the Board and Chief Executive Officer:



From: Enron Office Of The Chairman

Sent: Wednesday, January 23, 2002 8:10 PM

To: DL-G-all_enron_worldwide

Subject: Message from Ken Lay

Earlier today, I stepped down as Enron's Chairman of the Board and Chief Executive Officer. This decision was reached in cooperation with Enron's Board and the Credit Committee and is effective immediately.

To emerge from bankruptcy, Enron needs a CEO who can focus 100 percent of his or her efforts on rebuilding the company. Unfortunately, with multiple inquiries and investigations that require my immediate attention, at this time I am unable to fully concentrate on what is most important to Enron's stakeholders—preserving value for our creditors and our dedicated employees.

The Creditor Committee has begun a search for a restructuring specialist to serve as interim CEO to help the company emerge from bankruptcy. This individual will join Enron's remaining management team to direct the company's ongoing operations. I truly believe Enron can and will survive. I will remain a Director of the Board to help that it does.

During my time at Enron, I have witnessed tremendous change and opportunity. I have seen people rigorously grow and maintain one of the world's most efficient and safest gas pipe networks; I have seen people dedicate themselves to a cause that became a passion—opening of energy markets; I have observed smart people come together as a team to make creative solutions like EnronOnline; and I have watched people firelessly give of themselves to help their fellow employees and those in the community. Regardless of what has happened, I am proud of so much of what we were able to accomplish here.

Thank you for your contributions and for the inspiration you have been to me over the years.

Ken Lay

4

CLIENT AND AUDITOR

Enron was the 7th largest company in the U.S. at the time of its collapse. Its bankruptcy was the largest ever in U.S. history. As such the affair attracted huge attention. Not only the media jumped on the issue; also the U.S. congress wanted to show its constituency that this was something serious. Soon more than 10 congressional hearings were set up in an attempt to find out what had happened. The U.S. Department of Justice started its own investigation.

The first Committee that managed to get its act together was the Committee on Financial Services of the U.S. House of Representatives. The Committee focused on the issue why Arthur Andersen LLP, Enron's auditor and financial advisor, had not been able to prevent a disaster such as this. Enron had paid Andersen \$52 million in 2000 for auditing its books and for additional services.

On December 12, 2001, Arthur Andersen's Managing Partner and Chief Executive Officer Joseph F. Bernardino explained before the Committee of Financial Services his company's position in the Enron case as follows:

"Chairman Oxley, Congressman LaFalce, Chairman Baker, Congressman Kanjorski, Chairwoman Kelly, Congressman Gutierrez, Members of the Committee.

I am here today because faith in our firm and in the integrity of the capital market system has been shaken. There is some explaining to do.

What happened at Enron is a tragedy on many levels. We are acutely aware of the impact this has had on investors. We also recognize the pain this business failure has caused for Enron's employees and others. Many questions about Enron's failure need to be answered, and some involve accounting and auditing matters. I will do my best today to address those.

I ask that you keep in mind that the relevant auditing and accounting issues are extraordinarily complex and part of a much bigger picture. None of us here yet knows all the facts. Today's hearing is an important step in enlightening all of us. I am certain that together we will get to the facts. If there is one thing you take away from my testimony, I hope it is this: *Andersen will not hide from its responsibilities.* That is why I am here today. The public's confidence is of paramount importance. If my firm has made errors in judgements, we will acknowledge them. We will make the changes needed to restore confidence.

Today I want to address two issues that go to the heart of concerns about our role as Enron's auditor. First, did we do our job? I want to explain what we knew and when we knew it on several key issues, keeping in mind that our own review—like yours—is still under way. Second, did we act with integrity? I want to discuss the \$52 million in fees we received and respond to concerns that have been raised. I also want to talk about what I believe are some of the lessons we can already learn from Enron—for our firm, for the accounting profession, and for all participants in the financial reporting system.

Let me start by telling you what we know about three particular accounting and reporting issues:

- The restatements caused by the consolidation of two Special Purpose Entities, known as SPEs, and the recording of previously "passed" adjustments as a required byproduct of the restatement;

- A \$1.2 billion reclassification in the presentation of shareholders' equity during 2001—of which \$172 million was misclassified in the audited 2000 financial statement, and;
- The company's disclosures about its off-balance-sheet transactions and related financial activities.

I want to emphasize that my remarks are based on the information that is currently available. We have made our best efforts to be complete and accurate in describing what we know. But our review, like the work of the SEC, this Committee, Enron's Board, and others, is not yet complete. It is always possible that new information could be developed that would change current understanding of events or uncover new events.

CONSOLIDATION OF SPECIAL PURPOSE ENTITIES

Let me begin with the Special Purpose Entities. SPEs are financing vehicles that permit companies, like Enron, to, among other things, access capital or to increase leverage without adding new debt to their balance sheet. Wall Street has helped companies raise billions of dollars with these structured financings, which are well known to analysts and sophisticated investors.

Two SPEs were involved in Enron's recent statement announcements. On one, the smaller of them, we made a professional judgement about the appropriate accounting treatment that turned out to be wrong. On the one with the larger impact, it would appear that our audit team was not provided critical information. We are trying to determine what happened and why.

Let us begin with the larger SPE, an entity called Chewco. What happened with Chewco accounted for about 80 percent of the SPE-related restatement.

In 1993, Enron and the California Public Employees Retirement System (Calpers) formed a 50/50 partnership they called Joint Energy Development Investments Limited, or JEDI for short. Among other

factors, the fact that Enron did not control more than 50 percent of JEDI meant that that partnership's financial statements could not be consolidated with Enron's financial statements under the accounting rules. In 1997, Chewco bought out Calpers' interest in JEDI. Enron sponsored Chewco's creation as an SPE and had investments in Chewco.

The rules behind what happened are complex, but can be boiled down to this. The accounting rules dictate, among other things, that unrelated parties must have residual equity equal to at least 3 percent of the fair value of an SPE's assets in order for the SPE to qualify for non-consolidation. However, there is no prohibition against company employees also being involved as investors, provided that various tests were met, including the 3 percent test.

In 1997, we performed audit procedures on the Chewco transaction. The information provided to our auditors showed that approximately \$1.4 million in Chewco had come from a large international financial institution unrelated to Enron. That equity met the 3 percent residual equity test. However, we recently learned that Enron had arranged a separate agreement with that institution under which cash collateral was provided for half of the residual equity. What happened?

Very significantly, at the time of our 1997 procedures, the company did not reveal that it had this agreement with the financial institution. With this separate agreement, the bank had only one-half of the necessary equity at risk. As a result, Chewco's financial statements since 1997 were required to be consolidated with JEDI's which, in a domino effect, then had to be consolidated in Enron's financial statements.

It is not clear why the relevant information was not provided to us. We are still looking into that. On November 2, 2001, we notified Enron's audit committee of possible illegal acts within the company, as required under Section 10A of the Securities and Exchange Act.

Now, about the second SPE structure; specifically, a subsidiary of the entity known as LJM1. This transaction was responsible for about 20 percent—or \$100 million—of Enron's recent SPE-related restate-

ment. In retrospect, we believe LJM1's subsidiary should have been consolidated. I am here today to tell you candidly that this was the result of an error in judgement. Essentially, this is what happened:

After our initial review of LJM1 in 1999, Enron decided to create a subsidiary within LJM1, informally referred to as Swap Sub. As a result of this change, the 3 percent test for residual equity had to be met not only by LJM1, but also by LJM1's subsidiary, Swap Sub. In evaluating the 3 percent residual equity level required to qualify for non-consolidation, there were some complex issues concerning the valuation of various assets and liabilities. When we reviewed this transaction again in October 2001, we determined that our team's initial judgement that the 3 percent test was met was in error. We promptly told Enron to correct it.

We are still looking into the facts. But given what we know now, this appears to have been the result of a reasonable effort, made in good faith.

ADJUSTMENTS PREVIOUSLY NOT MADE TO ENRON'S 1997 FINANCIAL STATEMENT

As a result of the restatement for the SPEs, Enron was required to address proposed adjustments to its financial statements that were not made during the periods subject to restatement. Questions have been raised about certain of these "passed adjustments." Let me address that issue next.

As part of the audit process, the auditor proposes adjustments to the company's financial statements based on its interpretation of Generally Accepted Accounting Principles (GAAP). A company's decision to decline to make proposed adjustments does not mean that there has been an intentional effort to misstate. If the auditor believes that the company's action will result in either an intentional error or a material misstatement, it may not sign the audit opinion.

Often, there is a timing issue to consider. These adjustments typically are proposed by the auditor at the conclusion of the audit

work—usually one or two months after the close of the year-end. Some companies, like Enron, choose to book those adjustments in the year after the auditor identifies them, when they are immaterial.

Questions have been raised about \$51 million in adjustments not made in 1997 when Enron reported net income totaling \$105 million. Some have asked how adjustments representing almost half of reported net income could have been deemed to be immaterial. Auditing standards and EC guidance say both qualitative and quantitative factors need to be considered in determining whether something is material. The Supreme Court has described this approach as the “total mix” of information that auditors must consider.

In 1997, Enron had taken large nonrecurring charges. When the company decided to pass these proposed adjustments, our audit team had to determine whether the company’s decision had a material impact on the financial statements. The question was whether the team should only use reported income of \$105 million, or should it also consider adjusted earnings before items that affect comparability—what accountants call “normalized” income?

We looked at “the total mix” and, in our judgement, on a quantitative basis, the passed judgements were deemed no to be material, amounting to less than 8 percent of normalized earnings. Normalized income was deemed appropriate in light of the fact that the company had reported net income of \$584 million one year earlier, in 1996, \$520 million in 1995 and \$453 million in 1994.

It is also important to remind you that the restatement analysis presented in Enron’s recent 8-K filing was not audited. When Enron’s audited restatement is issued, the \$51 million in adjustments presented in 1997 will be reduced for the effect of adjustments proposed in 1996, which were recorded in 1997.

RECLASSIFICATION OF \$1.2 BILLION OF SHAREHOLDERS' EQUITY

Now let me turn to the issue of shareholders' equity. Shareholders' equity was incorrectly presented on Enron's balance sheet last year and in two unaudited quarters this year.

Auditors do not test every transaction and they are not expected to do. To do so would be impractical and would be prohibitive expensive. EnronOnline alone handled over 500,000 transactions last year.

Auditing standards require an audit scope sufficient to provide reasonable—not absolute assurance that any material errors will be identified. This testing is based on a cost-effective and proven technique known as sampling. If appropriate accounting is found in a properly chosen sample, this generally provides reasonable assurance that the accounting for the whole population of transactions had been done in accordance with GAAP and is free from material misstatement.

Shareholders' equity was initially overstated last year for a transaction with a balance sheet effect of \$172 million. This amount was recorded as an asset, but should have been presented as a reduction in shareholders' equity. That amount, \$172 million, was less than one third of one percent of Enron's total assets and approximately 1.5 percent of shareholders' equity of \$11.5 billion. It was a very small item relative to total assets and equity and had no impact on earnings or cash flow. Accordingly, the transaction fell below the scope of our audit.

In the first quarter of this year, Enron accounted for several more transactions in a similar way, increasing the size of the incorrect presentation of shareholders' equity by about \$828 million. The quarterly financial statements of public company's are not subjected to an audit, and we did not conduct an audit of Enron's quarterly reports. Consistent with the applicable standards, our work primarily was a limited review of the company's unaudited financial statements.

In the third quarter, Enron closed out the transactions that included the \$172 million and the \$828 million equity amounts, and we and Enron reviewed the associated accounting. This review included third-

quarter impacts on the profit and loss statement and on the balance sheet. This is when the erroneous presentation of shareholders' equity came into focus.

We had discussed the proper accounting treatment for similar types of transactions with Enron's accounting staff, and therefore, the scope of our work on the year 2000 audit and this year's quarterly reviews did not anticipate this sort of error. En we informed the company of the error, the company made the necessary changes in its financial statements

QUESTIONS ABOUT DISCLOSURE

Questions have been raised about the sufficiency of Enron's disclosures, especially about non-consolidated entities. I ask you to keep in mind that the company disclosed in its financial statements that it was using a number of unconsolidated structured financing vehicles. Unconsolidated means, by definition, that the assets and liabilities of these entities were not recorded in Enron's financial statements. However, in certain circumstances, footnote disclosures are required.

With that disclaimer, let me offer one man's view of what investors were told. Enron had hundreds of structured finance transactions. Some were simple; others, very complex. The company did not disclose the details of every transaction, which is acceptable under GAAP, but it did disclose those involving related parties and unconsolidated equity affiliates.

- JEDI and other entities are listed in footnote nine of Enron's annual report
- LFJM1 and LJM2 involving the company's former CFO both were described in the 1999 and 2000 annual reports and described more fully in its annual proxy statements.

In footnote 11 to the 2000 annual report, Enron also disclosed under the heading "Derivative Instruments" that it had derivative

instruments on 12 million shares of its common stock with JDI and 22.5 million with related parties.

Some people say we should have required the company to ask more disclosures about contingencies, such as accelerated debt payments, associated with a possible decline in the value of Enron's stock or changes in the company's credit rating.

I ask you to keep in mind that the company's shares were coming off near record levels when we completed our audit for 2000. No one could have anticipated the sudden, rapid decline we witnessed in this stock and its credit ratings, and accounting rules don't require a company do disclose remote contingencies.

That said, we continue to believe investors would be better served if our accounting rules were changed to reflect the risks and rewards of transactions such as SPEs, not just who controls them. Putting more of the assets and liabilities that are at risk on the balance sheet would do more than additional disclosure ever could. We have advocated changes in these accounting rules since 1982.

I offer an additional observation about Enron's disclosures. Press reports indicate that some who analyzed the company's public disclosures came to the conclusion that perceptions about the company—and thus the market's valuation of Enron—were not supported by what was in the company's public filings.

FEES PAID TO ANDERSEN

Some are questioning whether the size of our fees, \$52 million, and the fact that we were paid \$27 million for services other than the Enron audit, may have compromised our independence at Enron. I understand that the size of fees might raise questions, and I think our profession must be sensitive to that perception.

With that in mind, I think it would be helpful for the Committee to have a deeper understanding of the nature of the work we did for Enron, and how the fees for that work were reported. As a starting point, it is important to recognize that Enron was a big, complex com-

pany. Enron had \$100 billion in sales last year. It operated 25,000 miles of interstate pipeline and an 18,000-mile global fiber optic network. Enron did business in many countries. Its EnronOnline trading system was the world's largest web-based eCommerce system and handled more than half a million transactions last year—for 1,200 products. Enron was the seventh largest company on the Fortune 500.

This was not a simple company. It was not a simple company to audit. In addition to its operations and trading, Enron, as we know, engaged in sophisticated financial transactions. Not a few, but hundreds. Assets worldwide totaled \$65 billion, both before and after Enron adjusted for the restatements. Given this complexity, it should not surprise anyone that the fees paid to our firm for Enron's audit were substantial. The \$25 million we were paid for Enron's audit last year is comparable to the amounts that General Electric and Citigroup, two sophisticated financial services providers, paid for their audits. It is slightly more than the audit fees paid by two others—JP Morgan Chase and Merrill Lynch.

Because of the way the fee categories for new proxy statement disclosures on auditor fees were defined, many services traditionally provided by auditors—and in many cases *only* provided by auditors—now are classified as "Other." Regrettably, without knowledge of the underlying facts, this leads some to believe that such fees are for "consulting" services. In fact, the \$2.4 million of the \$27 million in "Other" fees reported by Enron last year related to work we did on registration statements and comfort letters. This is work only a company's audit firm can do.

Another \$3.5 million was for tax work, which has never even been mentioned as a conflict with audit work. Audit firms almost always do tax work for clients.

Another \$ 3.2 million of the "Other" fees Enron paid us last year related to a review of the controls associated with a new accounting system—a service highly relevant to the auditor's understanding of the

company's financial reporting system. Another Big Five Firm installed that financial accounting system—for about \$30 million.

Finally, \$4 million of the fees listed as having been paid to Andersen were, in fact, paid to Andersen Consulting, now known as Accenture. As most of you know, our firms formally separated last August and had been operating as independent businesses for some time. Nevertheless, the rules said Enron had to report any fees it paid to Andersen Consulting as having been paid to its audit firm.

If you take all these factors into account, the total fees that Arthur Andersen received from Enron last year amounted to \$47.5 million. And of this, about \$34.2 million, or 72 percent, was audit-related and tax work. Total fees for other services paid to our firm amounted to \$13.3. This was for several projects, none of which was for systems implementation or for more than \$3 million.

Some may still say that even \$13 million of consulting work is too much—that it weakens the backbone of the auditor. There is a fundamental issue here. Whether it's consulting work or audit work, the reality is that auditors are paid by their clients. For our system to work, you and the investing public must have confidence that the fees paid, regardless of the nature of our work, will not weaken our willingness to do what is right and in the best interest of the investors as represented by the audit committee and the board.

I do not believe the fees we received compromised our independence. Obviously, some will disagree. And I have to deal with the reality of that perception. I am acutely aware that our firm must restore the public's trust. I do not have all the answers today. But I can assure you that we are carefully assessing this issue and will take the steps necessary to reassure you and the public that our backbone is firm and our judgment is clear.

LESSONS FOR THE FUTURE

When a calamity happens, it is absolutely appropriate to ask what everyone involved could have done to prevent it. By asking the other

witnesses and me to testify today, the committee is working hard, in good faith, to understand the issues involved and to help prevent a recurrence with another company.

I believe that there is a crisis of confidence in my profession. This is deeply troubling me, as I believe it is a concern for all of the profession's leaders and, indeed, all of our professionals. Real change will be required to regain the public's trust. Andersen will have to change, and we are working hard to identify the changes that we should make.

The accountancy profession will have to reform itself. Our system of regulation and discipline will have to be improved. I discussed some of the issues that the profession faces in an op-ed in the *Wall Street Journal* last week, which is attached to my testimony. Other participants in the financial reporting system will have to do things different as well—companies, boards, audit committees, analysts, investment bankers, credit analysts, and others. We all must work together to give investors more meaningful, relevant and timely, information.

But our work starts with our firm. We are committed to making the changes needed to restore confidence. A day does not go by without new information being made available, and I would observe that all of us here today—and many others who are not here—have a responsibility to seek out and evaluate the facts and take needed action. My firm, and I personally as its CEO, will continue to do our part. I hope that my participation today has been helpful to your efforts

Thank you."

ENRON'S RESPONSE TO ANDERSEN TESTIMONY

In a press-release Enron Corp. reacted immediately on the testimony of Andersen's CEO Joseph F. Bernardino:

FOR IMMEDIATE RELEASE: Wednesday, December 12, 2001

HOUSTON-Enron Corp. said today that the comments made by an Andersen executive at a Congressional hearing were generally support-

ive of Enron's good faith and propriety in the preparation of its financial statements.

"Enron engaged in real time audit procedures with its auditors on every significant structured finance vehicle," said Kenneth L. Lay, Enron chairman and CEO. "It has always been Enron's policy to be open with its accountant, Andersen."

As to one special purpose entity, Andersen said it had been unaware of an arrangement relevant to that entity's off-balance sheet treatment. Enron noted, however, that it was the company's management, not Andersen, that discovered the arrangement and its relevance and reported it to Andersen within 24 hours.

In addition, Enron referred the matter to the previously formed Special Investigative Committee of the Board, which hired separate counsel that, in turn, hired separate accountants. That Special Committee is continuing its work to determine the facts and the proper remedial actions. Enron is determined to get to the bottom of these issues and began work on that effort before Andersen's advice."

NOTE

Andersen's CEO in his testimony belittles the problems to a great extent. It was all a matter of "minor errors", small "mistakes in judgement" or specific "interpretation" of "GAAP" rules. There is nothing in his testimony about the activities of people such as Andrew Fastow, Michael Kopper, Ben Glisan or Richard Causey. What about the Raptor vehicles? What about the massive shredding of papers and documents between October 23 and November 9, 2001. No word from Bernardino about the worries, in early 2001, of senior Andersen managers regarding Enron's accounting practices. In the mean time America's seventh largest company went down the drain in a cloud of dust, causing America's biggest bankruptcy case in history.

Not the first time

What makes Andersen an even tastier target for investigators is the fact that this is not the first time. Last year, the firm was hit with a \$7 million fine for "improper professional conduct," the first successful case against an auditor launched by the U.S. Securities & Exchange Commission in more than 20 years.

The fine related to auditing work for rubbish-processing firm Waste Management in the mid-1990s, including some \$1.4 billion in overstated earnings.

The Waste Management case followed Andersen's decision to pay \$110 million to settle a lawsuit on audits at Sunbeam, another U.S. client found to have less than reliable accounts. But there were others, such as Asia Pulp and Paper and a bankrupt insurance company in Australia, and of course the Baptist Foundation of Arizona (BFA).

The link between Enron and BFA is the way Arthur Andersen handled the books of both failed companies. The long ignored collapse of BFA is every bit as tragic as the Enron failure. BFA filed for bankruptcy in Phoenix, leaving in the lurch 13,000 mostly elderly investors who collectively lost more than \$590 million. It is the largest bankruptcy of a religious non-profit entity in the United States history.

BFA investors are Christian folk who live throughout the United States, hardworking men and women who assumed they had invested their money wisely because they believed neither Arthur Andersen accountants, nor the pious Southern Baptist salesmen who promoted BFA's high-interest notes, would deceive them. So far, BFA investors have received only pennies on their dollars from bankruptcy settlements. Arizona attorneys general have tried to force Andersen to pay back the BFA victims. So far, they have failed.

Currently, Andersen faces action by the Arizona Board of Accountancy and Arizona Attorney General's Office, as well as two ongoing civil lawsuits in state court alleging that Andersen's accounting fraud deceived BFA investors. And several of BFA's key-managers have been indicted for alleged white-collar fraud in state court.

There are more similarities between Enron and BFA. In Phoenix Andersen is accused of ignoring or failing to thoroughly investigate shell companies created by insiders who grotesquely enriched themselves while hiding BFA's mounting debt in "off-balance companies." Here too were whistleblowers, but Andersen ignored them. Documents have allegedly been altered.

As the smallest of the Big Five audit firms (the others are PricewaterhouseCoopers, Deloitte & Touche, KPMG and Ernst & Young), it cannot afford to pass up business. Since the bulk of its lucrative consultancy business—Andersen Consulting, now known as Accenture—has been spun off over the past few years, Andersen is forced to squeeze as much revenue out of its clients as possible.

As the investigations roll on, the consequences for Andersen could be disastrous. Possible claims could even wipe out the auditing firm. Even if investigators find that Andersen was blamelessly ignorant of the going-on at Enron, which is highly unlikely, it could still be hit by a temporary freeze on signing up new audit clients. Not that too many firms will be eager to hire Andersen as an auditor, at least if they wish to send out reassuring signals to investors.

And if Andersen's auditing business falters, it will have a knock-on effect on its allied sidelines, which run from consulting to legal services.

Merger Mania

Already, there is talk—so far brushed aside by the firms concerned—that Andersen may be forced to merge with a large rival, KPMG for example. That would make the Big Five—not that long ago known as the Big Eight—into the Big Four, and would certainly ring alarm bells among competition authorities.

With or without proof of malpractice at Andersen, the SEC is expected almost certainly to introduce new restrictions on the sector. At their most draconian, these could include an attempt to force the Big Five to split their auditing from their consultancy divisions, and possibly even spin off marginal interests such as legal and human

resources services. That would be bad news for the Big Five which have been frantically empire-building for the past decade. But it may be the only way to win back trust in those dull but vital financial statements.

Andersen as Campaign Contributor

Enron was a large contributor to politicians. Between 1989 and 2001 the company contributed all in all nearly \$6 million to federal parties and candidates, more than two-thirds to Republicans. Andersen, meanwhile, was an even bigger supporter of Bush, having contributed \$146,000 via its employees and PAC in 1999-2000. D. Stephen Goddard, relieved of his managerial duties in Andersen's Houston office in January also was one of Bush's biggest individual donors during the election. All told, Andersen has contributed more than \$5.2 million in soft money, PAC and individual contributions to federal parties and candidates, more than half to Republicans. While Enron's giving has concentrated mainly in big soft money gifts to the national political parties, Andersen's generosity often was targeted directly at members of Congress. For instance, more than half the current members of the House of Representatives were recipients of Andersen cash over the last decade. In the Senate, 94 of the chamber's 100 members reported Andersen contributions since 1989. At the same time, 71 senators and 186 House members (43 percent) reported taking Enron cash over the last decade.

Andersen's Total Contributions To Federal Candidates and Parties, 1989-2000

Election Cycle	Total Contributions	% to Dems	% to Reps
1990	\$ 252,780	43%	57%
1992	651,158	54	46
1994	584,361	50	50
1996	950,185	33	67

1998	825,056	31	69
2000	1,430,510	29	71
2002	525,442	31	69

NB. There is no question about Andersen's 'love' for Republicans.

Conflict of Interest

The massive donations from Andersen and Enron to political parties and candidates immediately created problems when the U. S. Department of Justice announced early January 2002 that it had created a task force, staffed with experts on complex financial crimes, to pursue a full criminal investigation of the Enron case. The country was quickly reminded of the pervasive reach of Enron and Andersen and their executives—the biggest contributors to the Presidential campaign of George W. Bush—when U.S. Attorney General John Ashcroft had to recuse himself from the probe because he had received \$57,499 in campaign cash from Enron for his failed 2000 Senate re-election bid in Missouri. Then the entire office of the U.S. Attorney in Houston recused itself because too many of its prosecutors had personal ties to Enron executives—or to angry workers who have been fired or have seen their life savings disappear.

Texas attorney general John Cornyn, who launched an investigation in December into 401(k) losses at Enron and possible tax liabilities owed to Texas, recused himself because since 1997 he has accepted \$158,000 in campaign contributions from the company.

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THE POWERS' REPORT

On October 31, 2001 Enron announced that the Board had appointed a Special Committee, to be chaired by newly elected Board member William Powers Jr., to examine and take appropriate actions with respect to transactions between Enron and entities connected to related parties.

*The Special Investigation Committee, consisting of William C. Powers, Jr., Raymond S. Troubh and Herbert S. Winokur, Jr., submitted its report to the Members of the Board of Directors on February 1, 2002. The report became known as **The Powers Report**.*

The Powers Report is more than 200 pages long and gives detailed information about the various transactions that brought Enron eventually in problems. We will follow the executive summary of the report.

BACKGROUND OF THE REPORT

On October 16, 2001, Enron announced that it was taking a \$544 million after-tax charge against earnings related to transactions with LJM2 Co-Investment, L.P. ("LJM2"), a partnership created and managed by Fastow, Enron's chief financial officer. It also announced a reduction of shareholders' equity of \$1.2 billion related to transactions with that same entity.

Less than one month later, Enron announced that it was restating its financial statements for the period from 1997 through 2001 because of accounting errors relating to transactions with a different Fastow partnership, LJM Cayman, L.P. ("LJM1"), and an additional related-party

entity, L.P. ("Chewco"). Chewco was managed by an Enron Global Finance employee, Kopper, who reported to Fastow.

The LJM1- and Chewco-related restatement, like the earlier charge against earnings and reduction of shareholders' equity, was very large. It reduced Enron's reported net income by \$28 million in 1997 (of \$105 million total), by \$133 million in 1998 (of \$703 million total), by \$248 million in 1999 (of \$893 million total), and by \$99 million in 2000 (of \$979 million total). The restatement reduced reported shareholders' equity by \$258 million in 1997, by \$391 million in 1998, by \$710 million in 1999, and by \$754 million in 2000. It increased reported debt by \$711 million in 1997, by \$561 million in 1998, by \$685 million in 1999, and by \$628 million in 2000. Enron also revealed, for the first time, that it had learned that Fastow received more than \$30 million from LJM1 and LJM2. These announcements destroyed market confidence and investor trust in Enron. Less than a month later, Enron filed for bankruptcy.

SUMMARY OF FINDINGS

This Committee was established on October 28, 2001, to conduct an investigation of the related-party transactions. We have examined the specific transactions that led to the third quarter 2001 earnings charge and the restatement. We also have attempted to examine all of the approximately two dozen other transactions between Enron and these related-party entities: what these transactions were, why they took place, what went wrong, and who was responsible.

Our investigation identified significant problems beyond those Enron has already disclosed. Enron employees involved in the partnerships were enriched, in the aggregate, by tens of millions of dollars they should never have received—Fastow by at least \$30 million, Kopper by at least \$10 million, two others by \$1 million each, and still two more by amounts we believe were at least in the hundreds of thousands of dollars. We have seen no evidence that any of these employees, except Fastow, obtained permission required by Enron's Code of Conduct of

Business Affairs to own interests in the partnerships. Moreover the extent of Fastow's ownership and financial windfall was inconsistent with his representations to Enron's Board of Directors.

This personal enrichment of Enron employees, however, was merely one aspect of a deeper and more serious problem. These partnerships—Chewco, LJM1, and LJM2—were used by Enron Management to enter into transactions that it could not, or would not, do with unrelated commercial entities. Many of the most significant transactions apparently were designated to accomplish favorable financial statement results, not to achieve *bona fide* economic objectives or to transfer risk. Some transactions were designed so that, had they followed applicable accounting rules, Enron could have kept assets and liabilities (especially debt) off its balance sheet; but the transactions did not follow those rules.

Other transactions were implemented—improperly, we are informed by our accounting advisors—to offset losses. They allowed Enron to conceal from the market very large losses resulting from Enron's merchant investments by creating an appearance that those investments were hedged—that is, that a third party was obligated to pay Enron the amount of those losses—when in fact that third party was simply an entity in which only Enron had a substantial economic stake. We believe these transactions resulted in Enron reporting earnings from the third quarter of 2000 through the third quarter of 2001 that were almost \$1 billion higher than should have been reported.

Enron's original accounting treatment of the Chewco and LJM1 transactions that led to Enron's November 2001 restatement was clearly wrong, apparently the result of mistakes either in structuring the transactions or in basic accounting. In other cases, the accounting treatment was likely wrong, notwithstanding creative efforts to circumvent accounting principles through the complex structuring of transactions that lacked fundamental economic substance. In virtually all of the transactions, Enron's accounting treatment was determined with extensive participation and structuring advice from Andersen, which

Management reported to the Board. Enron's records show that Andersen billed Enron \$5.7 million for advice in connection with the LJM and Chewco transactions alone, and above and beyond its regular audit fees.

Many of the transactions involve an accounting structure known as a "special purpose entity" or "special purpose vehicle" (referred to as an "SPE" in this Summary and in the Report). A company that does business with an SE may treat that SPE as if it were an independent outside entity for accounting purposes if two conditions are met: (1) an owner independent of the company must make a substantive equity investment of at least 3% of the SPE's assets, and that 3% must remain at risk throughout the transaction; and (2) the independent owner must exercise control of the SPE. In those circumstances, the company may record gains and losses on transactions with the SPE, and the assets and liabilities of the SPE are not included in the company's balance sheet, even though the company and the SPE are closely related. It was the technical failure of some of the structures with which Enron did business to satisfy these requirements that led to Enron's restatement.

THE CHEWCO TRANSACTION

The first of the related-party transactions we examined involved Chewco Investments L.P., a limited partnership managed by Kopper. Because of this transaction, Enron filed inaccurate financial statements from 1997 through 2001, and provided an unauthorized and unjustifiable financial windfall to Kopper.

From 1993 through 1996, Enron and the California Public Employees' Retirement System ("CalPERS") were partners in a \$500 million joint venture investment partnership called Joint Energy Development Investment Limited Partnership ("JEDI"). Because Enron and CalPERS had joint control of the Partnership, Enron did not consolidate JEDI into its consolidated financial statements. The financial statement impact of non-consolidation was significant: Enron would record its contractual share of gains and losses from JEDI on its

income statement and would disclose the gain or loss separately in its financial statement footnotes, but would *not* show JEDI's debt on its balance sheet.

In November 1997, Enron wanted to redeem CalPERS' interest in JEDI so that CalPERS would invest in another, larger partnership. Enron needed to find a new partner, or else it would have to consolidate JEDI into its financial statements, which it did not want to do. Enron assisted Kopper (whom Fastow identified for the role) in forming Chewco to purchase CalPERS interest. Kopper was the manager and owner of Chewco's general partner. Under the SPE rules summarized above, Enron could only avoid consolidating JEDI onto Enron's financial statements if Chewco had some independent ownership with a minimum of 3% of *equity* capital at risk. Enron and Kopper, however, were unable to locate any such outside investor, and instead financed Chewco's purchase of the JEDI interest almost entirely with debt, not equity. This was done hurriedly and in apparent disregard of the accounting requirements for non-consolidation. Notwithstanding the shortfall in required capital, Enron did not consolidate Chewco (or JEDI) into its consolidated financial statements.

Kopper and others (including Andersen) declined to speak with us about why this transaction was structured in a way that did not comply with the non-consolidation rules. Enron, and any Enron employee acting in Enron's interest, had every incentive to ensure that Chewco complied with these rules. We do not know whether this mistake resulted from bad judgement or carelessness on the part of Enron employees or Andersen, or whether it was caused by Kopper or others putting their own interests ahead of their obligation to Enron.

The consequences, however, were enormous. When Enron and Andersen reviewed the transaction closely in 2001, they concluded that Chewco did not satisfy the SPE accounting rules and—because JEDI's non-consolidation depended on Chewco's status—neither did JEDI. In November 2001, Enron announced that it would consolidate Chewco and JEDI retroactive to 1997. As detailed in the Background

section above, this retroactive consolidation resulted in a massive reduction in Enron's reported net income. And a massive increase in its reported debt.

Beyond the financial statement consequences, the Chewco transaction raises substantial corporate governance and management oversight issues. Under Enron's Code of Conduct of Business Affairs, Kopper was prohibited from having a financial or managerial role in Chewco unless the Chairman and CEO determined that his participation "does not adversely affect the best interests of the Company." Notwithstanding this requirement, we have seen no evidence that his participation was ever disclosed to, or approved by, either Kenneth Lay (who was chairman and CEO) or the Board of Directors.

While the consequences of the transaction were devastating to Enron, Kopper reaped a financial windfall from his role in Chewco. This was largely a result of arrangements that he appears to have negotiated with Fastow. From December 1997 through December 2000, Kopper received \$2 million in "management" and other fees. Relating to Chewco. Our review failed to identify how these payments were determined, or what, if anything, Kopper did to justify the payments. More importantly, in March 2001 Enron repurchased Chewco's interest in JEDI on terms Kopper apparently negotiated with Fastow (during a period in which Kopper had undisclosed interests with Fastow in both LJM1 and LJM2). Kopper had invested \$125,000 in Chewco in 1997. The repurchase resulted in Kopper's (and a friend to whom he had transferred part of his interest) receiving more than \$10 million from Enron.

THE LJM TRANSACTIONS

In 1999, with Board approval, Enron entered into business relationships with two partnerships in which Fastow was the manager and an investor. The transactions between Enron and the LM partnerships resulted in Enron increasing its reported financial results by more than

a billion dollars, and enriching Fastow and his co-investors by tens of millions of dollars at Enron's expense.

The two members of the Special Investigative Committee who have reviewed the Board's decision to permit Fastow to participate in LJM notwithstanding the conflict of interest have concluded that this arrangement was fundamentally flawed. (One member of the Special Investigative Committee, Herbert S. Winokur, Jr., was a member of the Board of Directors and the Finance Committee during the relevant period. The portions of the Report describing and evaluating actions of the Board and its Committees are solely the views of the other two members of the Committee, Dean William Powers, Jr., of the University of Texas School of Law and Raymond S. Troubh.) A relationship with the most senior financial officer of a public company—particularly one requiring as many controls and as much oversight by others as this one did—should not have been undertaken in the first place.

The Board approved Fastow's participation in the LJM partnerships with full knowledge and discussion of the obvious conflict of interest that would result. The Board apparently believed that the conflict, and the substantial risks associated with it, could be mitigated through certain controls (involving oversight by both the Board and Senior Management) to ensure that transactions were done on terms fair to Enron. In taking this step, the Board thought that the LJM partnerships would offer business benefits to Enron that would outweigh the potential costs. The principal reason advanced by Management in favor of the relationship, in the case of LJM1, was that it would permit Enron to accomplish a particular transaction it could not otherwise accomplish. In the case of LJM2, Management advocated that it would provide Enron with an additional potential buyer of assets that Enron wanted to sell, and that Fastow's familiarity with the Company and the assets to be sold would permit Enron to move more quickly and incur fewer transaction costs.

Over time the Board required, and Management told the Board it was implementing, an ever-increasing set of procedures and controls

over the related-party transactions. These included, most importantly, review and approval of all LJM transactions by Richard Causey, the Chief Accounting Officer; and Richard Buy, the Chief Risk Officer; and later during the period, Jeffrey Skilling, the President and COO (and later CEO). The Board also directed its Audit and Compliance Committee to conduct annual reviews of all LJM transactions.

These controls as designed were not rigorous enough, and their implementation and oversight was inadequate at both the Management and Board levels. No one in Management accepted primary responsibility for oversight; the controls were not executed properly; and there were structural defects in those controls that became apparent over time. For instance, while neither the Chief Accounting Officer, Causey, nor the Chief Risk Officer, Buy, ignored his responsibilities, they interpreted their roles very narrowly and did not give the transactions the degree of review the Board believed was occurring. Skilling appears to have been almost entirely uninvolved in the process, notwithstanding representations made to the Board that he had undertaken a significant role. No one in Management stepped forward to address the issues as they arose, or to bring the apparent problems to the Board's attention.

As we discuss further below, the Board, having determined to allow the related-party transactions to proceed, did not give sufficient scrutiny to the information that was provided thereafter. While there was important information that appears to have been withheld from the Board, the annual reviews of LJM transactions by the Audit and Compliance Committee (and later also the Finance Committee) appear to have involved only brief presentations by Management (with Andersen present at the Audit Committee) and did not involve any meaningful examination of the nature or terms of the transactions. Moreover, even though Board Committee-mandated procedures required a review by the Compensation Committee of Fastow's compensation from the partnerships, neither the Board nor Senior Management asked Fastow

for the amount of his LJM-related compensation until October 2001, after media reports focused on Fastow's role in LJM.

From June 1999 through June 2001, Enron entered into more than 20 distinct transactions with the LJM partnerships. These were of two general types: asset sales and purported "hedging" transactions. Each of these types of transactions was flawed, although the latter ultimately caused much more harm to Enron.

Asset Sales. Enron sold assets to LJM that it wanted to remove from its books. These transactions often occurred close to the end of financial reporting periods. While there is nothing improper about such transactions if they actually transfer the risk and rewards of ownership to the other party, there are substantial questions whether any such transfer occurred in some of the sales to LJM.

Near the end of the third and fourth quarters of 1999, Enron sold interests in seven assets to LJM1 and JM2. These transactions appeared consistent with the stated purpose of allowing Fastow to participate in the partnerships—the transactions were done quickly, and permitted Enron to remove the assets from its balance sheet and record a gain in some cases. However, events that occurred after the sales call into question the legitimacy of the sales. In particular: (1) Enron bought back five of the seven assets after the close of the financial reporting period, in some cases within a matter of months; (2) the LJM partnerships made a profit on *every* transaction, even when the asset it had purchased appears to have declined in market value; and (3) according to a presentation Fastow made to the Board's Finance Committee, those transactions generated, directly or indirectly, "earnings" to Enron of \$229 million in the second half of 1999 (apparently including one hedge transaction). Although we have not been able to confirm Fastow's calculation, Enron's reported earnings for that period were \$570 million (pre-tax) and \$549 million (after-tax).

We have identified some evidence that, in three of these transactions where Enron ultimately bought back LJM's interest, Enron had agreed in advance to protect the LJM partnership against loss. If this was in

fact the case, it was likely inappropriate to treat the transactions as sales. There also are plausible, more innocent explanations for some of the repurchases, but a sufficient basis remains for further examination. With respect to those transactions in which risk apparently did not pass from Enron, the LJM partnerships functioned as a vehicle to accommodate Enron in the management of its reported financial results.

Hedging Transactions. The first “hedging” transaction between Enron and LJM occurred in June 1999, and was approved by the Board in conjunction with its approval of Fastow’s participation in LJM1. The normal idea of a hedge is to contract with a creditworthy outside party that is prepared—for a price—to take on the economic risk of an investment. If the value of the investment goes down, that outside party will bear the loss. That is not what happened here. Instead, Enron transferred its own stock to an SPE in exchange for a note. The Fastow partnership, LJM1, was to provide the outside equity necessary for the SPE to qualify for non-consolidation. Through the use of options, the SPE purported to take on the risk that the price of the stock of Rhythms NetConnections Inc. (“Rhythms”), an internet service provider, would decline. The idea was to “hedge” Enron’s profitable merchant investment in Rhythms stock, allowing Enron to offset losses on Rhythms if the price of Rhythms stock declined. If the SPE were required to pay Enron on the Rhythms options, the transferred Enron stock would be the principal source of payment.

The other “hedging” transaction occurred in 2000 and 2001 and involved SPEs known as the “Raptor” vehicles. Expanding on the idea of the Rhythms transaction, these were extraordinary complex structures. They were funded principally with Enron’s own stock (or contracts for the delivery of Enron stock) that was intended to “hedge” against declines in the value of a large group of Enron’s merchant investments. LJM2 provided the outside equity designed to avoid consolidation of the Raptor SPEs

The asset sales and hedging transactions raised a variety of issues, including the following:

Accounting and Financial Reporting Issues. Although Andersen approved the transactions, in fact the "hedging" transactions did not involve substantive transfers of economic risks. The transactions may have looked superficially like economic hedges, but they actually functioned only as "accounting" hedges. They appear to have been designed to circumvent accounting rules by recording hedging gains to offset losses in the value of merchant investments on Enron's quarterly and annual income statements. The economic reality of these transactions was that Enron never escaped the risk of loss, because it had provided the bulk of the capital with which the SPEs would pay Enron.

Enron used this strategy to avoid recognizing losses for a time. In 1999, Enron recognized after-tax income of \$95 million from the Rhythms transaction, which offset losses on the Rhythms investment. In the last two quarters of 2000, Enron recognized revenues of \$500 million on derivative transactions with the Raptor entities, which offset losses in Enron's merchant investments, and recognized pre-tax earnings of \$532 million (including net interest income). Enron's reported pre-tax earnings for the last two quarters of 2000 totaled \$650 million. "Earnings" from the Raptors accounted for more than 80% of that total.

The idea of hedging Enron's investments with the value of Enron's capital stock had a serious drawback as an economic matter. If the value of the investments fell at the same time as the value of Enron stock fell, the SPEs would be unable to meet their obligations and the "hedges" would fail. This is precisely what happened in late 2000 and early 2001. Two of the raptor SPEs lacked sufficient credit capacity to pay Enron on the "hedges." As a result, in late March 2001, it appeared that Enron would be required to take a pre-tax charge against earnings of more than \$500 million to reflect the shortfall in credit capacity. Rather than take that loss, Enron "restructured" the Raptor vehicles by, among other things, transferring more than \$800 million of con-

tracts to receive its own stock to them just before the quarter-end. This transaction apparently was not disclosed to or authorized by the Board, involved a transfer of a very substantial value for insufficient consideration, and appears inconsistent with governing accounting rules. It continued the concealment of the substantial losses in Enron's merchant investments.

However, even these efforts could not avoid the inevitable results of hedges that were supported only by Enron stock in a declining market. As the value of Enron's merchant investments continued to fall in 2001, the credit problems in the Raptor entities became insoluble. Ultimately, the SPEs were terminated in September 2001. This resulted in the unexpected announcement on October 16, 2001, of a \$544 million after-tax charge against earnings. In addition, Enron was required to reduce shareholders' equity by \$1.2 billion. While the equity reduction was primarily the result of accounting errors made in 2000 and early 2001, the charge against earnings was the result of Enron's "hedging" its investments—not with a creditworthy counterparty, but with itself.

Consolidation Issues. In addition to the accounting abuses involving use of Enron stock to avoid recognizing losses on merchant investments, the Rhythms transaction involved the same SPE equity problem that undermined Chewco and JEDI. As we stated above, in 2001, Enron and Andersen concluded that Chewco lacked sufficient outside equity at risk to qualify for non-consolidation. At the same time, Enron and Andersen also concluded that the LJM1 SPE in the Rhythms transaction failed the same threshold accounting requirement. In recent Congressional testimony, Andersen's CEO explained that the firm had simply been wrong in 1999 when it concluded (and presumably advised Enron) that the LJM1 SPE satisfied the non-consolidation requirements. As a result, in November 2001, Enron announced that it would restate prior period financials to consolidate the LJM1 SPE retroactively to 1999. This retroactive consolidation

decreased Enron's reported net income by \$ 95 million (of \$893 million total) in 1999 and by \$8 million (of \$979 million total) in 2000.

Self-Dealing Issues. While these related-party transactions facilitated a variety of accounting and financial reporting abuses by Enron, they were extraordinarily lucrative for Fastow and others. In exchange for their passive and largely risk-free roles in these transactions, the LJM partnerships and their investors were richly rewarded. Fastow and other Enron employees received tens of million of dollars they should not have received. These benefits came at Enron expense.

When Enron and LJM1 (through Fastow) negotiated a termination of the Rhythms "hedge" in 2000, the terms of the transaction were extraordinarily generous to LJM1 and its investors. These investors walked away with tens of millions of dollars in value that, in an arm's-length context, Enron would never have given away. Moreover, based on the information available to us, it appears that Fastow had offered interests in the Rhythms termination to Kopper and four other Enron employees. These investments, in a partnership called "Southampton Place," provided spectacular returns. In exchange for a \$25,000 investment, Fastow received (through a family foundation) \$4.5 million in approximately two months. Two other employees, who each invested \$8,500, each received \$1 million in the same time period. We have seen no evidence that Fastow or any of these employees obtained clearance for those investments, as required by Enron's Code of Conduct. Kopper and the other Enron employees who received these vast returns were all involved in transactions between Enron and the LJM partnerships in 2000—some representing Enron.

PUBLIC DISCLOSURE

Enron's publicly-filed reports disclosed the existence of the LJM partnerships. Indeed, there was substantial factual information about Enron's transactions with these partnerships in Enron's quarterly and annual and in its proxy statements. Various disclosures were approved by one or more of Enron's outside auditors and its inside and outside

counsel. However, these disclosures were obtuse, did not communicate the essence of the transactions completely or clearly, and failed to convey the substance of what was going on between Enron and the partnerships. The disclosures also did not communicate the nature or extent of Fastow's financial interest in the LJM partnerships. This was the result of an effort to avoid disclosing Fastow's financial interest and to downplay the significance of the related-party transactions and, in some respects, to disguise their substance and import. The disclosures also asserted that the related-party transactions were reasonable compared to transactions with third parties, apparently without any factual basis. The process by which the relevant disclosures were crafted was influenced substantially by Enron Global Finance (Fastow's group). There was an absence of forceful and effective oversight by Senior Enron Management and in-house counsel, and objective and critical professional advice by outside counsel at Vinson & Elkins, or auditors at Andersen.

THE PARTICIPANTS

The actions and in-actions of many participants led to the related-party abuses, and the financial reporting and disclosures failures that we identified previously. These participants include not only the employees who enriched themselves at Enron's expense, but also Enron's Management, Board of Directors and outside advisors. In summary, based on evidence available to us, the Committee notes the following:

Andrew Fastow. Fastow was Enron's Chief Financial Officer and was involved on both sides of the related-party transactions. What he presented as an arrangement intended to benefit Enron became, over time, a means of both enriching himself personally and facilitating manipulation of Enron's financial statements. Both of these objectives were inconsistent with Fastow's fiduciary duties to Enron and anything the Board authorized. The evidence suggests that he (1) placed his own personal interests and those of the LJM partnerships ahead of Enron's interests; (2) used his position in Enron to influence (or attempt to

influence) Enron employees who were engaging in transactions on Enron's behalf with the LJM partnerships; and (3) failed to disclose to Enron's Board of Directors important information it was entitled to receive. In particular, we have seen no evidence that he disclosed Kopper's role in Chewco or LJM2, or the level of profitability of the LJM partnerships (and his personal and family interests in those profits), which far exceeded what he had led the Board to expect. He apparently also violated and caused violations of Enron's Code of Conduct by purchasing, and offering to Enron employees, extraordinarily lucrative interests in the Southampton Place partnership. He did so at a time when at least one of those employees was actively working on Enron's behalf in transactions with LJM2.

Enron's Management. Individually, and collectively, Enron's Management failed to carry out its substantive responsibility for ensuring that the transactions were fair to Enron—which in many cases they were not—and its responsibility for implementing a system of oversight and controls over the transactions with the LJM partnerships. There were several direct consequences of this failure: transactions were executed in terms that were not fair to Enron and that enriched Fastow and others; Enron engaged in transactions that had little economic substance and misstated Enron's financial results; and the disclosures Enron made to its shareholders and the public did not fully or accurately communicate relevant information. We discuss here the involvement of Kenneth Lay, Jeffrey Skilling, Richard Causey, and Richard Buy.

Kenneth L. Lay. For much of the period in question, Lay was the Chief Executive Officer of Enron and, in effect, the captain of the ship. As CEO, he had the ultimate responsibility for taking reasonable steps to ensure that the officers reporting to him performed their oversight duties properly. He does not appear to have directed their attention, or his own, to the oversight of the LJM partnerships. Ultimately, a large measure of the responsibility rests with the CEO.

Lay approved the arrangements under which Enron permitted Fastow to engage in related-party transactions with Enron and authorized the Rhythms transaction and three of the Raptor vehicles. He bears significant responsibility for those flawed decisions, as well as for Enron's failure to implement sufficiently rigorous procedural controls to prevent the abuses that flowed from his inherent conflict of interest. In connection with the LJM transactions, the evidence we have examined suggests that Lay functioned almost entirely as a Director, and less as a member of Management. It appears that both he and Skilling agreed, and the Board understood, that Skilling was the senior member of Management responsible for the LJM relationship.

Jeffrey K. Skilling. Skilling was Enron's President and Chief Operating Officer, and later its Chief Executive Officer, until his resignation in August 2001. The Board assumed, and properly so, that during the entire period of time covered by the events discussed in this Report, Skilling was sufficiently knowledgeable of and involved in the overall operations of Enron that he would see to it that matters of significance would be brought to the Board's attention. With respect to the LJM partnerships, Skilling personally supported the Board's decision to permit Fastow to proceed with LJM, notwithstanding Fastow's conflict of interest. Skilling had direct responsibility for ensuring that those reporting to him performed their oversight duties properly. He likewise had substantial responsibility to make sure that the internal controls that the Board put in place—particularly those involving related-party transactions with the Company's CFO—functioned properly. He has described the detail of his expressly-assigned oversight role as minimal. That answer, however, misses the point. As the magnitude and significance of the related-party transactions to Enron increased over time, it is difficult to understand why Skilling did not ensure that those controls were rigorously adhered to and enforced. Based upon his own description of events, Skilling does not appear to have given much attention to these duties. Skilling certainly knew or should have known of the magnitude and the risks associated with these transactions. Skill-

ing, who prides himself on the controls he put in place in many areas at Enron, bears substantial responsibility for the failure of the system of internal controls to mitigate the risk inherent in the relationship between Enron and the LJM partnerships.

Skilling met in March 2000 with Jeffrey McMahon, Enron's Treasurer (who reported to Fastow). McMahon told us that he approached Skilling with serious concerns about Enron's dealings with the LJM partnerships. McMahon and Skilling disagree on some important elements of what was said. However, if McMahon's account (which is reflected in what he describes as contemporaneous talking points for the discussion) is correct, it appears that Skilling did not take action (nor did McMahon approach Lay or the Board) after being put on notice that Fastow was pressuring Enron employees who were negotiating with LJM—clear evidence that the controls were not effective. There also is conflicting evidence regarding Skilling's knowledge of the March 2001 Raptor restructuring transaction. Although Skilling denies it, if the account of other Enron employees is accurate, Skilling both approved a transaction that was designed to conceal substantial losses in Enron's merchant investments and withheld from the Board important information about that transaction.

Richard Causey. Causey was and is Enron's Chief Accounting Officer. He presided over and participated in a series of accounting judgements that, based on the accounting advice we have received, went well beyond the aggressive. The fact that these judgements were, in most if not all cases, made with the concurrence of Andersen is a significant, though not entirely exonerating, fact.

Causey was also charged by the Board of Directors with a substantial role in the oversight of Enron's relationship with the LJM partnerships. He was to review and approve all transactions between Enron and the LJM partnerships, and he was to review those transactions with the Audit and Compliance Committee annually. The evidence we have examined suggests that he did not implement a procedure for identifying all LJM1 or LJM2 transactions and did not give those transactions

the level of scrutiny the Board had reason to believe he would. He did not provide the Audit and Compliance Committee with the full and complete information about the transactions, in particular the Raptor III and Raptor restructuring transactions, that it needed to fulfill its duties.

Richard Buy. Buy was and is Enron's Senior Risk Officer. The Board of Directors also charged him with a substantial role in the oversight of Enron's relationship with the LJM partnerships. He was to review and approve all transactions between them. The evidence we have examined suggests that he did not implement a procedure for identifying all LJM1 or LJM2 transactions. Perhaps more importantly, he apparently saw his role as more narrow than the Board had reason to believe, and did not act affirmatively to carry out (or ensure that others carried out) a careful review of the economic terms of all transactions between Enron and LJM.

The Board of Directors. With respect to the issues that are the subject of this investigation, the Board of Directors failed, in our judgment, in its oversight duties. This had serious consequences for Enron, its employees, and its shareholders.

The Board of Directors approved the arrangements that allowed the Company's CFO to serve as general partner in partnerships that participated in significant financial transactions with Enron. As noted earlier, the two members of the Special Investigative Committee who have participated in his review of the Board's actions believe this decision was fundamentally flawed. The Board substantially underestimated the severity of the conflict and overestimated the degree to which management controls and procedures could contain the problem.

After having authorized a conflict of interest creating as much risk as this one, the Board had an obligation to give careful attention to the transactions that followed. It failed to do this. It cannot be faulted for the various instances in which it was apparently denied important information concerning certain of the transactions in question. However, it can and should be faulted for failing to demand more informa-

tion, and for failing to probe and understand the information that did come to it. The Board authorized the Rhythms transaction and three of the Raptor transactions. It appears that many of its members did not understand those transactions –the economic rationale, the consequences, and the risks. Nor does it appear that they reacted to warning signs in those transactions as they were presented, including the statement to the Finance Committee in May 2000 that the proposed Raptor transaction raised the risk of “accounting scrutiny.” We do note, however, that the Committee was told that Andersen was “comfortable” with the transaction. As complex as the transactions were, the existence of Fastow’s conflict of interest demanded that the Board gain a better understanding of the LJM transactions that came before it, and ensure (whether through one of its Committees or through use of outside consultants) that they were fair to Enron.

The Audit and Compliance Committee, and later the Finance Committee, took on a specific role in the control structure by carrying out periodic reviews of the LJM transactions. This was an opportunity to probe the transactions thoroughly, and to seek outside advice as to any issues outside the Board members’ expertise. Instead, these reviews appear to have been too brief, too limited in scope, and too superficial to serve their intended function. The Compensation Committee was given the role of reviewing Fastow’s compensation from the LJM entities, and did not carry out this review. This remained the case even after the Committees were on notice that the LJM transactions were contributing very large percentages of Enron earnings. In sum, the Board did not effectively meet its obligation with respect to the LJM transactions.

The Board, and in particular the Audit and Compliance Committee, has the duty of ultimate oversight over the Company’s financial reporting. While the primary responsibility for the financial reporting abuses discussed lies with Management, the participating members of this Committee believe those abuses could and should have been pre-

vented or detected at an earlier time had the Board been more aggressive and vigilant.

OUTSIDE PROFESSIONAL ADVISORS.

Andersen. The evidence available to us suggests that Andersen did not fulfill its professional responsibilities in connection with its audit of Enron's financial statements, or its obligation to bring to the attention of Enron's Board (or the Audit and Compliance Committee) concerns about Enron's internal controls over the related-party transactions. Andersen has admitted that it erred in concluding that the Rhythms transaction was structured properly under the SPE non-consolidation rules. Enron was required to restate its financial results for 1999 and 2000 as a result. Andersen participated in the structuring and accounting treatment of the Raptor transactions, and charged over \$1 million for its services, yet apparently failed to provide the objective accounting judgement that should have prevented these transactions from going forward. According to Enron's internal accountants (though this apparently has been disputed by Andersen), Andersen also reviewed and approved the recording of additional equity in March 2001 in connection with this restructuring. In September 2001, Andersen required Enron to reverse this accounting treatment, leading to the \$1.2 billion reduction of equity. Andersen apparently failed to note or to take action with respect to the deficiencies in Enron's public disclosure documents.

According to recent public disclosures, Andersen also failed to bring to the attention of Enron's Audit and Compliance Committee serious reservations Andersen partners voiced internally about the related-party transactions. An internal Andersen e-mail from February 2001 released in connection with recent Congressional hearings suggests that Andersen had concerns about Enron's disclosures of the related-party transactions. A week after that e-mail, however, Andersen's engagement partner told the Audit and Compliance Committee that, with respect to related-party transactions, "[r]equired disclosure [had been]

reviewed for adequacy," and that Andersen would issue an unqualified audit opinion. From 1997 to 2001, Enron paid Andersen \$5.7 million in connection with work performed specifically on the LJM and Chewco transactions. The Board appears to have reasonably relied upon the professional judgement of Andersen concerning Enron's financial statements and the adequacy of controls for the related-party transactions. Our review indicates that Andersen failed to meet its responsibilities in both respects.

Vinson & Elkins. As Enron's longstanding outside counsel Vinson & Elkins provided advice and prepared documentation in connection with many of the transactions discussed previously. It also assisted Enron with the preparation of its disclosures of related-party transactions in the proxy statements and the footnotes to the financial statements in Enron's periodic SEC filings. Management and the Board relied heavily on the perceived approval by Vinson & Elkins of the structure and disclosure of the transactions. Enron's Audit and Compliance Committee, as well as in-house counsel, looked to it for assurance that Enron's public disclosures were legally sufficient. It would be inappropriate to fault Vinson & Elkins for accounting matters, which are not within its expertise. However, Vinson & Elkins should have brought a stronger, more objective and more critical voice to the disclosure process.

NB. Because of the relationship between Vinson & Elkins and the University of Texas School of Law, the portions of the Report describing and evaluating actions of Vinson & Elkins are solely the views of Trough and Winokur.

ENRON EMPLOYEES WHO INVESTED IN THE LJM PARTNERSHIPS

Michael Kopper. Kopper worked for Fastow in the Finance area, he enriched himself at Enron's expense by virtue of his roles in Chewco, Southampton Place, and possibly LJM2. In a transaction he negotiated with Fastow, Kopper, and his co-investor in Chewco received more

than \$10 million from Enron for a \$125,000 investment. This was inconsistent with his fiduciary duties to Enron and, as best we can determine, with anything the Board—which apparently was unaware of his Chewco activities—authorized. We do not know what financial returns he received from his undisclosed investments in LJM2 or Southampton Place. Kopper violated Enron's Code of Conduct not only by purchasing his personal interests in Chewco, LJM2, and Southampton, but also by secretly offering an interest in Southampton to another Enron employee.

Ben Glisan. Glisan, an accountant and later McMahon's successor as Enron's Treasurer, was a principal hands-on Enron participant in two transactions that ultimately required restatements of earnings and equity: Chewco and the Raptor structures. Because Glisan declined to be interviewed by us on Chewco, we cannot speak with certainty about Glisan's knowledge of the facts that should have led to the conclusion that Chewco failed to comply with the non-consolidation requirement. There is, however, substantial evidence that he was aware of such facts. In the case of Raptor, Glisan shares responsibility for accounting judgements that, as we understand based on the accounting advice we have received, went well beyond the aggressive. As with Causey, the fact that these judgements were, in most if not all cases, made with the concurrence of Andersen is a significant, though not entirely exonerating, fact. Moreover, Glisan violated Enron's Code of Conduct by accepting an interest in Southampton Place without prior disclosure to or consent from Enron's Chairman and Chief Executive Officer—and doing so at a time when he was working on Enron's behalf on transactions with LJM2 including Raptor.

Kristina Mordaunt, Kathy Lynn, and Anne Yaeger Patel. Kristina Mordaunt was an in-house lawyer at Enron, while Kathy Lynn and Anne Yaeger Patel were employees in the Finance area. All three appear to have violated Enron's Code of Conduct by accepting interests in Southampton Place without obtaining the consent of Enron's Chairman and Chief Executive Officer.



The tragic consequences of the related-party transactions and accounting errors were the result of failures at many levels and by many people: a flawed idea, self-enrichment by employees, inadequately-designed controls, poor implementation, inattentive oversight, simple (and not-so-simple) accounting mistakes, and overreaching in a culture that appears to have encouraged pushing the limits. Our review indicates that many of those consequences could and should have been avoided.

6

A CULTURE OF THROWING AROUND MONEY

Throwing around money is in American economies, contrary to European, a normal way of doing business. The system has to be 'greased' for optimal performance is a common opinion. In European economies this 'greasing' is achieved by reducing friction between the main production factors: entrepreneurs, labor, capital and land. In European economic thought and theory an economy can only be in equilibrium if all production factors have achieved optimal satisfaction.

The American economy is not focused on achieving optimal satisfaction of all production factors, as such it neglects economic thought and theory. It is only focused on achieving profits at all costs. It simply means that the American economy is not achieving an optimal situation but is continuously in a sub-optimal position. In order to let the system work the sub-optimum is 'corrected' by large money donation to various parties such as management, occasionally labor, press, stock exchange analysts, politics, etc. We will come back later on the theoretical background of this issue. In this chapter we will only focus on the mechanics of the 'money circuit'.

The main recipients of the 'donations' were the politicians (campaign contributions), top management or the entrepreneurs, and certain groups of labor.

ENRON'S CAMPAIGN CONTRIBUTIONS AND LOBBYING

Enron and Andersen, Enron's auditing firm, did belong to the largest contributors to the political circus—and were among the most generous donors to President Bush. Over the last decade Enron spent almost \$6 million for political support:

Election Cycle	Total Contributions	% to Dems	% to Reps
1990	\$ 163,250	42%	58%
1992	281,009	42	58
1994	520,996	42	58
1996	1,141,016	18	81
1998	1,049,942	21	79
2000	2,441,398	28	72
2002	353,959	6	94

NB. Enron's 'love' for Republicans is quite clear.

President Bush raised nearly \$114,000 in PAC and individual contributions from Enron in 1999-2000, making the company one of his biggest donors. Enron also donated \$100,000 to the Bush/Cheney inaugural gala in January 2000, a contribution that was matched by Enron's chairman and chief executive, Kenneth Lay, and his wife. The Lays have contributed a total of almost \$883,000 to candidates and parties since 1989, of which 90 percent went to the Republicans. But, not only the Lays were big contributors from the Enron community, also Enron's Forrest Hogle and Jeffrey Skilling, with contributions of respectively \$410,000 and \$190,000 contributed substantially. Almost all of the money from Hogle and Skilling went to the Republicans.

Kenneth Lay is a long time friend of the president and was one of Bush's top contributors during the presidential election and two gubernatorial campaigns in Texas. Lay, listed by the Bush/Cheney campaign

as a pioneer who raised at least \$100,000 for the election, reportedly has been one of the administration's closest advisors on energy policy since Bush took office.

Enron hopes for sure to draw on close relationships with a number of elected officials for help during its current crisis. The company spent \$2.1 million lobbying Congress and the White House in 2000, an increase over the \$1.9 million it spent on lobbying in 1999. Enron has contributed to the campaign accounts of 71 current senators and 188 current members (43 percent) of the House.

Not surprisingly, the top recipients of Enron's contributions among current members of Congress are all from Texas. Sens. Kay Bailey Hutchison (R) and Phil Gramm (R) lead the list of Senate recipients since 1989 with each approximately \$99,000. The seven biggest House beneficiaries of Enron's giving since 1989 are also from Texas. They are led by Democratic Rep. Ken Bentsen, who received \$42,750 and followed by Sheila Jackson and Joe Barton, who received respectively \$38,000 and \$29,000.

Enron Corp. spent \$2,075,000 on lobbying for the first six months of 2001, according to the lobbying disclosure reports Enron and its subsidiaries filed with the House of Representatives. The bankrupt company lobbied on a gamut of issues, such as, among others:

- **Budget/Appropriations:**
 - H.R. 2311, Energy and Water Development Appropriations Act, 2002. All provisions.
 - Export-Import Reauthorization
 - Foreign Operations Appropriations
 - International Monetary Fund
 - H.R. 1647, Electricity Emergency Relief Act. All provisions.

- H.R. 1941, Electric Refund Fairness Act of 2001. All provisions.
- H.R. 1974, Western States Energy Consumer Protection Act. Of 2001. All provisions.
- S. 388, National Energy Security Act. Of 2001. All provisions.
- S. 597, Comprehensive and Balanced Energy Policy Act of 2001, All provisions.
- S. 764, A bill to direct the Federal Energy Regulatory Commission to impose just and reasonable load-differentiated demand rates.
- **Taxation/Internal Revenue Code:**
 - H.R. 1410, Internet Tax Moratorium and Equity Act. All provisions
 - H.R. 1915, Gas Affordability Act of 2001. All provisions.
 - H.R. 2079, To amend the Internal Revenue Code of 1986 to impose a windfall profits tax on electric generating facilities having excess profits. All provisions.
 - H.R. 2147, Save America's valuable Energy Resources Act of 2001. All provisions.
 - H.R. 2392, Clean Energy Incentives Act. All provisions.
 - H.R. 333, Bankruptcy Abuse Prevention and Consumer Protection Act of 2001. All provisions.
 - H.R. 4, To enhance energy conservation, research and development and to provide for security and diversity in the energy supply for the American people, and for other purposes. All provisions.

- S. 288, Internet Tax Nondiscrimination Act. All provisions.
- S. 420, Bankruptcy Reform Act of 2001. All provisions.
- S. 596, Energy Security and Tax Incentive Policy Act of 2001. All provisions.
- **Telecommunications:**
 - H.R. Broadband Expansion Grant Initiative of 2001. All provisions.
 - H.R. 1542, Internet Freedom and Broadband Deployment Act of 2001. All provisions.
 - H.R. 1697, Broadband Competition and Incentives Act of 2001. All provisions.
 - H.R. Cable Consumers Rights Act of 2001. All provisions.
 - H.R. 2038, Rural Broadband Enhancement Act. All provisions.
 - H.R. 496, Independent Telecommunications Consumer Enhancement Act of 2001. All provisions.
 - S. 88, Broadband Internet Access Act of 2001. All provisions.
- **Transportation:**
 - S. 235, Pipeline Safety Improvement Act of 2001. All provisions.
 - Pipeline Safety
- **Trade (Domestic & Foreign):**
 - Enron was very active in this field focusing especially on the steel industry. Whether it handled about Emergency Steel Loan Guarantees, Trade Law Reform, Trade Promotion, Steel and National Security, Trade Fairness, limiting steel imports, saving the Ameri-

can steel industry, steel revitalizing, or whatever, it had to be stopped apparently at all costs.

It is quite clear that Enron Corp. did have a very specific view on its industrial environment and was willing to defend its position tooth and nail and did not have any scruples to use substantial amounts of money to get what it wanted to get.

Cheney: We are keeping papers secret on principle

Last year vice-president Cheney chaired a special committee on energy matters. This committee counted a number of Enron executives among its members. After Enron's collapse a number of congressmen asked the vice president for the minutes of the meetings of that special committee. There was a certain interest in the discussions of the committee and about a possible influence of Enron over the proceedings. In this regard the generous attitude of Enron towards contributions to the Republican Party and Republican politicians certainly played a role.

Cheney refused to hand over any documents regarding the proceedings of the committee. The congressmen did not give in and asked the General Accounting Office, the investigative arm of Congress, to get the papers for the committee. Again, Cheney, with the support of the president, refused to back down. The papers will be considered as confidential. Congress has filed a case in court in order to get the documents after all. According to vice president Cheney private discussions with third parties should remain private and therefore the minutes of such meetings will remain secret.

Of course the background of the request is to find out whether or not Enron has tried to cash-in on its generous contribution attitude and had asked for favors it would otherwise not be able to get.

But what did Lay actually get in return for his many millions spent? Six seats at the table for Dick Cheney's energy-policy formulations. That is a fact. Probably Enron-friendly energy policies as a result, but we cannot check that because we do not have the minutes of the meet-

ings. Why the secrecy if there was nothing to hide? May be a veto power over the head of the Federal Energy Regulatory Commission—former chief Curtis Hebert Jr. said recently Bush replaced him not long after Herbert declined Lay's demand for a friendlier stance toward energy deregulation.

Enron and Wall Street

Some of the biggest firms on Wall Street earned hundreds of millions of dollars helping Enron weave the intricate partnerships that helped the energy trading firm grow but ultimately led to its bankruptcy. In underwriters fees alone, Wall Street firms earned, according to the *Wall Street Journal*, some \$214 million and several millions more in lending, derivatives trading, and consulting fees.

The banks that worked as underwriters of stock or debt for Enron and that helped arrange loans or advised it on merger deals belong to the largest and most respectable firms in the business, such as Citibank and its Salomon Smith Barney unit, Credit Suisse First Boston, Merrill Lynch, Goldman Sachs, J.P.Morgan Chase and Lehman Bros.

For instance, J. P. Morgan Chase, Merrill and Citigroup, among others, each kicked in \$10 to 25 million in for LJM2. J. P. Morgan Chase exemplifies the complicated relationships between Wall Street firms and Enron. J. P. Morgan said by underwriting bonds and providing loans to Enron, it was left with a \$2.6 billion exposure once the company collapses. The securities firm also had an analyst covering Enron, who advised clients to buy Enron stocks as recently as last fall.

What happened? Did nobody really understand what could go wrong? Or is it simply the American *stock-crazy* environment where everything is a matter of linear extrapolation and downturns or risks do not exist?

LAST-MINUTE BONUS ORGY

Shortly before hundreds of Enron employees were laid off and the company declared bankruptcy on December 2, 2001, about 500 executives of the company were awarded hefty bonuses. The 'retention bonuses' for executives amounted to a total of \$55 million. The news about the payment of bonuses came just after the company had announced that it would not abide by severance payment promises to laid-off employees.

The generous executive payouts, many of which were handed out on November 30, 2001, have led some former Enron officials to conclude that the company has yet to abandon its greedy ways. The bonuses were approved by an Enron management team largely still running the company—Jeff McMahon, then Enron's chief financial officer and now the president, and Ray Bowen, then-treasurer and now CFO. And they were approved after the departure of the "bad guys" who have been hauled before Congress, such as former president and chief executive Jeff Skilling and former chief financial officer Andrew Fastow. McMahon himself received a bonus of \$1.5 million and Bowen got \$750,000. The "top-ten" awardees were:

- John Lavaroto: \$5 million
- Louise Kitchen: \$2 million
- Jeffrey McMahon: \$1.5 million
- James Fallon: \$ 1.5 million
- Raymond Bowen Jr.: \$750,000
- Mark Haedicke: \$750,000
- Gary Hickerson: \$700,000
- Wesley Colwell: \$600,000

- Richard Dimichelle: \$600,000
- James Hughes: \$500,000

Earlier 75 executives, who worked on the company's doomed merger with Dynegy Inc., were already allowed to share an extra bonus of \$50 million among themselves.

The official Enron severance rules state that each eligible ex-employee is entitled to one week of pay for every \$10,000 of employment up to 26 weeks. But reality has proved to be quite different. Enron employees laid off before December 2 have been told they have no funds coming to them. U.S. Bankruptcy Judge Arthur Gonzales ruled that the 4,500 Enron employees laid off since bankruptcy were entitled to each receive a \$4,500 severance check.

According to one former senior executive, Enron's original severance package—subsequently scrapped—cost \$120 million and would have provided each employee approximately \$30,000 in severance on average. That plan was reduced, then discarded. Instead, at least \$105 million was distributed in executive bonuses. Some called the action “outright fraud and theft.”

Two of the Enron executives who testified before Senator Greenwood's subcommittee are among those who received the generous gifts—McMahon, who received \$1.5 million, and vice president and general counsel for corporate development Jordan Mintz, who received \$200,000.

Enron spokesman Mark Palmer has defended the bonuses as standard operating procedure when a company is trying to retain its talent. But one day after his disclosure nobody picked up his phone anymore. The same was true for other recipients of huge bonuses: they were all gone. Palmer's own bonus was \$200,000.

7

THE CONGRESSIONAL HEARINGS

Just four days before Enron disclosed a stunning \$628 million loss for the third quarter—its first public woes—workers who audited the company's books for Arthur Andersen, the big accounting firm, received an extraordinary instruction from one of the company's lawyers. Congressional investigators discovered that the October 12 memo directed workers to destroy all audit material, except for the most basic "work papers." And that is what they did, over a period of several weeks. As a result, FBI investigators, congressional probers and workers suing the company for lost retirement savings will be denied thousands of e-mails and other electronic and paper files that could have helped illuminate the actions and motivations of Enron executives involved in what is now the biggest bankruptcy in U.S. history.

Though there are no firm rules on how long accounting firms must retain documents, most hold on to a wider range of them for several years. Any deliberate destruction of documents subject to subpoena is illegal. In the Arthur Andersen's dealings with the documents related to Enron, "the mind-set seemed to be, if not required to keep it, then get rid of it," said Ken Johnson, spokesman for the House energy and Commerce Committee, whose investigators first got wind of the October 12 memo and which is pursuing one half of a dozen investigations of Enron. "Anyone who destroyed records out of stupidity should be fired," said committee chairman Billy Tauzin, a Louisiana Republican.

"Anyone who destroyed records to try to circumvent our inspection should be prosecuted."

WAS A CRIME COMMITTED?

The accounting for a global trading company like Enron is mind-numbingly complex. But it is crucial to learning how the company fell so far so fast, taking with it the jobs and pension savings of thousands of workers and inflicting losses of millions of individual investors.

Shredded evidence is only one of the issues that will get close scrutiny in the Enron case. The U.S. Justice Department created a task force, staffed with experts on complex financial crimes, to pursue a full criminal investigation. But the country was quickly reminded of the pervasive reach of Enron and its executives when one government attorney after the other had to recuse himself from the probe because of receiving campaign contributions. In Houston even the entire office of the U.S. Attorney recused itself for the same reason.

The justice investigation will be overseen in Washington by a seasoned hand, Josh Hochberg, head of the fraud section and the first to listen to the FBI tape of Linda Tripp and Monica Lewinsky in the days leading to the case against President Clinton. The probe will address a wide range of questions: Were Enron's partnerships with shell corporations designed to hide its liabilities and mislead investors? Was evidence intentionally or negligently destroyed? Did Enron executives' political contributions and the access that the contributions won them result in any special favors? Did Enron executives know the company was sinking as they sold \$ 1.1 billion in stock while encouraging employees and other investors to keep buying? And what about personal enrichment at the costs of Enron? History shows that such large task forces usually find something indictable.

Enron has already acknowledged that it overstated its income for more than four years. The question is whether this was the result of negligence or an intent to fraud. Securities fraud requires a willful intent to deceive. It does not look good, some lawyers say, that key

Enron executives were selling stock shortly before the company announced a restatement of earnings.

As for Arthur Andersen, criminal charges could result if it can be shown that its executives ordered the destruction of documents while being aware of the existence of a subpoena for them.

Enron is in the crosshairs of a dozen congressional panels. In the Senate, the Permanent Investigative Subcommittee got a jump on January 11, 2002 by subpoenaing documents of 49 Enron executives and, separately, the corporate records of Enron and Arthur Andersen. The subpoenas are aimed at learning "what the officers knew and what they did about it."

In the mean time there are already 47 class actions filed against Enron and its executives and directors, filed either by shareholders or employees and carrying mainly the possible penalty of heavy fines. Most allege that Enron failed to disclose its many risky partnerships, which proved to be a large part of its undoing. Though Enron is bankrupt, Arthur Andersen could be liable as well, and Enron's officers and directors have deep pockets.

WERE FAVORS RECEIVED?

Though there has been no evidence of anything illegal so far, it is a fact that Enron enjoyed considerable influence from the start of the Bush administration. Curtis Hebert Jr., the former chairman of the Federal Energy Regulatory Commission, told *New York Times* that Lay offered to support Hebert's continuing in that role if Hebert would take a friendlier view toward energy deregulation. Hebert declined, and the Bush Administration replaced him. Lay and other Enron officials met six times with officials led by Vice President Dick Cheney (a former oil man) to craft a new energy policy. That policy, not surprisingly, was friendly to Enron and other energy companies.

Bush said that he was aware that Lay had approached his Cabinet secretaries for help, but they had refused. According to Bush he met

Lay in the spring of 2001 for the last time in Houston, at an event hosted by his mother.

While Bush and the Republicans have gained the lion's share of attention from Enron and Lay, they get at least a little cover from the company's campaign contributions to prominent Democrats, such as Senate Energy Committee Chairman Jeff Bingaman and Louisiana Senator John Breaux. Enron and its top officials have hired the well-known Democratic lawyers Robert Bennett and David Boies. And Bob Rubin, the Democrat's high priest of economics and finance, was caught fishing—albeit tentatively by all accounts—for Treasury intervention on Enron's behalf.

TAKING THE FIFTH AMENDMENT

Top auditor David Duncan, who was the first Andersen executive to be called to testify, had earlier said to his lawyer that he would refuse to testify before the congressional panel unless he was granted immunity.

"Mr. Duncan, Enron robbed the bank. Arthur Andersen provided the getaway car, and they say you were at the wheel," Rep. James Greenwood, R-Pennsylvania, the subcommittee chairman, told Duncan shortly after he was sworn in to testify. When Greenwood then asked whether he ordered the destruction of Enron documents in an attempt to subvert investigators, Duncan declined to answer.

"Mr. Chairman, I would like to answer the committee's questions but on advice of my counsel I respectfully decline to answer the question based on the protection afforded to me under the Constitution of the United States," Duncan said, repeating it when asked to clarify. Andersen fired Duncan, in the mean time.

Duncan earlier had told investigators that he was ordered to destroy documents via an e-mail from company in-house lawyer Nancy Temple. According to Duncan his team began shredding Enron documents last fall after Temple issued an October 12 e-mail reminding employees of Andersen's document retention policy: "Save what is important, destroy everything else."

"It might be useful to consider reminding the engagement team of our documentation and retention policy. It would be helpful to make sure that we have complied with the policy. Let me know if you have any questions.

Nancy"

Said the e-mail sent to Michael Odom, the risk management partner responsible for the Houston office. The e-mail was forwarded to Duncan. In his testimony Odom confirmed what Duncan had said earlier. Odom added that such a memo had never previously been issued to the team.

The risk manager has been relieved of management responsibilities but not placed on leave, the firm said. The accounting firm also confirmed that Duncan called a meeting on October 23, a day after he learned of a request from the Securities and Exchange Commission for information about Andersen's auditing of Enron, to organize the "expedited effort to dispose of Enron-related documents."

Other Andersen executives later told the committee that Duncan initiated the shredding campaign on his own. But several lawmakers expressed skepticism, sharply questioning them on whether Duncan acted without the knowledge of his peers or superiors. Duncan, through his attorney, had previously told congressional investigators that he had been following the advice of Andersen's in-house counsel Nancy Temple. There were rumors that the document destruction at Andersen was far more widespread than the company has acknowledged, involving as many as 80 employees.

Dorsey Baskin, the Andersen executive in charge of auditing standards, told lawmakers the company wanted to unravel the circumstances surrounding the destruction of the documents and is conducting its own investigation into the matter. But legislators were highly critical of Andersen's policies and repeatedly questioned the executives why no clear directive was immediately issued to order that

all Enron-related documents be preserved once it became apparent that the bankruptcy would be federal investigated.

Former Enron CEO Jeffrey Skilling repeatedly told Congressional investigators that he knew nothing of any off-the-books partnerships used by Enron Corp. to hide debt, a move that ultimately led to the collapse of the once-powerful energy trader.

Skilling, in many hours of testimony before several House and Senate Committees, appeared unshaken by most of the questions posed by investigators. The former executive said he was not aware of any financing arrangements designed to conceal liabilities or inflate profitability.

He was a "controls" freak, Skilling later said. But there was no way for him to know all that was going on in the company. He repeatedly denied knowing about transactions that Enron used to hide nearly \$1 billion in debt. "Enron was an enormous corporation, how could I have known everything going on in the company?" Skilling said. The former CEO blamed Enron's collapse on liquidity problems. "There are things called a run on a bank. You can have a fundamentally solvent company that has a liquidity problem," he explained.

Skilling said he felt "devastated and apologetic about what Enron has come to represent." When he left the company in August 2001, he "fervently believed that Enron was not in any financial peril." He maintained that his sudden departure from Enron, last August, had nothing to do with the company.

Enron's former in-house lawyer Jordan Mintz testified that he repeatedly tried to talk to Skilling regarding conflicts of interests posed by Andrew Fastow, then the company's chief financial officer, having a financial interest in the partnerships. However, Mintz was consistently rebuffed.

Enron's various transactions required the approval of Skilling and other executives. However, Skilling did not sign many of the forms, Mintz said.

"I did not sign the documents because they were not given to me," Skilling said.

Unlike Skilling, Andrew Fastow, Enron Corp. ousted chief financial officer, refused to testify before Congress. Michael Kopper, a former company officer, invoked the Fifth Amendment, as did Richard Causey, Enron's chief accounting officer, and Richard Buy, the company's chief risk officer.

ANDREW FASTOW, ENRON'S CHIEF FINANCIAL OFFICER

Congress and the public were especially interested in the testimony of Andrew Fastow, Enron's former Chief Financial Officer. Fastow was seen as the main behind the "creative accounting" and the shady deals with the partnerships. He took, as most of his former colleagues did, the Fifth Amendment.

According to Fastow's spokesman, Gordon Andrew "Our position remains that Mr. Fastow acted with the full knowledge and approval of Enron's board of directors, its office of the chairman, which included Mr. Lay and Mr. Skilling, and its internal and external auditors and advisors." Fastow's former boss, Jeffrey Skilling, had no such hesitation, insisting to his incredulous interrogators that things had gone swimmingly on his watch.

The tale of Andy Fastow's rise from a plodding loan consolidator to financial genius at one of the country's coolest companies wasn't what it appeared to be. Then again, neither was Enron. "Fastow could talk the talk, but there is pretty clear evidence now he could not walk the walk," said an Enron insider. Fastow and his team "were all caught up in the façade of greatness."

In the company's fat days, Fastow earned a reputation as a money wizard who constructed the complex financial vehicles that Enron drove on the road to explosive growth. Skilling wanted an "asset-light" company that could rapidly exploit deregulating markets for energy, water, broadband capacity and anything else that could be traded. So beginning in 1993, Fastow created hundreds of "special-purpose enti-

ties” designed to transfer Enron’s debt to an outside company and get it off the books—without giving up control of the assets that stood behind the debt.

The challenge for Enron was to enter the burgeoning energy markets without sacrificing its credit rating by carrying too much debt on the books. So Fastow got creative. He tripled his staff, to more than 100, hiring various banking experts and giving them the task of selling and buying capital risk. “They were all young kids, 28 to 32, with great pedigrees, and they started coming up with their fancy derivatives,” said one Houston lawyer, who interviewed dozens of former Fastow associates before suing Enron’s management. “But Fastow was the boys genius setting all these SPEs up.”

The people who set across the negotiating table from Fastow as he pitched Enron’s deals, and the people who worked with him, were never as impressed with him as they were with his boss and mentor, Skilling. It was Skilling who provided the strategic vision behind Enron, who transformed its old gas-pipeline culture into a swaggering, rule-breaking, dealmaking cult that ultimately mislaid its analytical skills and perhaps its moral compass. Skilling, a Harvard M.B.A. and former McKinsey & Co. consultant, had a high-wattage intellect that always impressed. Even when he was a student, people who met him knew he would do something big.

Fastow was never considered a big man on campus, not even at his suburban New Jersey high school. A teacher there remembers Fastow only as a slacker who tried to talk him into raising his grades. Hardly anyone at Northwestern University’s Kellogg School of Management can even recall him from his years as a M.B.A. student. The response is similar at Tufts, where he studied Chinese and economics as an undergraduate and played a little trombone and tennis on the side. Most Enron employees did not know who he was until relatively recently. As head of Enron Capital Management—his job in 1997 and 98, when he was named CFO—he wielded his power across a very narrow band. In contrast to the avuncular Lay and the brilliant Skilling, Fastow was a

PowerPoint executive whose number-crunching talent far exceeded his managerial and people skills. Indeed, when Fastow was charged with running an actual business—he was named managing director of Enron Energy Services in 1996—he botched it, and Skilling had to reel him back to finance.

SHERON WATKINS: THE WHISTLEBLOWER

Congressional investigators hailed Enron Corp. executive Sheron Watkins as a heroin as she accused in her testimony two top company officials, along with Enron's auditors and law firm, of duping her former Chairman Kenneth Lay about the company's risky accounting practices.

Watkins, who blew the whistle on Enron after trying to alert Lay about problems last summer, told a House panel that former Enron CEO Jeffrey Skilling and former chief financial officer Andrew Fastow, deceived Lay and the board of directors about improper—and possibly illegal—partnerships that allegedly concealed over \$1 billion in debt.

"I do believe that Skilling and Fastow along with these two respected firms did dupe Lay and the board," Watkins said, referring to Enron's law firm, Vinson & Elkins, and its accounting firm, Arthur Andersen.

Watkins told the panel that she tried to tell Lay of her worries about the company's accounting last August, after he reassumed the role of CEO following the resignation of Skilling, who said he was leaving for personal reasons. "Lay was back at the helm as CEO and in my opinion he did not understand the gravity of the situation the company was in," she said. "Lay relied on Skilling to manage the details of Enron's many partnerships, which a key report from the company's independent directors found were used to inflate profits and improperly hide debts. From all the records and presentations that I ever viewed, Mr. Skilling was supposed to be an integral part of the controls and the review process with the LJM transactions," she said.

Watkins, self-assured and very detailed as she answered a barrage of questions, had been with Enron since 1993 when Fastow hired her to work at the Houston-based company, once the nation's seventh biggest before it collapsed under its debts and filed for bankruptcy in late 2001.

Watkins, a CPA who worked at Andersen for 11 years before joining Enron, said she met with Lay a total of three times in 2001. Last August, Watkins gave the CEO five memos that expressed her concerns with Enron's accounting practices, she said. Lay promised he would "get to the bottom" of Enron's problems. Lay also later said he was going to fire Vinson & Elkins and Andersen. Instead Lay asked Vinson & Elkins to investigate the matter, Watkins said.

In her testimony, Watkins said Andersen was culpable since the accounting firm had approved Enron's partnerships. "Andersen signed off on something they should not have," she said. "They should have known if they were signing off on it."

Watkin's August letter to Lay initiated an investigation into Enron's partnerships. Another Watkins memo to Lay, from October, outlined "disclosure steps to rebuild investor confidence" in which she said he should "come clean and admit problems."

Watkins, however, never went outside Enron, to either the Securities and Exchange Commission or other federal agencies, with her concerns, because "I did not want to hasten our demise," she said. In fact, Watkins sold her \$31,000 in Enron stock in late August—after sending Lay her memo—and cashed in \$17,000 in Enron cash option in October.

Enron's questionable accounting eventually led to its collapse. In December, Enron filed the biggest bankruptcy in U.S. history and fired Andersen as its auditors in January. Enron is under scrutiny from the Justice Department, the Securities and Exchange Commission and numerous congressional committees, and the company is being sued by scores of former employees. Thousands of those workers lost their retirement savings because they invested heavily in Enron stock.

Last June, Watkins began working under Fastow in corporate development. Within weeks, Watkins, who was charged with reviewing all assets Enron considered for sale, realized the impropriety of certain transactions, she said. She was highly alarmed by the information she was seeing as Enron was using its own stock, in effect, to generate gains or avoid losses on its income statement. Under one transaction, an Enron "special purpose" partnership called "Raptor" owed the company \$750 million. But Raptor had no viable business and because it was a partnership, Enron shareholders would bear the brunt of the loss, Watkins said. "Raptor owed Enron \$750 million and it was not a third party that bore the loss," she added.

Some Enron employees, such as current chief operating officer Jeff McMahon, had complained about the questionable accounting practices and the fact that Fastow had a stake in some of the partnerships, she said. "I was shocked that people could explain this to me with no concern in their voice," she said. "For the most part, people seemed to think there was an accounting rule that made this acceptable."

However, Watkins said she never went to Skilling with her concerns because she was afraid she would lose her job. Skilling, in an earlier hearing, testified before Congress that he did know that the partnerships were used by Enron to inflate profit and hide debt.

When Watkins told Lay of her concerns, she added, Fastow found out and wanted her fired and her computer seized. She said that while Enron was known as a fun and innovative company, it had some very competitive people who, at times, made it a difficult place to work. "Enron was voted one of the best places to work. It was the job to have in Houston. The atmosphere was electric. It was fun. You were surrounded by bright people, energized to change the world. You felt somewhat invincible," Watkins told lawmakers in Washington.

LAY TAKES THE FIFTH

Initially Kenneth L. Lay, Enron's embattled chairman, had agreed to appear voluntarily in a congressional hearing. After the publishing of

the Powers Report he cancelled his appearance. Angry lawmakers did not agree with this behavior and subpoenaed Lay to appear for a congressional hearing. Lay sat through 90 minutes of attacks from congressional investigators before he declined to testify, citing advice from his lawyer.

Meanwhile, a deal approval sheet from June 2000 contains Lay's signature. The sheet authorizes a transaction, "Project Backbone," where LJM2 Co-Investment LP bought dark fiber from Enron. The sheet lists law firm Vinson & Elkins as Enron's counsel while Kirkland & Ellis advised LJM2.

Enron CFO Andrew Fastow is credited as the financial mastermind behind Enron's web of corporate partnerships that were allegedly used to inflate profits and hide debt. Formed in 1999, LJM2 is one of Fastow's transactions that he part-owned.

The LJM document is one of the first showing that the former CEO knew about and even approved Enron's obscure partnerships. Lay and his wife have always maintained that the former CEO was not fully informed about the operations of those partnerships.

As part of "Project Backbone," Enron sold access to its nationwide fiber-optic network to LJM2 for more than \$90 million and booked about \$50 million, the document said. The sheet also lists a number of Enron executives including Chief Accounting Officer Richard Causey and Chief Risk Officer Richard Buy.

On the last line of the approval sheet, the names of Jeff Skilling, then the company's president and chief operating officer, and Enron's then vice chairman Joseph Sutton are typed in. However, the nearly unreadable signature appears to be that of Kenneth Lay, who was chairman and chief executive at Enron at the time.

Another document, a deal approval sheet from July 2000 sheds further doubt on the testimony from Jeff Skilling. The transaction, known as "Margaux," involves the sale of Enron's 33 percent stake in three European power plants to LJM2 for \$10 million. The sheet shows Skillings signature next to the executive section. Skilling, who

testified earlier, repeatedly told a congressional panel that he did not know the company was using off-the-books partnerships to hide debt.

A key lawmaker casted further doubt earlier on Skilling's testimony. Rep. John Dingell (D-Mich), ranking member of the House Energy and Commerce Committee, sent a letter recently to Skilling's attorney, Bruce Hiler, where he pointed to a document from an October 2000 meeting that showed the former CEO had knowledge that the partnerships were used to inflate profits at Enron.

Lay, once mentioned as a possible energy secretary for the Bush administration, invoked his Fifth Amendment right under the U.S. Constitution against self-incrimination and refused to testify before the Senate Commerce Committee.

Stone-faced, Lay sat through blistering attacks from Republican and Democratic senators of the panel. In fact, some of the most vicious attacks came from Republicans, whose party benefited heavily from Enron's generous political donations.

"I'd say you were a carnival barker, except that would not be fair to carnival barkers," Sen. Peter Fitzgerald, R-Ill., said. "A carney will at least tell you up front that he is running a shell game. You, Mr. Lay, were running what was purported to be the seventh-largest corporation in America."

Lay said he was deeply troubled about invoking the Fifth Amendment. "I come here today with profound sadness about what has happened to Enron, its current and former employees, and stakeholders," he said. "I have been instructed by my counsel not to testify based on my Fifth Amendment right. I cannot disregard my counsel's instructions."

THE FIFTH AMENDMENT OF THE AMERICAN CONSTITUTION

Many, or actually most, of Enron's and Andersen's executives who were summoned to appear for congressional committees to testify in order to shed light on the demise of Enron, invoked the Fifth Amend-

ment as an excuse not to testify. The full text of the Fifth Amendment is as follows:

FIFTH AMENDMENT [U. S. CONSTITUTION]—*‘No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life and limb, no shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use without just compensation.’*

The Fifth Amendment ‘can be asserted in any proceeding, civil or criminal, administrative or judicial, investigatory or adjudicatory; and it protects against any disclosures which the witness reasonably believes could be used in a criminal prosecution or could lead to other evidence that might be so used.’ The only way the Fifth Amendment can be asserted as to testimony is on a question-by-question basis. The appropriate device for compelling answers to incriminating questions is a government grant of use immunity.

The source of the Fifth Amendment was the maxim “that no man is bound to accuse himself.” This maxim is but one aspect of two different systems of law enforcement, which competed in England for acceptance: the accusatorial and the inquisitorial. In the accusatorial system, which predated the reign of King Henry II (1154-1189) but was expanded and extended by him, first the community and then the state by grand and petit juries proceeded against alleged wrongdoers through the examination of others, and in the early years through examination of the defendant as well. The inquisitorial system, which developed in the ecclesiastical courts, compelled the alleged wrongdoer to affirm his culpability through the use of the oath *ex officio*. Under the oath, an official had the power to make a person before him take an oath to tell the truth to the full extent of his knowledge as to all matters

about which he would be questioned; before administration of the oath the person was not advised of the nature of the charges against him, or whether he was accused of crime, and was also not informed of the nature of the questions to be asked.

Historic studies have revealed that in England and the colonies the privilege was narrower than the present interpretation in the U.S. judicial system, a common situation reflecting the gradual expansion, or occasional contracting, of constitutional guarantees based on the judicial application of the policies underlying the guarantees in the context of new factual patterns and practices.

Critics of the U.S. criminal justice system often assert that the oft-quoted right-to-remain-silent serves to protect only the guilty. As is often thought: If you are really innocent, why would you "take the Fifth" or otherwise request a lawyer?

In a new ruling, the U.S. Supreme Court recently answered that question quite clearly, ruling in a unanimous *per curiam* opinion that an assertion of innocence does not automatically mean that the person cannot "take the Fifth." Anyone at some risk of being "ensnared by ambiguous circumstances" is equally protected. In other words, Criminal investigations are often imperfect and consequences of a given fact or statement are often unknown until it might be too late to avoid inadvertently being a witness against yourself.

In effect, the new ruling will increase the instances in which the state will have to grant immunity in order to get cooperation from a witness—always a somewhat risky decision. At the same time, the ruling clarifies that the Fifth Amendment's protection applies whenever a person could reasonably be connected to criminal behavior, regardless of an assertion of innocence, granting the benefit of the doubt in that question to the individual, as it should, instead of to the state or a court.

Otherwise, witnesses would never know for sure just what their culpability might be until they have already opened their mouth. Implicit in the court's ruling is the idea that even truly innocent persons can be

caught up in a prosecution unfairly, even if only to tangential offenses not known to the state. The power to avoid that problem goes to the heart of the privileges against self-incrimination.

HOW IT ALL STARTED

The 401(k) started some twenty years ago, Ronald Reagan was president and the DOW stood at 900. It was Ted Benna, a benefits consultant, who first got the idea for a new plan. He was working on revamping a bank's cash-bonus plan at the time and knew that paragraph (k) of Section 401 in the tax code had gone into effect that year to give legal stature to savings arrangements already in place. At that time it was common for employees to be given the choice to defer half or all of their non-salaried compensation, often bonuses, into a company's cash-deferred profit-sharing plan.

Section 401(k) essentially gave the definitive go-ahead for that type of tax deferral. But Benna suspected its provisions could be interpreted more broadly. He figured instead of employers putting up money and giving workers the choice to defer, why not let employees defer part of their own salary pre-tax and get an employer match as incentive, particularly for low-paid employees. "I was stretching the law to suit the design I came up with," Benna said.

In 1981, the IRS issued proposed regulations on Section 401(k) that officially sanctioned pre-tax salary reductions. In essence, the IRS made it more straightforward for an employer to provide a salary-reduction savings plan with tax incentives for employees. The pre-tax protection of income was a boon given the high marginal tax rates at the time.

But, beyond the tax code, several forces spurred 401(k) growth, not least of which was a sea change in the pension arena. Regulatory changes made it more costly and restrictive to run pension plans, especially for smaller firms. And the government imposed shorter vesting schedules in 1986. That meant companies had to increase their pension funding, since more employees would be eligible for payment, even if they did not stay with the company for more than five to seven years.

There was also a push for more "portability," where workers could take their retirement money with them. Part of the reason for this was that companies restructured and some older employees lost their jobs. A growing number of people in the work force also started changing jobs more frequently.

Savings advocates, for instance, have been pushing for higher contribution levels for a long time now. Congress is likely to consider a bill that would raise the cap on participant contributions to \$15,000 a year from the present \$10,500, and would provide a "catch-up" provision for workers 50 and older to save an extra \$5,000 a year.

And the 401(k) structure still is evolving to match demand for greater flexibility. A worker's investment choices, for instance, are likely to move in one of two directions. They might mirror an employer's institutional pension funds, which are both less costly for participants and are more closely monitored. Or, they may become more retail centric; meaning employees would direct all of their 401(k) money into a retail brokerage account, opening up a participant's investment universe. That sort of change would relieve businesses of some of their fiduciary responsibility, which in Benna's opinion is unworkable. "They are in a no-win situation. They can never have enough funds or the right funds or my favorite funds. And they can be sued," he said.

"What is more, for all the talk of participants' control over their investments, all it takes is one merger for a worker to realize he or she is going to lose access to some fund choice or to be told to sell company

stock," Benna added. "We need to get the employer out of being the gatekeeper," he argued.

Since the start 401(k) has become a household word. For starters it has changed the way you save for retirement. The days of the fully-funded-company-pension are over for most people. The system has today 42 million participants. Assets amount to roughly \$1.8 trillion. These assets are likely to surpass the \$2.1 trillion invested in all institutional pension plans, whose growth is less than half that of the 401(k). In fact the annual compounded asset growth of the 401(k) funds was 13.1% since its start. Pension plan assets, by contrast, did grow over the same period only 5% annually.

It was this kind of dollar-power that helped fuel the bull market in the 1990s and revolutionized the mutual fund industry, which was quick to market the plans in their early days and now manages more than half of 401(k) assets.

THE ENRON PROBLEM

Enron's demise cost its employees more than \$1 billion in 401(k) savings. While top-executives, of the company, including chairman and CEO Kenneth Lay dumped their stocks for many months in succession, and often made killings when the Enron stock was still high, the common worker could not move its company stock. Enron top management and Wall Street analysts even urged the common worker, up to the very last moment in late October 2001 and even up to mid-November, to buy more stock, while they themselves tried in a frenzy to get rid of it. The stock tied up in the 401(k) savings was "locked-up", it could not be sold before a certain time was elapsed. Especially for the elderly, who also lost their jobs, nothing less than a disaster. No job, no savings mean for these people a future of poverty, probably ending in some form of charity shelter.

Did Enron cross the line? The Department of Labor is investigating whether Enron violated retirement laws. The answer could be in a passage of the 1974 pension law—just a hundred words or so—that out-

lines a company's responsibilities over employee retirement plants. The passage states in a few words, that a company has to monitor every investment in a 401(k) like a hawk—whether it is a fund or the company's own stock. The minute an investment turns shaky, the company is supposed to remove it from the plan. The Department of Labor is trying to determine whether Enron lived up to the terms of its "fiduciary" responsibility outlined in that clause—Sec. 404a of the Employee Retirement Income Security Act—and whether the employees are entitled to restitution. The clause is also the basis of nearly a dozen lawsuits by thousands of employees who claim Enron should not have encouraged them to keep buying the stock when the company knew it was not a solid investment anymore. The legal question is did Enron executives exercise prudent oversight? Were Enron executives wearing multiple hats?

Sec. 404a puts the responsibility for sound investments on the shoulders of the plan fiduciaries. A fiduciary can be the officers, trustees, or a committee of executives. It varies from company to company. The law outlines four general standards that plan fiduciaries must follow:

- they must administer the plan with skill and prudence;
- they must maintain diversified investments; and
- they must follow their own written guidelines for the plan.

The fourth benchmark is the "exclusive benefit rule," meaning the fiduciaries must operate the plan for the sole benefit of the participants and beneficiaries. For example, in some cases, a fiduciary may improperly try to use pension money for other corporate activities. According to the law, investments have to pass the "prudent man" test, meaning they must make sense to the average man, not to a financial wizard. The fiduciaries have to make sure it is an appropriate investment for the participants, and whether the plan should continue to hold it or

not. It is in fact a matter of how you apply a fairly broad standard to very specific situations.

Enron executives may have trouble justifying why they kept the stock as an investment option in the plan. Based on the information of today, it does not look particularly good for Enron executives. They may have stepped over the line.

Like Enron, about 2,000 companies have 401(k) jam-packed with their own stock—and employees cannot touch it for years no matter what is happening on Wall Street. A lot is at stake. Reformists argue there should be a limit to the amount of company stock in 401(k)'s because it is too dangerous to concentrate any retirement money in just one investment. It is a tragedy waiting to happen many experts say. You might think your company's stock is great—but that is also what Enron employees thought a year ago.

Critics of reform argue lawmakers have introduced proposals without proper research, propelled only by the heartfelt stories of Enron employees who lost everything. A string of Washington think-tanks and lobby groups have commissioned studies to prove their point that the "Enron problem" is exceedingly rare. Opponents also say the federal government should not be telling individuals how to invest.

A recent study by the newsletter *DC Plan Investing* found plenty of 401(k) plans with a dangerous concentration in company stock. Out of 219 large-company plans surveyed, 25 had stock representing 60 percent or more of assets. (Enron had nearly 58 percent in company stock). Three companies had more than 90 percent, including Proctor & Gamble, with 94.65 percent, Sherwin-Williams, with 91.25 percent, and Abbot Laboratories, with 90.23 percent.

Like the rest of Wall Street, many stocks suffered losses over the year 2001, though nothing like the catastrophic losses of Enron. Coca-Cola, for example, has 81.47 percent of its plan in company stock, while Texas Instruments has 75.65 percent. Coke shed 21.8 percent last year, while Texas Instruments gave up 40.9 percent, compared to a loss of 13 percent for the S&P 500. Lucent's 401(k) also lost almost all,

while recently also Global Crossing, the world's largest fiber optic company went bankrupt, saw the 401(k) plans of its workers go up in smoke.

A SYSTEM THAT HAS WORKED WELL-AT LEAST SO FAR?

So far the 401(k) system has been a success, there is no question about that. First, it makes for loyal employees, aligning workers' interests with the companies. And, companies can issue new shares whenever they want, so there is no outlay of cash. Part of the success of the 401(k) system is that it has not been complicated by years of reform legislation like the traditional pension system, and that there have been relatively few cases such as Enron.

But there are dangers involved that can not be denied either. The Proctor & Gamble retirement program, for instance, includes an employee stock ownership plan (ESOP) with a 401(k) feature. Employees can sell the stock in their 401(k) at any time, but in the ESOP, which has a mix of common and preferred shares, employees can sell the common stock after five years, and can start diversifying their preferred shares starting at age 50. Although P&G's system is more flexible than Enron's was, it is still risky.

In fact the present 401(k) system carries four dangers in it which might create sooner or later serious problems for investors:

- The bull-market of the 90s will not continue forever, in fact it ended in 2001. Not only is an economy subject to periodical ups and downs (short and long term), companies are tending to have good and bad times also. History has proven these things over and over. The problem is actually that analysts always use linear extrapolation for their predictions, while in reality predictions are subject to far more complicated variables. For instance, notwithstanding more than ten years of trying to turn the tide the Japanese stock market lost 75% of its value over the last twelve years in a continuous slide. The Nikkei dropped from a high level of 40,000, around 1988, to

less than 10,000 early 2002. In 1988 many analysts predicted that the Nikkei would reach the 50,000 mark within a year! In other words holders of Japanese stock lost 75% of their savings, and no recovery is anywhere in sight.

- To reward loyal workers with a share in the company is basically a laudable thing, but as "part-owner" he should have a say in the company's well-being. So far American companies, however, have shied away from workers participation in running the business. This is quite contrary to Europe, where workers-participation in managing the company has become a common issue over the last decades. Of course such a system would include a change in treatment of the production factor "labor". In today's America "labor" is the variable production factor that makes fast downward adjustment of costs possible. American employees have hardly any "job-guarantee". The possibility for "part-owners" to be fired immediately at any time, while any agreed upon severance plan can be dumped just as easy as well, with as only purpose the protection of the stake-holders, is a highly contradictory situation.
- The practice to tie-up workers' money in company stock is against any form of prudent investment. In fact no investment should ever exceed 5% of a particular stock, regardless whether it is company stock or any other. The temptation for companies to use this tied-up capital for other purposes will often prove to be too big. It is like letting your dog guard his own food something that never works regardless how good the training was.
- Another quite important issue is the value of the stock. A lot has been written over asset-value in the past. In recent years this issue disappeared more or less from the bookshelves. This is understandable because it is a quite difficult subject. What most people have forgotten is that asset value has two distinct different aspects: (1) asset value for tax purposes; (2) asset value for economic purposes.

These two "values" are not the same. The first deals with accounting, write-offs, and tax payments. The second issue deals with the so-called "alternative" value of an asset, in fact the value in case the asset is sold. The difference between the two is the "book-profit or -loss" In old-times it was easy. The value of an asset was determined by its second-best use. Ships, airplanes, cars, office buildings, they all have a second-best value. The problem starts by things where either there is hardly any or no second-best value at all. A patent for a pharmaceutical drug expires after a limited number of years, once expired the value is actually zero. What is the alternative value of an airport? Notwithstanding the fact that an airport is an extremely expensive high-tech affair its alternative value is very low. What other use does it have anyway? It is even more difficult to assess the value of an imaginary asset. What is, for instance, the value of an Internet company? Stock prices should have a link with the asset-value of a company is the bottom line of classic economic theory. Of course there can be an extra premium for excellent management, ample market conditions or other special circumstances. But as Enron has taught us there is a great danger for a "balloon-effect" if asset value and stock value is too far out-of-line. It is this balloon-effect that is far more dangerous for the 401(k) plans than the accounting issue.

In other words it is highly dangerous to think that because there were no serious problems with 401(k) plans so far that these plans are indefinitely safe. Enron has proven that the system is vulnerable, while Japan has proven that any economic system that strays off the road of sound economics will fail inevitably. The present value of Japanese stocks is the undeniable proof.

CAN 401(K) PLANS BE IMPROVED?

The Enron collapse has shown the weakness of the 401(k) system. It did not take long before several congress members, and even President

George Bush, presented draft legislature for improvement. Basically the proposed improvements focus on a maximum percentage for company stock, equal treatment for executives and workers and limited lock-up of stock. These reforms do not change the status of the worker. He will still be "part-owner" without any say in the management of the company. His vulnerability for being used as "cost-adjuster" will not change. In other words, this is not a really good solution. On top of that the funds would still remain under control of the company, and in some cases that might be a temptation to big to deal with for some managers.

The alternative would be to privatize the 401(k) plans completely. In fact this would mean to change the 401(k) plans into a sort of mutual fund with professional fund-managers. Technically this is possible. Problems will be the tax-treatment of matching funds and whether or not companies are willing to give up control over the plans. In a way this would also solve the issue of the worker being treated as some kind of discriminated part-owner. He would have his say via the mutual fund. Although this would solve one problem, it creates another: the direct link between worker and company via share-ownership is in reality cut.

9

THE FALLOUT

AN OMINOUS TREND

Big companies go bankrupt once in a while, as such the Enron story is nothing new. Actually the year 2001 is a record year as far as U.S. bankruptcies is concerned. The total number of bankruptcies filed during the year jumped 19 percent to 1.49 million from 1.25 million in 2000. That year-total easily surpassed the previous high of 1.44 million bankruptcies recorded in 1998.

It does not come as a surprise, economists have predicted for some time that bankruptcies would reach new highs in 2001 as the recession took its toll on the finances of consumers and corporations alike. Some experts forecast that the surge will continue in 2002.

Personal bankruptcy filings totaled 1.45 million in 2001, up 19 percent from 1.22 million in 2000. Business bankruptcies rose slightly less sharply, increasing 13 percent to 40,099 from 35,472 in the year before. Almost half of the personal bankruptcies are caused by high medical costs in cases where people lack insurance coverage.

Despite mostly favorable economic conditions over the period, personal bankruptcies have risen sharply in the United States since the mid-1980s. In 1984, just over 285,000 people filed for bankruptcy, compared with almost 1.5 million last year.

But it is not only the number of bankruptcies that made the year 2001 the *Year Of The Bankruptcies*, it is also the size of some of bank-

ruptcies that makes experts worry. Enron was the seventh largest U. S. company and its bankruptcy the largest in U.S. history. Only a few weeks later, in January 2002, it was K-mart, the largest U.S. retailer, that had to file for bankruptcy. Global Crossing, the largest fiber-optic company in the world, soon followed K-mart and Enron. In the meantime, the general public probably has forgotten already the bankruptcy of the Finova Group in March 2001, the 10th largest in U.S. history, and the debacle of Pacific Gas & Electric, the 5th largest bankruptcy in U.S. history, that took place in April 2001.

The reasons for all these sad stories are the same: debt defaults, weak business models, and over-extended credit lines. Last year companies defaulted on 9.8 percent of outstanding debt. Things were clearly too easy and now the price has to be paid.

Although in itself it is nothing new that consumers or companies go bankrupt it is the upgoing trend and the severity of the bankruptcy that causes experts to worry. Add to this the fact that the USA does not have an overall social security system and the picture becomes quite clear how serious the situation is. The elderly who can't find work anymore and who lost at the same time their much hailed 401(k) plans will be the next drop-outs in U.S. society. They will be added to the millions and millions that are already depending on handouts and other forms of charity. It is the millions that are never shown on CNN, Fox or ABC and NBC. That would be bad for the ratings. The Enron case has made that once more crystal clear. Pure capitalism, based on greed, cannot solve this problem, neither can charity replace basic rights of human dignity. After all, those who are now left in the dark because of the Enron debacle, were the same ones who made it possible for Kenneth Lay, Andrew Fastow, Michael Kopper and others to stash away millions and millions of dollars in numbered accounts in far-away exotic islands. They do not have to worry about anything anymore, they know the courts will have a hard time to prove their guilt beyond reasonable doubt.

SHARING THE PAIN

The death of one company is usually the success of another. Of course Enron was doing business at a large scale, its demise causes customers to look for an alternative, that is nothing new. Enron stood in the middle of trading electricity and natural gas, commodities that belong to the daily necessities of life. We cannot do without. One of the companies that was lucky and happened to be in the right place was the Intercontinental Exchange (ICE). ICE's trading volume started to climb steadily in November, when the Enron problems became visible. Today its daily trading increased to a volume of \$25 billion—or an increase of 100 percent. ICE's business really went through the roof, thanks to the demise of Enron.

ICE's success illustrates that the market has moved to absorb the demise of Enron. That does not take away that people are not hurt. ICE's main base is in Atlanta that is far away from Houston and no solution for those who lost their jobs at Enron.

Others, however, were not so lucky. Among the energy companies that traded with Enron, Duke potentially lost \$100 million, Mirant some \$80 million and Dynegy about \$75 million. Among banks the biggest exposure suffered J.P. Morgan, it recently announced to have \$500 million in unsecured and derivative exposure to Enron. Citigroup could face a similar loss. Fortunately for the banks most loans are syndicated which mean that the risk is spread over a large number of underwriters. That dilutes the impact of any one failure. For instance, the effect on Citigroup is estimated to be less than five cents on the profit per share. Morgan will take a slightly bigger hit per share, probably some 4 percent reduction in earnings for next year.

The fallout is likely to be felt most keenly within the energy industry, especially among companies that, like Enron, had specialized in trading electricity and natural gas. The energy traders, such as American Electric Power, Duke, Dynegy and Reliant, argue that unlike Enron, they possess major physical power plants and storage facilities, assets that balance the risks in trading.

Dynegy derives more of its earnings and cash flow from marketing and trading than do companies that are more akin to traditional utilities. Then there is also the Enron case against Dynegy for the failed merger. Enron is suing Dynegy for \$10 billion as a result of the failed merger. The suit probably has little chance of succeeding but adverse legal decisions would immediately push Dynegy's stock down.

Mirant is especially eager to put some daylight between the company and Enron. Mirant has \$22 billion in assets and 15,000 megawatts of generating power across the country. It makes it easy for the company to sell forward because it produces the energy itself. Mirant's internal control bars traders from putting more than \$75 million of capital at risk each day. That is a small fraction of Mirant's shareholder equity, currently \$4.7 billion, or its annual profits, projected to be nearly \$700 million in 2001.

Estimated exposure for the hardest hit companies looks as follows:

Company	Potential exposure (in millions)
J. P. Morgan	\$500
Citigroup	\$500
Duke Energy	\$100
Reliant	\$80
Mirant	\$80
Dynegy	\$75
American Electric Power	\$50
UtiliCorp	\$32

THE REAL LOSERS

The American economy is often referred to as a system of *investor-capitalism*, meaning a system driven by investor money. Going through annual reports, company brochures, web-sites or articles over the Enron debacle most, if not all, is either about the poor investor who

lost his savings or the managing crook or villain who caused the company to collapse after making sure that he had stashed away enough for his old days in numbered accounts in far-away-exotic islands. What about the company workers? Enron employed some 20,000 workers all over the world. Actually the only thing we know about them is that they lost their savings in their 410(k) plans because the stock was tied-up. Again, this reference is actually to the worker-investor, not really to the worker as a member of the Enron society. The second thing we know is that some 4,500 employees were fired and that the severance plans had disappeared, which meant that they had nothing left. That was all, a few lines, no more.

Social security in the U.S. is not what it is in Europe. You are lucky if you get six months unemployment benefits, after that most end up in some kind of charity program if they can't find any work. Especially for elderly people, let us say 45 years of age and above, it is difficult to find any work at all. If, as in the case of Enron, not only the severance plan is cancelled but the 401(k) savings also disappeared, and most probably the regular pension plan will be under threat too, than the future for those people looks really bleak. Poverty will be their fate.

In fact the real losers of Enron are its workers. They were the ones that made Enron big, they were the ones that made the money, without their input Enron would never have become the seventh largest company in the U.S. The Enron collapse emphasizes the internal weakness of the American interpretation of capitalism: over-valuation of the production-factors capital and management and under-valuation of the production-factor labor. The result of this is inevitably sub-optimalisation and economic distortion.

10

THE AMERICAN ECONOMIC IDEOLOGY

Is the Enron case something unique, a rare incident, or is it the top of an iceberg? In other words is the Enron collapse caused by a coincidental combination of a lax management-system and a group of unscrupulous individuals, or is it a sign of a wrong interpretation of the basics of a free market economic system in America? The only way to find this out is a look at the economic fundamentals of the present capitalistic system, as it evolved since the Industrial Revolution some 300 years ago.

The *Free Market Economy* of the 21st century finds its roots in the Industrial Revolution. This *Revolution* was the process of fast industrialization that took place in England around 1700 and that changed the country from an agricultural society into an industrial giant. This change had enormous consequences for the kind of society that people were living in at those times. It gave birth to a new science that tried to explain what was happening: *Economics*. Soon the new science developed three basic economic ideologies: *Capitalism*, *Liberalism* and *Socialism*.

The three main world-economies of today, the U.S.A, Europe and Japan are all founded on their own interpretation of these *ideologies*. Japan chose for a version based on its old samurai system, the *Keiretsu Economy*, actually a liberal-capitalistic system. After decades of enormous growth the system faltered. For more than ten years now Japan is confronted with economic stagnation, a bankrupt banking system and

stocks that lost more than 75% of their value. It looks extremely doubtful whether or not the system can be patched up. A definite failure of the keiretsu economy, however, will have disastrous consequences for any other economic system in use.

Europe chose for a capitalist system within a socialist framework that gave life to the *Welfare State*, a situation in which everybody is protected against the problems of pure capitalism. It is an expensive system, but it is a system without poverty and hardly any millionaires. So far the system has performed extremely well.

The United States became the champion of *Pure Capitalism*, based on Adam Smith's theory of *the invisible hand*; a system based on minimal government interference. The system is characterized by lack of stability, it has produced huge budget and trade deficits, but also millions of millionaires and millions of society drop-outs living in abject poverty at the same time. Over the last decade the American system ventured into *investment-capitalism*, a system based on aggressive investments focused on an optimal combination of entrepreneur and investor, leaving the production factor labor largely in the cold. It is a system that promotes greed in its optimum form, led by the figures from hour to hour on the New York Stock Exchange it advocates a culture of profits and nothing else. It was this system that produced Enron and Enron-like corporations. The key question is whether Enron is just a rare situation in an otherwise sound system, or whether it is the other way around: an exponent of a wrong system. Or is it so that Karl Marx, after all, was correct in his prediction that the ever-present greed of pure capitalism would inevitably cause the system collapse?

For a proper understanding of what all these ideologies and their ins and outs stand for a little economic history is inevitable.

THE PRECONDITIONS FOR TAKEOFF

We do not know exactly what triggered the Industrial Revolution. Around 1700 in England there were a number of things happening at the same time. In the first place there was a substantial population

growth. From time to time Europe, including England, suffered from plague epidemics. The plague was a disease that originated in the Far East, probably it came from China, and was brought to Europe by travelers and/or rats. During the 16th and 17th century England was hit in 1563, 1603, 1625 and during the years 1664-1666. During plague epidemic substantial parts of the population perished, sometimes up to 30 or 60 percent of the total population. The epidemic that hit England in 1664 was one of the worst ever to hit the country. Many people fled to the countryside in the hope to escape, even King Charles II moved his court out of London to Hampton Court. Initially infection was kept in check by a very severe winter but the following summer it broke out in all its severity. The epidemic peaked in the third week of September of the year 1666 when more than 10,000 people died.

The epidemic of 1664-1666 happened to be the last in England's history. By the turn of the century the population had recovered completely. The continuous, and uninterrupted population growth since the last epidemic, created a growing demand for food over a long period. This increase in demand created a multiplier effect in England's economy. Higher demand means higher prices and that, in return, means increase in production. In order to satisfy growing demand more land had to be taken in production and more animals had to be raised.

Land was scarce in England and what we see happening were attempts to use available land better. In other words productivity increased. Parallel with the improvements in farming techniques went the improvement in farm tools. Seed drills, horse-drawn hoes came already into operation in the 17th century. Later they were followed by the Dutch self-sharpening cast-iron plough and reapers. Andrew Meikle invented in 1786 a threshing machine that could run on steam, water or horse power.

In fact what happened in the English agriculture was an Agricultural Revolution. The effects were far reaching. In the first place the devel-

opments kept food prices low. In the second place the increased agricultural productivity increased investment in agricultural tools, transport vehicles and building constructions. This in itself created increased demand in iron manufacturing and adjacent industries. But there was also a negative factor. Increased agricultural productivity displaced agricultural pools of labor and often rendered them unemployed or underemployed. Especially female and juvenile workers were hit by this problem.

THE TAKEOFF

While the Agricultural Revolution was in full swing other developments took place elsewhere in England. First there were the developments in the engine industry. The first piston engine was developed in 1690 by the French physicist and inventor Denis Papin and was used for pumping water.

The English engineer Thomas Savery constructed a different prototype in 1698. Thomas Newcomen, another British inventor, came in 1705 with his so-called atmospheric engine. It was James Watt (1736-1819), a Scottish engineer and inventor, who managed to improve Newcomen's engine so much that it started to look like a modern steam engine. He patented his engine in 1769. Later he went into a partnership with Matthew Boulton, a manufacturer of small equipment from Birmingham. It would become an extremely successful partnership, within a few years they manufactured hundreds of steam engines in various types.

A precondition for a good engine was the availability of good quality iron. While Papin, Savery, Watt and others worked on their steam engines it was Abraham Darby, an English ironmaster, who made the first successful use of coke in smelting iron. Born near Dudley, in Worcestershire, Darby was to dedicate his life to iron-making. In the early 18th century, iron production was primitive, limited, and expensive. Smelting iron ore required high temperatures, which for over 3,000 years had been provided by burning charcoal. In England, how-

ever, the price of charcoal was climbing as forests dwindled. An alternative fuel was coke, the solid carbonaceous residue remaining when volatile materials have been distilled from coal. Coke had been produced for half a century or more, but its use in iron-smelting had not been mastered. Darby made the first successful use of coke in iron-smelting in 1709. He found that lumps of coke were stronger than lumps of charcoal and could support a larger charge of iron ore, so that iron could actually be produced not only more cheaply but also at a faster rate. The high carbon content of Darby's iron was later reduced by the introduction of blast furnaces, an invention of John Smeaton.

With these innovations, Britain was producing the world's best iron, in the highest quantities, and with the lowest price by the late 18th century. The ability to produce this cheap, strong, versatile building material contributed significantly to the nation's military and industrial rise. Darby's son, Abraham Darby II, improved his father's iron-smelting process using coke, and effectively established the technique. Henry Cort introduced a further increase of quality in the 1780s. Cort also took out a patent for rolling that extended the use of iron, now the master material for the first Industrial Revolution. Cast iron rails were introduced in the 1770s. The world's first cast-iron bridge, *Ironbridge*, was constructed in the Midlands across River Severn in 1777-1779 near Darby's ironworks at Coalbrookdale, a place whose name speaks for itself and which has been called "the cradle of the Industrial Revolution". The bridge still exists. Even the gravestones in the local churchyard were made of iron.

The widespread application of steam-power depended on an increase in the production both of iron and coal, which was facilitated by improving pumping of water. Already by 1765 there were more than 100 steam engines at work in the coal mines. Inventing became such a fashionable thing, in London, in 1754, that there was even a society established for it: the *Society for the Encouragement of Arts, Manufactures, and Commerce*.

The main industry in England, at the beginning of the 18th century, was the textile industry. There were three kinds of raw material, wool, a traditional British product, linen, which came mainly from Flanders (today's Belgium) and cotton, which was imported from India and from what is now the United States of America. Cotton, as a raw material, was far cheaper than the other two and easier to process. In the early years of the 18th century a series of inventions in the cotton processing industry increased productivity enormously. The drop in prices for the final product had a very favorable effect on demand and stimulated further extension of production. This development further stimulated the Industrial Revolution.

The continuous stream of new inventions soon caused labor resistance. Kay, inventor of the flying shuttle, had to flee the country. In the early 19th century the *Luddite Rising*, Luddites, named after a mythical King Ludd, smashed machines. The machine-makers, and mechanics, constituted a new skilled labor force, what one writer in the 1840s called "a new race of men". By then, they were employing a whole new range of machine tools. The so-called "father of the machine tool industry", Henry Maudsley, a blacksmith by original occupation, made the first all-metal lathe and fitted it with a slide-rest that held the tool in the best position.

GREAT BRITAIN: THE WORKSHOP OF THE WORLD

The industrial upswing caused by the Industrial Revolution was enormous. If we look at the consumption of raw material, for instance, English statistics show that coal production doubled between 1750 and 1800, and in the 19th century it was to increase twentyfold. Pig-iron production quadrupled between 1740 and 1788, and quadrupled again during the next 20 years, stimulated by war demand. Raw cotton imports quintupled between 1780 and 1800, and were to rise again thirtyfold during the 19th century.

The relationship between population growth and industrial growth was a matter not of fact but of speculation, even controversy. The fact of growth was obvious. The population of England and Wales in 1700, has been estimated at around 5.5 million, and in 1750 at 6.5 million. By the time of the first census in 1801 it was 9 million, and in 1831, 14 million. It was because Britain had the agricultural capacity to support an abundant and rising population that its industrial economy could grow. Labor was plentiful and therefore cheap, and industrial workers could be fed at low costs. As the national income rose, a greater volume of imports could be financed from internal growth and exports, mostly carried in British ships. Population growth, measured from 1801 in decennial censuses, facilitated migration from one region to another.

Immigration underpinned later American industrialization, where agriculture was transformed not only to feed a growing American population but also to export cereals and other agricultural products to other parts of the world. In the process, agriculture itself was said to have been *industrialized*.

THE NEED FOR COLONIES

The *engine* of the Industrial Revolution was a system based on free enterprise and the continuing strive to balance demand and supply. It is a system which we call today *Capitalism*. Capitalism can only function if a few key issues are in place. First, there must be money available at a reasonable price. In Great Britain, at the start of the Industrial Revolution, money was no problem, it came mainly from the profits made in the colonial trade. A second issue was the availability of raw materials. England had abundant supplies of coal and iron, but not cotton, this had to come from India, and later from America. Cotton was essential for the textile industry, in other words there was pressure to safeguard the continuous supply of cotton. It became one of the pushing factors behind the final round of colonization. Sugar was another commodity only available in colonies, mainly West India but

later also other sources were developed. Wool, although initially a British raw product, soon had to be imported from Australia and Argentina. The phenomenal increase in production of the industry made it necessary to look for alternative markets, colonial markets were eyed for export of final products. In other words, not only for raw materials but also for export purpose colonies became a central issue.

THE NEED FOR CHEAP LABOR

A third key issue was the availability of cheap labor. Basically this was no problem. The sharp increase in agricultural productivity, between 1750 and 1850 agricultural output roughly doubled, with produce like wheat increasing fourfold, freed labor from the sector. It was not so much the amount of labor as such that was a problem; it was the skill of the laborer that often became a problem. The skills and the quality of the labor were often not enough to attract industry. Hence, in many regions agricultural reorganization and population growth created a society of unemployed paupers rather than proletarians.

But that was not the only labor problem. Industrial development was so fast that many laborers had difficulty to keep up the pace of change. There was often unrest among workers as the number of machines increased. Sometimes machines were destroyed. The *Luddites* considered them as a threat to their independence and livelihood. A different reaction was to develop collective bargaining through unions, and if necessary enforced by strikes, to raise wages. While industrial workers were paid higher wages than farm laborers and there was thus an economic incentive for individuals to find industrial jobs and move into industrial towns, there were many signs of family and social unrest as rhythms of work changed along with patterns of community.

Since industry developed through alternating booms and slumps, there were also large numbers of unemployed in "bad times", which often coincided with bad harvests when the price of food rose. The demand for cheap bread was not new, but it was louder than ever before. Yet when a large section of the new employing class, in their

campaign against the *Corn Laws*, claimed that bread would be cheap if imports of grain were allowed into the country free of commercial duties and employment would rise with the increased exports thereby generated, many industrial workers refused to cooperate with them in attacking the landed interests as the source of all the country's troubles. *Chartism* was the world's first specifically industrial working-class movement, with industrial workers demanding political rights along with bread.

The years of most active and open protest followed the start of what was to be Britain's first prolonged industrial slump in 1837. This depression lasted until a boom, generated by railway expansion, in the mid-1840s, revived economic activity. These were the years when the Anti-Corn Law League, with middle-class leadership, agitated in parallel to the Chartists, both conscious of the new significance of "class" in an industrial society.

It was these developments, focused on addressing the *exploitation* of the working class that formed the breeding ground for the theories of people such as Robert Owen, Karl Marx and Friedrich Engels. Exploitation was widespread, not only in England but all over the industrialized Europe at that time. Child labor was very common, children five and six years of age were forced to work from 13 to 16 hours a day. There were no safety rules and standards, working conditions were appalling, and wages were extremely low. The laborer was simply a slave at the disposal of the factory owner who could do with him what he wanted.

It was in those early years of the 19th century that socialism as a movement against capitalism was developed. Its aim was initially a class-less society but later the concept concentrated on social reforms within capitalism. Marx and Engels on the other hand went a step further. According to them capitalism was the result of a historical process characterized by unceasing conflict between classes. By creating a large class of property-less workers, capitalism sowed the seeds of its own demise. According to Marx socialism would inevitably lead to commu-

nism. What both ideologies had in common was the idea of *solidarity*, common ownership of means of production, extreme abundance of material goods, ample time for everybody to do what would please him or her.

It is here that our story splits in two directions, a European one and an American one. In Europe socialist-capitalism, based on solidarity, would eventually become the ruling political ideology. In the U.S. socialism never became a serious issue, neither communism. Actually on the contrary fear for communism, in the early years after World War II, ended in a complete witch-hunt organized by American Senator McCarthy. America's capitalism is probably the most pure form of this ideology that exists; safety nets or solidarity do not limit it, as is the case in Europe. In the U.S. capitalism is simply based on extreme profit-making, others call this *greed*. In this unequivocal attitude is no place for any solidarity with others. It is here where we encounter one of the main issues that can lead to world terrorism.

EMERGENCE OF ECONOMICS AS A SCIENCE

Apart from a revolution in agricultural and industrial production, there was also a revolution in economic thought that appeared around the same time. In other words, the Industrial Revolution was not just one single thing that happened, it was an overall acceleration of society. First there was the appearance of the Physiocrats, a French school of economic thought. A second development was Adam Smith, the godfather of modern economic thought, who introduced his theory of the invisible hand.

The Physiocrats

The leader of the physiocrats, the Frenchman François Quesnay, believed in the existence of a natural order in economics, one that does not require direction from the state for the people to be prosperous. He published his ideas in his book *Tableau économique* (1758), in which he traces the flow of money and goods through the economy. This

flow, he believed, was seen to be both circular and self-sustaining, like the flow of blood in a human body. More important, however, was the idea that it all rested on the division of society into three main classes: (1) The productive class, consisting of agriculture, fishing, and mining. This class represented about half the population. (2) The proprietary class, consisting of landed proprietors and those supporting them. This class amounted to about one quarter of the population. (3) The artisan, or sterile, class, made up of the rest of society.

Quesnay's theory is significant because it expressed the belief that only the agricultural sector is capable of producing new wealth, a surplus or a net product. This surplus could be taxed by a state to find capital for new activities. Other activities, such as manufacturing, were considered as essentially sterile, they did not produce anything new but simply transformed or circulated the output of the productive class. It was this aspect of physiocrat thought that turned against mercantilism, the prevailing economic idea that wealth could only be accumulated by the state. If industry and trade did not create wealth, then it was futile for the state to try to enhance society's wealth by a detailed regulation and direction of economic activity.

Adam Smith's Invisible Hand

The Scottish philosopher and economist Adam Smith (1723-1790) is often called the father of modern economics. He went in his attacks on mercantilism much further than the physiocrats. His book *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776) was a frontal attack on the popular system of mercantilism, the system of state-controlled economics, and all it represented.

Smith's central thesis was that capital is best employed for the production and distribution of wealth under conditions of governmental non-interference, or *laissez-faire*, and free trade. In Smith's view, the production and exchange of goods can be stimulated, and a consequent rise in the general standard of living attained, only through the efficient operations of private industrial and commercial entrepreneurs acting

with a minimum of regulation and control by governments. To explain this concept of government maintaining a *laissez-faire* attitude towards commercial endeavors, Smith proclaimed the principle of the invisible hand: every individual in pursuing his or her own good is led, as if by an invisible hand, to achieve the best good for all. Therefore any interference with free competition by government is almost certain to be injurious.

Modern Economics and the Industrial Revolution

The ideas and theories of Adam Smith and the Physiocrats provided the ideological and theoretical background for the Industrial Revolution. The fundamental characteristic of the industrialization process was the introduction of mechanical power (originally steam) to replace human and animal power in the production of goods and services. As the mechanization of production gained momentum in England and gradually spread to other parts of the world, several fundamental changes occurred. Production became more specialized and concentrated in larger units, called factories. The artisans and small shops of the 18th century did not disappear, but they were relegated to the periphery of economic activity in the leading nations, especially England, Germany and the United States. The modern working class began to emerge; workers no longer owned their tools, they had little property, and generally they had to exchange their labor for a money wage. The application of mechanical power to production brought with it great increase in productivity, which made goods cheap and abundant. Consequently, the real standard of living rose throughout much of the world during the 19th century.

Appalling conditions for large numbers of workers anywhere marred the early days of the Industrial Revolution. Working in factories was new for everybody, for the workers and for the owners of the factories. Factories grew from very small to extremely large without anybody actually knowing what the necessary preconditions should be. How many square meters per sewer should be the norm? How many win-

dows were necessary for proper ventilation? What packaging material was harmful? What chemicals in the textile mills were poisonous? In fact nobody knew any answers, it was trial and error, there were no scientific institutions to do the necessary work, there were no laws, there was no inspection. Today it is easy to blame all these early entrepreneurs for misuse of power, for exploitation, etc. Many, however, simply had no knowledge of how things really worked. It was maximum production at a minimum of costs, which was something every entrepreneur knows very well.

But although it is true that nobody actually knew the technical answers connected to a proper production process, there were a number of human questions where the answer was obvious. Child labor, extremely long working hours, very low wages that were forms of plain exploitation. These conditions led Karl Marx (1818-1883) to produce his massive indictment of the capitalistic system. Marx was a German of Jewish descent and worked initially as journalist and editor in Germany. Together with Friedrich Engels he wrote the Communist Manifesto (1848), a first systematic statement of modern socialist doctrine. In 1849 he was expelled from Germany because of his revolutionary ideas and settled down in England. Here he wrote his famous book *Das Kapital*, which is the intellectual foundation for communism as an ideology. It is a massive work and appeared in three volumes. Volume I was published in 1867, volume II in 1884 and volume III in 1894. Marx died in 1883, which means that the last two volumes of *Das Kapital* were published after his death. Marx believed that land and capital should be owned collectively and that the products of the system should be distributed according to need and not to greed.

Under pressure of many gradually the appalling conditions in industry disappeared in the course of the 19th century. Child labor was abolished, labor laws were introduced, unions were formed, work weeks and workdays were regulated, and in other words capitalism was cleaned up. As the 19th-century drew to a close capitalism was the dominant economic system. It was successful because it demonstrated

an enormous ability to create new wealth and to raise the real standard of living for many, but not all. Capitalism, as many started to realize, was only for those who had a job. For those who did not have a job or those who lost their job for whatever reason and were not able to get another one the poverty of other times was just the same.

THE EMERGENCE OF MODERN ECONOMIC IDEOLOGIES

The Industrial Revolution in Western Europe gave birth to modern economics. Soon the new economic thought developed different ways of thinking. Adam Smith became the god-father of modern capitalism. His theory of the invisible hand promoted a system without any government interference, everything should be left over to the parties directly involved. Smith recognized four main production factors: entrepreneurship, capital, land and labor. The entrepreneurs in those times, however, were usually also the owners of the land and the capital. In practice, therefore, it became a struggle between entrepreneurs and labor. Against the almighty entrepreneurs labor had little chance. This situation soon led to exploitation of labor as we saw before.

In a reaction to Smith's pure capitalism other economic philosophers developed different ideas, which either focused on personal freedom and development, the role of government or on the exploitation of the production factor labor. This development gave rise to three other economic ideologies: liberalism, socialism and communism.

CAPITALISM

The 20th century became, without any doubt, the age of capitalism. Notwithstanding two world-wars, a frontal assault by communism and the Great Depression of the 1930s the ideology survived. Especially World War II proved the viability of the capitalist system of production. Within the shortest time possible, after the horrendous Japanese attack on Pearl Harbor, a system of war production was set into motion as the world had never seen before. Ships, planes, tanks, artil-

lery and whatever the war effort needed rolled out of the factories in endless rows. Nothing was impossible. The Japanese and the Germans actually lost the war because they could not mobilize such an industrial effort as the Americans did.

The Great Depression was another test of the capitalist system. It was by far the most severe economic upheaval in modern times. Contrary to Marx philosophy that capitalism would eventually cause its own downfall this did not happen. Apart from the fact that Marx theory was incorrect, something we will discuss later, there were two approaches that together saved the system. First, governments began to intervene in the economy to correct the worst abuses inherent to capitalism. They also started to put in place frameworks within capitalism had to be kept. Economic rules of engagement were created to avoid in time predictable and to cope with un-predictable problems.

The second approach became the issue of pump-priming, an idea launched by the British economist John Maynard Keynes. In 1936 Keynes published his book *The General Theory of Employment, Interest and Money*. Like Adam Smith's ideas from another era, Keynes' thought profoundly affected the way, in which capitalism worked in advanced democracies, giving rise to the school of thought known as Keynesianism. Keynes demonstrated that it is possible for a modern government to use its powers to spend money, vary taxes, and control the money supply in ways that can dampen the cycles of boom and bust. According to Keynes, in a depression, government should increase its spending, even at the cost of unbalanced budgets, to offset the decline in private spending. The process should be reversed if a boom threatens to get out of hand, leading to excessive speculation and inflation.

In the European theatre of World War II the Allied forces landed in Normandy on June 6, 1944 and moved quickly eastward through France into Germany. From the east the Russians, who stopped the Germans in early 1943 in Stalingrad, moved to the west through Poland into Germany. Both armies met in Germany. After the war

Germany was partitioned into four parts, an American, British, French and Russian part. The separation between the Russian part and the three others became the beginning of the iron curtain that would separate the ideologies for years to come. Soon it became also clear that countries like Poland, Tszechoslovakia, Bulgaria, Hungary and the Baltic States, all countries initially liberated from the Germans by the Russians, chose to follow Russia in its communist ideology.

Western Europe was anxiously following these developments. In most of these countries communist political parties were legitimate and participated in elections. Post-war elections soon made clear that communist parties in France and in Italy were forces to reckon with. With the Great Depression of the 1930s still fresh in everybody's mind, a period that had caused widespread poverty in Western Europe as a result of massive unemployment, the communists came with an impressive alternative: the communist welfare state. This welfare state had some very attractive things. First, there was no unemployment; everybody was directly or indirectly employed by the state. Secondly, all medical costs were for the account of the state. Thirdly, pension age was set at 65 years of age. Upon reaching that age everybody was entitled to a state pension. And education in the communist welfare state was free. The modern communist state glorified the state and the individual at the same time.

West European communist parties broadly advertised the attractive policies of the communist state. It was here that American and European capitalist systems split and each went its own way. The Americans were not bothered directly by any communist attraction, on the contrary, there was no legitimate communist party in the U.S. anyway and whatever communist sympathy there might be was under attack of Senator McCarthy. Gradually West European non-communist parties (Christian Democrats, Liberal and Socialist) 'borrowed' some of the communist-welfare-state ideals. The legal right to a decent income for every citizen, based on a minimum necessary disposable income, was introduced, healthcare for everybody was made available, and the right

to decent living quarters for everybody was adopted, as well as child support for all mothers. Solidarity with the individual became the name of the game in Western Europe. The need for a communist welfare state disappeared and gradually political support for communist parties, which had collected in some countries, such as France and Italy, forty percent of the electorate, eroded. The new system became known as social-capitalism.

Solidarity in these countries reached great heights. The idea that the broadest shoulders should carry the heaviest weights became flying expressions in European welfare states. To finance the expenses of the system strong progressive income-taxes were introduced, in some countries reaching, inclusive premiums for social security, levels of up to 65 or 70 percent of gross income. Remarkably, there was little protest as everybody realized the necessity to grant the individual a decent existence at all times. Poverty was eradicated but most millionaires disappeared in the process also. Large-scale social housing programs created decent living quarters for everybody. Today in Western Europe nobody has to sleep under a bridge anymore, but there are no Bill Gates also. One country went even further; recently the Netherlands adopted for its citizens the legal right to self-killing. What had started as a maneuver to keep away communism had ended in a system of unknown decency based on solidarity for the individual.

The United States was never threatened in its core existence in the way as the Europeans were; therefore, there was no need to go to the extent as the Europeans did. Although over the years also in the U.S. social reform took place, and forms of social security were put in place, it never went as far as in Europe. Solidarity with the drop-outs of society, as it exists in today's Europe, is not an issue in the world's most powerful country.

LIBERALISM

Liberalism is a movement, philosophy or ideology that is focused on the development of personal freedom and social progress. It advocates

a society where government abstains from interfering in the economic process as much as possible. Governments should focus on maintaining law and order and take care of national defense.

As a political movement liberalism first appeared during the English Civil War (1642-1649) when soldiers of the New Model Army of Parliament began to debate liberal ideas concerning extension of the suffrage, parliamentary rule, the responsibilities of government, and freedom of conscience. It became a hotly contested issue, with on one side John Milton, advocating freedom of thought and expression. On the other side there was philosopher Thomas Hobbes, favoring strong and unrestrained government. He argued that the sole test of government was its effectiveness rather than its basis in religion or tradition. Hobbes' pragmatic view of government, which stressed the equality of individuals, opened the way to free criticism of government and the right to revolution, ideas that Hobbes himself opposed.

John Locke

An influential early liberal was the English philosopher John Locke (1632-1704). In his political writings, he argued for popular sovereignty. The right of rebellion against oppression, and toleration of religious minorities. According to the thought of Locke and many of his followers, the state exists not to promote people's spiritual salvation, but to serve its citizens and to guarantee their life, liberty, and property under a constitution.

In France, Locke's philosophy was taken over by the leaders of the Enlightenment, notably by the author and philosopher Voltaire. He insisted that the state should be supreme over the Church and demanded universal religious toleration, abolition of censorship, lenient punishment of criminals, and strong state acting only under general rules of law against forces obstructive of social progress and individual liberty. For Voltaire as for the French philosopher and dramatist Denis Diderot, the state is a machine for the creation of happiness and a positive instrument designed to check a strong nobility and

a strong Church, the two forces they considered most uncompromisingly dedicated to the conservation of old institutions.

An American writer and philosopher supporting Locke's ideas was Thomas Paine. He argued that the authority of one generation should not be considered binding to its successors, that the state is perhaps necessary but still an evil, and that the belief in divine order was all the religion that needed to be demanded of free people.

In Great Britain the utilitarian school, chiefly the jurist Jeremy Bentham and his disciple, the economist John Stuart Mill, elaborated liberalism. The utilitarians reduced all human experiences to pleasures and pains, maintaining that the only function of the state was to increase pleasures and reduce pains, and that legislation was acceptable as an evil designed to reduce worse evils.

Liberalism in Transition

By the middle of the 19th century, liberal thought concerning constitutionalism, wider suffrage, toleration of dissent, absence of arbitrariness, and policies designed to promote happiness had acquired powerful advocates in Great Britain and other European countries and in the United States. Despite a prevalent tendency to find fault with the United States, European visitors considered that nation an exemplar of liberalism because of its popular culture, emphasis on equality, and wide suffrage.

Nevertheless, liberalism reached a stage of crisis at this time, in relation to democracy and economic power that was important to its later development. On the one hand, some democrats such as the French philosopher and author Jean-Jacques Rousseau were not liberals. Rousseau objected to the network of voluntary, private groups that many liberals considered essential to the movement. On the other hand, most early liberals were not democrats. Neither Locke nor Voltaire had believed in universal suffrage, and even most 19th-century liberals feared mass participation in politics, holding that the so-called lower classes were uninterested in the principal values of liberalism, that is,

that they were indifferent to freedom and hostile to the expression of diversity in society.

As suffrage steadily widened in the 19th century, with the successive reform acts in Great Britain in 1832, 1867, 1884, and 1885, many liberals became concerned chiefly with preserving the individual values that they identified with an aristocrat social order and political order. More radical groups such as the socialists soon took their place as social critics and reformers.

Liberalism and Economics

The crisis concerning economic power was more profound. One branch of liberal philosophy was its economics as developed by the so-called classical economics, notably the Britons Adam Smith and David Ricardo. Economic liberals opposed mercantilist restrictions on economic activity and favored unhampered private enterprise. Such thinkers as the British statesman John Bright argued against such legislation, as maximum-hour laws on the grounds that it infringed on liberty and that society, particularly its economy, would flourish best when it was regulated least.

As industrial capitalism developed in the 19th century, economic liberalism continued to be characterized by a negative attitude towards state authority. The working classes began to suspect that the philosophy protected the interests of powerful economic groups, particularly manufacturers, and that it encouraged a policy of indifference and even of brutality towards the working classes. These classes, which had begun to acquire political status and organized strength, turned to the political liberalism that was more concerned with their needs, than that of the socialist and labor parties.

The outcome of this crisis in economic and social thinking was the development of positive liberalism. As noted, certain modern liberals, like the Anglo-Austrian economist Friedrich August von Hayek, considered the positive attitude an essential betrayal of liberal ideals. Others, such as the British philosophers Thomas Hill Green and Bernard

Bosanquet, known as the Oxford Idealists, devised a so-called organic liberalism designed to hinder hindrances to the good life. Green and Bosanquet advocated positive state action to promote self-fulfillment, that is, to prevent economic monopoly, abolish poverty, and secure people against the disabilities of sickness, unemployment, and old age. They came to identify liberalism with the extension of democracy. Despite the metamorphosis in the philosophy of liberalism since the mid-19th century, almost all-modern liberals agree that their common objective is enlargement of the individual's opportunity to realize full potentials.

SOCIALISM

Socialism is a political ideology that holds that all (or almost all) the means of production, other than labor, should be owned by the community. This allows the return on capital to be shared more equally than under capitalism.

A Reaction to Exploitation

The term began to be used in the first half of the 19th century by radical intellectuals who considered themselves to be the true heirs of the Enlightenment, a group of thinkers sharing an unshakable faith in the power of reason. Among its early theorists were a French aristocrat, Claude de Saint-Simon, and a British capitalist, Robert Owen. Like their followers and successors, they objected to capitalism on ethical and practical grounds. Capitalism, they claimed, was unjust: it exploited workers, degraded them, transformed them into beasts or machines, and enabled the rich to get richer while the workers faced misery. They also maintained that capitalism was an inefficient and irrational mechanism for the development of society's productive forces. It underwent cyclical crisis caused by overproduction or underconsumption, did not provide work for all, allowing human resources

to be unused or under-utilized, and produced luxuries instead of necessities.

Socialism was a reaction against liberalism's alleged emphasis on individual achievements and private rights at the expense of collective welfare. Nevertheless, socialism was also a direct descendant of liberalism. In common with liberals, socialists were committed to the idea of progress and the abolition of aristocratic privileges; unlike them they denounced liberalism as a façade behind which capitalist greed could flourish unimpeded.

With Karl Marx and Friedrich Engels, socialism acquired a theory of exploitation and a theory of history. According to Marx capitalism was the result of a historical process characterized by unceasing conflict between classes. By creating a large class of property-less workers, capitalism sowed the seeds of its own demise. It would eventually be succeeded by a communist society. By the end of the 19th century Marxist socialism had become the ideology of all working class parties in many countries, except the United States.

Internationalization

The transformation of socialism from a doctrine held by a relatively small number of intellectuals and activists into the ideology of mass working-class parties was triggered by the fast industrialization of Europe. This process caused the forming of a large proletariat. Socialists were members of centralized and nationally based parties, loosely organized under the banner of the Second Socialist International, upholding a form of Marxism popularized by Engels, August Bebel, and Karl Kautsky.

Following Marx, socialists held that capitalist relations would eliminate small producers until only two antagonistic classes, capitalists and workers, would face each other. A major economic crisis would eventually open the way to socialism and the common ownership of the means of production. Meanwhile, socialist parties, in alliance with trade unions, would fight for a minimum program. This was enshrined

in the manifesto of the Second Socialist International and in the program of the most important and successful socialist party of the time, the German Social Democratic Party, founded in 1875.

The program, approved at Erfurt, Germany, in 1890, and drafted by Karl Kautsky and Eduard Bernstein, provided a summary of Marxist theories of historical change and exploitation, indicated the final goal, namely communism, and established a list of minimum demands which could be implemented within capitalism. These included major political reforms, such as universal suffrage and equal rights for women, a social protection system of national insurance, pensions, and a universal medical service, the regulation of the labor market aimed at introducing the eight-hour working day, and the full legalization and recognition of trade unions.

Socialists assumed that all their demands could be achieved peacefully in democratic countries, that violence might be necessary where despotism prevailed (as in Russia), and ruled out participation in bourgeois governments. The majority assumed that their task was to build up the movement until the eventual collapse of capitalism would enable socialism to be established. Some, such as Rosa Luxembourg, impatient with this wait-and-see attitude, advocated the use of the mass general strike, as a revolutionary weapon to be deployed when required.

World War I and the Russian Revolution

World War I and the Russian revolution separated the supporters of Vladimir Ilich Lenin from the reformist social democrats, most of whom had backed their national governments during the war. The former acquired the name of Communists. The latter remained throughout the inter-war period the dominant current in European labor movement and in the electorate under various names. They became the main alternative to conservative, liberal and Christian democratic parties. In many countries, however, due to a lack of majorities it was custom to form coalitions between various parties. In this way

policies often became a mixture depending on the parties involved in the coalition.

For Russia the revolution was a complete change from the feudal times of the tsars. Russia was completely reformed and communism certainly achieved certain successes that cannot be denied. The lack of direction in appropriating resources and means of production led to an enormous planning *bureaucracy* that in the end killed itself. The system was simply not able to replace a market mechanism. There were famous examples from collective farms who received their seeds months after the planting season, harvests that remained on farms because it was forgotten to arrange transport to distribution centers, factories that produced nails instead of needles because someone had forgotten to make any specifications, and so on.

In the Aftermath of World War II

As we discussed earlier after World War II Eastern Europe, liberated from the German armies, joined Russia as followers of communism. After decades of disappointments it was clear that the system did not work and to the end of the century all countries, including Russia, returned to capitalist free market economic systems.

Western Europe, after World War II, under threat to be swallowed up by communism, adjusted its capitalistic system to social-capitalism, a system based on solidarity and offering the same prime advantages as communism: employment security, overall medical coverage, sufficient disposable income for everybody and the right to decent housing. It became a system, as the British reformer William Beveridge once said (1879-1963): from the cradle to the grave. A system based on solidarity from the haves with the have-nots.

Socialism and the 21st Century

It is very likely that the 21st century will be a continuation of the last decades of the 20th century. Differences between political parties in

Western Europe, the birthplace of socialism, have become very small. Actually there is not much discussion anymore about main lines, it are only the political signatures that differ. The European Welfare State, within the framework of the European Economic Community (EEC) is a fact. Europe is proud of its creation; there is no doubt about that. Of course more has to be done, first of all the financing has to be guaranteed for the middle and the long term. Low birth rates in combination with high life expectancies might cause financial problems in the future if not addressed now. Another problem is enlargement of the community. Many, if not all, of the candidates that like to join have lower economic standards than the EEC presently enjoys. That also will create financial problems. But the EEC has proven to be a formidable block of power and there is no doubt that these problems can all be solved in due time.

The idea of solidarity as basis for capitalism is in the eyes of the Europeans a better basis than the idea of greed to which pure capitalism inevitably leads. Solidarity provides the framework for a society in which capitalism can work, in a way it is society's safety net. Those who miss the boat, for whatever reason, are caught in this net and taken care of.

Europe's political mainstreams, regardless whether they are Christian-Democrat, Liberal or Socialist, are all based on ideologies, but in the context of their own specific denomination. Christian Democrats are usually capitalists within a religious-socialist context. Liberals favor a hands-off government policy but within a minimum socialist framework. Europe's socialists have since long become capitalist-socialists, they try to combine the best of both systems. The same line of solidarity is drawn in European international relations and even in bilateral and multilateral aid to third world countries. This principle, for instance, is the basis for Europe to try to balance its attention in the Middle East conflict between Israel and the Palestinians. For these reasons the European image in the Middle East is considerably better than the American image.

COMMUNISM

Communism is unbreakably connected with Karl Marx, German political philosopher and revolutionary, co-founder with Friedrich Engels of scientific socialism (modern communism), and, as such, one of the most influential thinkers in modern history.

Marx was born in Trier on May 5, 1818 and was of Jewish descent. He studied at the universities of Bonn, Berlin, and Jena. In 1842, shortly after contributing his first article to the Cologne newspaper *Rheinische Zeitung*, Marx became editor of the paper. Although his political views were radical he was not yet a communist. His writings in the *Rheinische Zeitung* criticizing contemporary political and social conditions embroiled him in controversy with authorities: in 1843 Marx was compelled to resign his editorial post, and soon afterwards the *Rheinische Zeitung* was forced to discontinue publication. Marx then went to Paris. There, as a result of his further studies in philosophy, history, and political science, he adopted communist beliefs. In 1844, when Engels visited him in Paris, the two men found that they had independently arrived at identical views on the nature of revolutionary problems. They undertook to collaborate in a systematic elucidation of the theoretical principles of communism and in the organization of an international working-class movement dedicated to those principles. Their collaboration was to continue throughout Marx's life.

The Communist Manifesto

In 1845 Marx was ordered to leave Paris because of his revolutionary activities. He settled in Brussels and began the work of organizing and directing a network of revolutionary groups, called Communist Correspondence Committees (CCC), in a number of European cities. In connection with the consolidation of these committees in 1847 to form the Communist League, Marx and Engels were commissioned to formulate a statement of principles.

The program they submitted, known throughout the world as the Communist Manifesto, was the first systematic statement of a modern socialist doctrine and was written by Marx, partly on the basis of a draft prepared by Engels. The central propositions of the Manifesto, contributed by Marx, embody the theory, later explicitly formulated in his *Critique of Political Economy* (1859), called the materialist conception of history, or historical materialism. These propositions are that in every historic epoch the prevailing economic system by which the necessities of life are produced determines the form of societal organization and the political and intellectual history of that epoch; and that the history of society is a history of struggles between the exploiting and the exploited, that is, between the ruling and the oppressed social classes. From these premises, Marx drew the conclusion in the Manifesto that the capitalist class would be overthrown and that it would be eliminated by a worldwide working-class revolution and replaced by a classless society. The Manifesto influenced all subsequent communist literature and revolutionary thought generally; it has been translated into many languages and published in hundreds of millions of copies.

Political Exile

After the Manifesto appeared, revolutions occurred in France and Germany, and the Belgian government, fearful that the revolutionary tide would engulf Belgium, banished Marx. He thereupon went first to Paris and then to the Rhineland. In Cologne he established and edited a communist periodical, the *Neue Rheinische Zeitung*, and engaged in organizing activities. In 1849 Marx was arrested and tried in Cologne on a charge of incitement to armed insurrection; he was acquitted but was expelled from Germany, and the *Neue Rheinische Zeitung* was suppressed. Later in the same year he was again banished from France and spent the remainder of his life in London.

In London Marx devoted himself to study and writing and to efforts to build an international communist movement. His main work would

be *Das Kapital*, a voluminous work that was published in three volumes. Only volume I appeared during his lifetime, in 1867. The two other volumes, edited by Engels, were published in 1885 and in 1894. The work is a systematic and historical analysis of the economy of the capitalist system of society, in which he developed the theory of the exploitation of the working class by capitalists through the appropriation by the latter of the surplus value produced by the former.

Marx died on March 14, 1883. Notwithstanding all his revolutionary activities Marx theories did not have much influence during his lifetime. After his death it increased with the growth of the labor movement. His ideas and theories came to be known as Marxism, or scientific socialism, which constitutes one of the principal currents of contemporary political thought. His analysis of capitalist economy and his theories of historical materialism, the class struggle, and the surplus value have become the basis of modern socialist doctrine. Of decisive importance with respect to revolutionary action are his theories on the nature of the capitalist state, the road to power, and the dictatorship of the proletariat. Lenin revived these doctrines, revised by most socialists after his death, in the 20th century and, as developed and applied by him, constituted the core of the theory and practice of Bolshevism and the Third International.

Although there are still a few countries that try to maintain communism, history has shown that it is not a viable economic system. On the other hand, however, it was a system that served the former Soviet Union for more than 70 years and made it possible for them to send successfully spacecrafts to our universe and even allowed them to build a permanent space station. Communism, or at least the fear of it, was the driving force behind Europe's present welfare state, an achievement the Europeans are rightly proud of.

THE EUROPEAN WELFARE STATE

As we mentioned before, under threat of communism, especially after World War II, the West European countries adopted the attractive points of communism using capitalist ways to achieve this:

- **Life-time-employment** in the communist system was translated in Western Europe into a system of insurance against involuntary unemployment. This insurance has no time limit. At the age of 65 everybody receives a government paid pension equal to the minimum wage. Private retirement plans come on top of this government basic pension.
- **Free medical treatment** under communism. Western Europe translated this issue in a government-controlled insurance system for medical costs for everybody.
- **Free education** under communism. Europe translated this by developing a system of study financing based on performance for all students.
- **Affordable housing** under communism. Europe solved this issue by introducing subsidized rents.

By implementing these “rules of the game,” in addition to strict but fair rules to prevent employers using employees as the only way for quickly adjusting costs, the production factor labor was freed from those things that prevented its optimal functioning.

The result of the welfare state was two-fold. In the first place it eliminated poverty, nobody in Europe lives under a bridge or depends on charity. But in the process most millionaires were eliminated also. It is important to keep in mind that in any of the European countries allowances are based on the social minimal necessary amount for a decent living. This brings us to the second advantage of the system: maintaining buying power. As the famous British economist Keynes

has shown it is a population's buying power that maintains a country's economy.

WHY NOT IN THE USA?

The reasons that socialism never really did get a foothold in the USA are easy to understand. In the first place the Industrial Revolution started in England in the first half of the 18th century, at a time the United States did not yet exist as an independent country. There was no industry of any importance yet; the War of Independence still had to start. Actually only during the second half of the War of Independence America's industry started to develop because of the needs for guns, ships, ammunition, uniform, shoes, etc. That was one hundred and fifty years later than the British start. Most of the problems that arose in Britain were either not around in the US or could be avoided.

For instance, the Industrial Revolution in England involved a massive transfer of workers from agriculture to industry. Often the new industrial workers were not specifically trained for the jobs they were supposed to do. Part of the problems in industry came from lack of training, unqualified workers, child labor and working in factories, which were located in Old City districts. In the U.S. the situation was very different. The U.S. population consisted of immigrants; they arrived from outside the country and could choose where they wanted to be active. For farmers there was ample land available, for craftsmen there were ample jobs. Contrary to England there was no massive relocation of labor from agriculture to industry.

Another big difference formed the cities. Cities in US were all newly constructed and built in much larger spaces than English industrial cities such as Manchester, Liverpool and Coventry, all cities which were hundreds of years old. The narrow, cramp and squalid conditions of the old British cities were never around in the U.S. In other words the overall situation in industry was much better than in England, ergo less complaints, less protests and no need for revolutionary ideas.

In other words, contrary to Europe, there was no need in the U.S. to pay any special attention to the production factor labor. In other words in the U.S. only one of the three ideologies did get a permanent foothold: capitalism. This brings to the question whether or not the Enron collapse was the result of the American interpretation of the capitalist economic system or just a coincidence.

11

ENRON AND MODERN ECONOMICS

Modern economics is based on the optimization of the four main factors of production: capital, entrepreneurship (management), land and labor. Each of these production facts has its own contribution to the production process:

- **Capital** takes care of the financing of the process. The reward for its participation is interest. It is obvious that capital will always look for that particular activity that generates the highest interest. The bottom line for capital is the bank's interest rate. If returns on investment fall lower than bank interest capital will return to the banks. The flood of money returning to the banks will cause bank interest to drop and that might make other activities again profitable. It speaks for itself that certain "rules of the game" are necessary to make the "money-system" work. These rules apply not only for the banks, but also for the investor. It is clear that Adam Smith's invisible hand is not enough for investors to work with. There is a clear government role for creating not only a level playing field, but also rules of the game and an independent arbiter.
- **The entrepreneur** is the organizer of the economic activity. Like the director of an orchestra he takes care that everybody plays his own tune within the framework of the composer. Without a director the orchestra will fall apart. It is obvious that not everybody has the qualities necessary to be a director, it needs study, character and tal-

ent. In other words “directors” are scarce objects. As such they need an appropriate reward: salary plus bonus.

- **Land** is a production factor that varies in importance according to the economic activity at hand. In agriculture, for instance, land is the most important production factor, while for an activity involving the internet land is only a minor factor. Land is a production factor with often sentimental values that interfere with economics. A clear example, for instance, is agricultural policy in Japan. In urban Tokyo there are still rice fields in production thanks to enormous subsidies.
- **Labor** is a production factor that is just as necessary as the previous three. Someone will have to do the actual work. In the different economic systems treatment of the production factor labor is quite different. The European capitalist system works, for instance, within a socialist framework. This framework is an inheritance of the Industrial Revolution. Over the years it evolved into a system where management works hand in hand with labor, acknowledging the importance of the production factor. Rules of engagement, rules of the game and the arbiter are completely in place. In Japan’s keiretsu economy it is quite different. A keiretsu is a conglomerate of companies with intimate and intricate relationships. Banks are an important part of any keiretsu. Cross-shareholdership and cross-directorship are quite common in the keiretsu community, in other words the keiretsu is a close-knit community of companies that support each other. If one is in trouble the others have to help. It is clear that under these circumstances modern economics do not work. The four production factors work in a keiretsu together as a gray mass without much distinction, everything is anonymous.

The Production Function

According to modern economics only an optimal combination of the four production factors can produce maximum results. Such a combi-

nation does not necessarily mean a fixed amount for each factor because production factors often are interchangeable. For instance, investments in machinery or equipment can replace labor. High rise buildings create a more optimal land use than low rise. The different combinations of production factors form together a mathematical curve, which is called in economic terms a production function. Such an optimal position is only reached as each and every production factor is rewarded properly according to its contribution to the production process.

What is an appropriate reward for a production factor? For capital it is rather easy, any return on investment higher than what a bank pays in interest is appropriate. For land it is any amount equal to or higher than the next best alternative. For instance, in rural areas land used for agricultural purposes might have a higher return than when it is used for industry. Closer to urban areas this might slowly change until at a certain distance from a city the revenue in both alternatives might be the same. Coming closer, the use of land for industrial purposes might generate higher revenue than using it for agriculture.

Rewarding the production factors labor and entrepreneurship is the most difficult because both are human and that means they can talk back, something we call negotiating in economic terms. It is especially in regard to these two production factors that the American system totally differs from the European and Japanese systems. In the U.S. the economic philosophy of Adam Smith is strictly followed, assuming that the invisible hand takes care of everything. Modern American economists such as Milton Friedman and Alan Greenspan abhor from anything that has to do with government intervention whatsoever. This situation favors management, it runs the show and is not hindered by anything else than a vague framework. Management writes its own paychecks and arranges, via cross-interests between the various boards, its own bonuses. There are no limits and no systems; you play the game as far as it goes. The Enron case did show how far it could go. In the Enron case even the boundaries between legal and criminal were

crossed, greed, as far as that concerns, is blindfolded, as it seems. It is like playing baseball without rules and without referee, from the playing field we know that won't work.

In Europe and in Japan this is quite different. In Europe deals between the boards are practically impossible because the members are from a totally different background and status. Remuneration levels in Europe and Japan are substantially lower than in the U.S. and greed, as it exists in the U.S., plays no role of importance. In Japan it is the keiretsu, the conglomerate of companies, that keeps management salaries and bonuses in check. That leaves us with probably the most difficult production factor: labor.

Labor

The production factor labor has a number of characteristics, which make it very specific and which often need inputs from others in order to let it work properly:

- Labor can sell its services in principle only between the ages of 16 and 65; the older the laborer the more difficult it is to find suitable work.
- Labor often has to follow specialized studies in order to keep its job; if the specific work disappears (bankruptcy, merger) it is often hard or too late for the laborer to change.
- Labor in the U.S. is seldom or never participant in discussions regarding course and development of the company.
- Labor is often breadwinner and has as such commitments outside the company.
- Labor needs to save during its working life for its retirement.

In many of the above-mentioned issues the laborer needs the support and/or cooperation of either the entrepreneur or the government.

For labor these things are matters of survival that means they have to be arranged in such a way that things cannot go wrong. The only way to achieve that is by government guarantees. For instance, to let a company administer the pension fund for its own workers is a dangerous thing, if the company goes down it may pull the pension fund with it. We have seen the problems with 401(k) in the Enron case, and even more recently with Global Crossing. That is unfair for the worker who has no influence on management. The disappearance of a severance-pay-system, as was the case with Enron, is something that should never be allowed to happen. That companies such as Enron, Global Crossing and others collapse almost from one day to the other are things beyond the power of the worker, therefore he or she has to be protected against such things. In the U.S. few of these things are arranged properly, that makes the production factor labor vulnerable and as such it can't perform in an optimal way. It is good to remember that this is not an accounting but an economic problem.

The result of this situation of lack of overall security is that especially elderly workers who loose their job end up as society-drop-outs. They have to sell off properties which only gives temporary relief. The final stop is charity after a life of dedication to various entrepreneurs. There are already millions of Americans who suffered this fate. These drop-outs are, from an economic point of view, a disaster because their lack of buying power limits economic demand and that affects economic growth. It is precisely for this reason that European countries provide allowances for these drop-outs to prevent decrease of demand.

In Japan the situation is totally different but the final outcome is the same as in the U.S. In the keiretsu economy partners in one and the same keiretsu are supposed to help each other out in case of problems. Until a decade ago this was no problem. It made it possible to guarantee the production factor labor life-time-work. This life-time-work-guarantee made any involvement of the Japanese government in social security unnecessary. A decade ago cracks in the Japanese economy started to appear. Especially the banking sector was hard hit because of

numerous loans with insufficient collateral. The financial problems had their influence on the keiretsus and in the end restructuring could not be prevented. The promise of life-time-employment could not be kept, life savings in stock lost much of their value and millions of Japanese are today ending up in charity.

ENRON: AN ISOLATED CASE OR THE TOP OF AN ICEBERG?

Almost all publications concerning the Enron collapse deal with the accountancy issue. But in reality Enron was brought down because of a combination of three issues: (1) creative accounting; (2) a run on the "house" caused by rumors and continuous dropping share prices; (3) criminal acts.

Creative Accounting

Creative accounting has become quite popular over the last decade. It is a form of accountancy that is not based on conservative following the basic rules, but a system that tries to maximize the loopholes in existing financial and tax laws, with as specific aim bloating the balance sheet. The more debts you can keep off the balance sheet the better your result looks. Similar tactics are used to jack-up asset prices in order to improve credit ratings. As such the system goes beyond what used to be accounting: an administrative process that tries to reflect the reality of the economic figures involved as correct as possible.

Over the last decade numerous books promoting creative accounting have been published and on many universities and colleges it is part of the accountancy curriculum. In other words, Enron's way of accounting is nothing new, it is quite common. It is therefore quite likely that many companies in the U.S. are in the same position as Enron.

Run on the House

A run on the house is usually based on facts and fiction fueled by rumors. It is the old saying: "where smoke is must be fire." Although

few people seem to have noticed the problems within Enron it is a matter of fact that the company's shares already started to drop at the end of 2000. Once that is in motion and accompanied by persistent rumors it is going to lead its own life. Once the public realizes that there is truth in the rumors the run becomes unstoppable.

Criminal Acts

Although a number of cases are already filed nobody is yet convicted. However, the situation around people such as Andrew Fastow is such that they will have a hard time to prove that they are innocent. Whether or not management can escape charges remains to be seen, there are certainly indications of gross negligence.

Financial Meltdown?

In other words creative accounting is something quite common, it simply means that there might be many other cases with questionable forms of accounting. Whether or not that leads to similar problems as with Enron is difficult to say. In fact this depends on the honesty of the employees of such companies. Not everybody employs a Andrew Fastow. In general people are honest, only a few misuse a situation, in other words the likelihood of serious cases such as Enron might not be very big. But even without criminal acts companies are vulnerable. As we saw earlier, it is easy to jack-up asset values, and that can easily undermine companies. How easy share prices can be bloated is something that Japan has taught us. If such a situation would happen in the U.S., in combination with the still unsolved financial situation in Japan, the world might be in for a real meltdown.

EPILOGUE

SLIDING TOWARDS A FINANCIAL MELTDOWN?

Some ten, twelve years ago a number of "doom" books were published, predicting the collapse of Japan, America or both. Famous authors, specialists in their field, wrote these books. The arguments used were quite convincing, but today we know they were wrong. Or at least so far nothing happened. Leafing through these books teaches us that many of the arguments still stand and in many cases it seems that only the timeline was incorrect. On the other hand there were unforeseen incidents, such as for instance the Gulf War, that had huge influence in general but did not affect the arguments given. And of course the War on Terrorism. In hindsight it appears that the speed of the process of collapsing was overestimated. Assuming Enron is really the top of the iceberg of corporate America it is tempting to look at these arguments again.

DANIEL BURSTEIN: YEN! JAPAN'S NEW FINANCIAL EMPIRE AND ITS THREAT TO AMERICA

Educated at Reed College and the University of California at Berkeley, Daniel Burstein is an award-winning writer and journalist who has covered the Pacific Rim for decades. His articles have appeared in *The New York Times*, the *Los Angeles Times*, *New York* magazine and many other publications. His book *YEN! Japan's New Financial Empire and its Threat to America* was published in 1988, a reprint in 1990 contains a special postscript: *Entering the Decade of Reckoning*.

YEN! Traces the alarming course of events by which Reaganomics sold America into staggering debt and allowed Japan to surge ahead as "banker to the world." YEN! Reveals the eye-opening facts that the world's ten largest banks are Japanese, that Washington now depends on Japanese investors to finance nearly one-third of the U.S. budget deficit, and that by the early 1990s, at least one million Americans will be working for Japanese-owned companies. Burstein predicted that if nothing was done fast, America would be heading into a future in which Japanese moneymen own, control, and bankroll an increasingly large piece of the American dream.

Among others, Burstein focuses on the value of the yen. The Reagan administration tried to solve the problem of the trade deficit with Japan (in 1984 approx. \$ 3 billion per month) by trying to weaken the dollar and strengthen the yen. President Reagan put strong political pressure on the Japanese and was quite successful. In 1984 the yen stood at 250 for a dollar, near the end of 1987 the rate was 125 for a dollar. The Japanese had feared that any drop below 180 would create serious economic repercussions in Japan, but nothing happened.

The Reagan administration was completely convinced that the stronger yen in combination with a weaker dollar would fundamentally improve the American competitiveness and as such eradicate the trade deficit with Japan. But nothing happened, the trade deficit even increased further. In October 1987 the deficit reached a record high of \$17.6 billion. Within that record the United States ran a deficit with Japan of almost \$6 billion. The Reagan policy was not only wrong, it had achieved exactly the opposite of its intention.

What had happened was that the Japanese industry had embarked on a massive effort of cost cutting, moving production overseas (often to the U.S.), resourcing components that could no longer be produced competitively at home, getting out of unprofitable sectors, and adding new technology. The success of the Japanese effort was astonishing and surprised the Americans completely.

But that was not all. While wealthy Americans were busy putting their supply-side tax cuts into largely nonproductive paper investments; Japanese business managed to keep up its long-standing policy of reinvesting heavily in manufacturing. As a result Japanese processing machinery was, on the average, two years newer than American. Japanese civilian R&D became the largest in the world, while the American was trailing far behind. Japanese net investment in 1986 was \$30 billion larger than the U.S. figure. In the 80s American business invested only \$ 2,600 per worker annually, while Japan's commitment to new equipment, training, and improvements in the production process was two and a half times as great. The massive transfer of manufacturing from Japan to the U.S. did disguise the real trade deficit enormously, because such products disappeared from the list of imported goods, but they were in reality Japanese after all.

Most of the ideas behind financial deregulation have merit. But as was the pattern in so many areas during the Reagan years, the government was unwilling to couple the principle of deregulation with mechanisms capable of properly minimizing the dangers and maximizing the benefits. The result was that American capitalism in the 1980s came to be characterized by what *Business Week* called "the casino economy."

Shocking abuses of the new system captured headlines, notably the insider trading scandals and the Savings and Loan problems. But more important than the illegal acts of the few were the newly legalized and encouraged directions taken by the financial community as a whole. Financial products were thrown on the market with the risks poorly understood and the economic value questionable. Investment bankers, arbitrageurs, and leveraged buyout specialists gained a disproportionate share of power, spreading the cancer of "management for short-term financial return" at the expense of building sound long-term business. From junk bonds to home equity loans, from new securities backed by mortgages to those backed by credit card receivables, the center of

gravity in the American financial system swung from equity to debt, with the debt portion pyramiding toward chaos.

The Tokyo Stock Exchange

Another subject Burstein gives a lot of attention to was the Tokyo Stock Exchange (TSE). The first American portfolio manager to bet heavily on Japan was Paul Aron. At Dreyfus in 1969, he launched a \$100 million mutual fund as a vehicle for Americans to invest in the coming Tokyo Stock Exchange miracle he forecasted. Most professionals disagreed sharply with his optimism about Japan. At 1,800 the Nikkei index was already deemed "astronomical." But time proved Aron right: the Nikkei soared in the 1970s, and his investors enjoyed results that ranked alongside the most spectacular ever returned by a mutual fund.

Over the years the Nikkei rose to 7,000. At 13,000 it could not go any higher was the common opinion among experts. It did not stop there. Tokyo did not look like a bull market, it looked instead like a very serious case of "Tulipmania." Prices seemed to have about as much to do with real value as in the seventeenth-century Dutch tulip bulb craze when trading in a single rare bulb shot up as high as 5,500 guilders before crashing down to 300 guilders. The most popular rationalization was the notion that market's rise resulted from analysts uncovering "hidden assets" of Japanese corporations. Why was the share price of Nippon Steel skyrocketing when the company itself was reeling under the blows of deregulation and facing fierce competition from steel exporters in lower-wage countries? Because of "hidden assets"—namely, its massive real estate holdings. Carried on the books at prices paid decades earlier, the market value had risen by ten, fifty, or one hundred times. At 349 yen, each Nippon Steel share actually represented 992 yen of net asset value in the company. If Nippon Steel never hauled one ingot out of its blast furnaces and turned itself into a realty company instead, stockholders would make out like bandits.

But the real estate market in Japan suffered from an even greater Tulipmania than the stock market. What businesses could possibly generate enough cash flow to warrant paying \$10,000-\$20,000 for a single square foot of space in Tokyo? How could the sum total of Japan's land area, roughly the size of California, be more valuable than the entire North American continent? In 1988 the TSE reached almost 40,000, the highest level it would ever reach.

The Coming Decline of American Living Standards

According to Burstein the most arresting implication of Japan's growing wealth and America's growing debt would be the pressure this situation would put on American living standards—both absolute and relative. U.S. economic growth would turn to negative real numbers in the years ahead, with direct downward consequences for personal income and household purchasing power. He predicted:

- The world will go off the dollar standard. The combination of America's debtor status, a volatile dollar, and Japan's new role as leading creditor would almost certainly mean the demise of the U.S. dollar as the world's key currency. The yen would replace the dollar.
- U.S. domestic manufacturing would be squeezed. The growing Japanese-owned sector of American industry, driven to manufacture in the United States by the politics of the trade deficit and able to do so easily because of the yen's strength, will exert an extreme new competitive pressure on many businesses, causing the downfall of many American companies.
- American companies will lose profits from abroad. Some American manufacturers will gain greater export revenues over the next few years because of the weak dollar, but their ability to make new investments in international manufacturing operations will be hampered by strong currencies.

- American and Japanese workers will “trade places.” The erosion of corporate profitability will hinder American industrial expansion, especially into costly development of new products, processes, and technologies.
- The consumer society will consume less as prices rise. Price increases of Japanese and other foreign goods were held to a minimum during the fall of the dollar from 1985 to 1987. But by fighting tooth and nail to maintain market share during those years, the Japanese staved off a resurgence of U.S. industry and won a renewed capacity to set the pricing agenda.
- U. S.—Japan financial brinkmanship will be punishing. Threats and counter-threats could lead to concerted efforts to withdraw Japanese support from the U.S. bond market, the dollar and the stock market.
- Inflation will take a heavy toll. Even a small reduction in Japanese support for Treasury bonds will push interest rates up dramatically and rekindle inflation. Hyperinflation and the “Argentina syndrome” can’t be ruled out as the Japanese press U. S. borrowers to denominate more debt in yen.

As we know today, in the early months of the year 2002, mr. Burstein was completely wrong. It did not happen that way. Just after his book was published the TSE started a long continuous slide downwards, with the Nikkei index dipping under 10,000 early 2002. Japanese investors lost three quarters of their investments. The once so strong Japanese banks are today in a state of technical bankruptcy. The reason for this development was the overvalued Japanese real estate market. This market collapsed pulling down the stock market in its wake. The Japanese economy ended up in an almost continuous recession since the late 80s with little hope to recover unless a serious and very fundamental restructuring is carried out. For this, however, the necessary political will seems not yet in place. So far the only efforts seem to focus on “exporting away” the crisis.

Although the U.S. managed to eradicate the budget deficit the trade deficit is still growing. In 2001 it reached a level of \$375 billion. The place of Japan as U.S. creditor nation is slowly taken over by China. The trade deficit with China ballooned to \$ 83 billion over the year 2000, more than the trade deficit with Japan some ten years ago.

BRIAN READING: JAPAN, THE COMING COLLAPSE

Former *Economist* journalist and Japan expert, Brian Reading, explodes the myth of an economic superpower bent unstoppable on world domination. He reveals a nation of tax cheats ruled by venal politicians and paralytic government, its industry riddled with corruption, its finances with inequity, and its society with latent violence. Despite the country's glittering postwar success, he argues, Japan is a hara-kiri economy set to self-destruct. His book was published in 1992.

Brian Reading's book follows Japan's history from the very beginning. The internal struggles, the civil wars, the Tokugawa Shogunate, the opening up of Japan by Commodore Perry's gunboat diplomacy, up to World War II.

After Japan's surrender in 1945 the Americans found an empty country. The war had left the civilian economy twice destroyed. The blockade in imports meant that every available resource was channeled into armament production and the war effort. By 1945, the production of peacetime goods had fallen 70-95% below pre-war levels. At the same time, stocks of raw materials, finished products, fuel and food were nearly exhausted. Clothing and household items were worn out. Machinery, plant and equipment for peacetime production had been neglected for a decade, neither repaired nor replaced, only converted to the production of military supplies. The peacetime capital stock had been used up in the effort to sustain all-out-war.

The economic destruction was followed by physical destruction. From 1944, air attacks on Japan had increased in intensity. The destruction was on a gigantic scale: 119 major cities were reduced to

rubble. Only one, Kyoto, survived intact. In urban areas, 40% of all dwellings were flattened, 2 million homes were destroyed and 9 million people driven on to the streets.

It was no use to look to the victors for help. The American plans for post-war Japan were clear, simple and limited. They intended to dismantle the Japanese military machine and to destroy the industrial might in which it had rested. Economically they aimed to return Japan to the state of industrialization it had reached in 1926-30. Politically they would impose democracy. Their overriding and almost only objective was to destroy the power, privileges and wealth of the Japanese ruling classes, who were blamed collectively and indiscriminately for Japanese militarism. The U.S. had no intention of lifting a finger to help.

From the Meiji restoration through to the end of the Second World War, Japanese production was concentrated in the hands of a few large *zaibatsu*: family-owned and controlled industrial and financial conglomerates. There were four major *zaibatsu*—Mitsui, Mitsubishi, Sumitomo and Yasuda—who between them accounted for a quarter of all paid-up capital in Japanese industry, and a further six—Nissan, Asano, Furukawa, Okura, Nakajima and Nomura—which together accounted for a further tenth. These ten companies controlled 50% of Japanese banking and mining operations, 60% of its metalworking and shipping, and 70% of all machinery production. The families owning them were among the richest and most powerful of the world. The *zaibatsu* customarily included banks, major trading houses and a variety of large companies involved in steel, shipbuilding, heavy engineering, chemicals and other strategic industries. All were run by major holding companies owned by the immensely rich families.

The Americans intended to destroy the *zaibatsu* and strip their owners of all personal wealth, power and influence. Conglomerate-busting and anti-monopoly legislation were designed to change the corporate face of Japan. The owners and senior managers of the old *zaibatsu* were prohibited from any future activities in management and finance.

Measures to break up the corporate concentration of economic power were not entirely successful. It was too large and complex a task for the American administration to achieve on its own. The Japanese pretended to cooperate, the better able to mislead the Americans by hiding assets. Soon the Americans lost their enthusiasm for the task when, with cold war tension rising, policy towards Japan switched to reconstruction. The *zaibatsu*, in their old form, all ceased to exist; but somewhat similar *keiretsu*—also conglomerates of related companies and often with the same names as the former *zaibatsu*—replaced them. But each member of a *keiretsu* family is owned by its own shareholders, and not by a family-owned holding company. *Keiretsu* family members are tied together by cross shareholdings and by board membership. They center mostly on major banks.

Rescued by Another Foreign War

The economic reconstruction of Japan would have been exceptionally protracted, and the chances of democracy taking root exceedingly slim, had not fate come to the rescue. On 25 June 1950, North Korean troops crossed the 38th parallel and invaded South Korea. The Korean War had begun, altering Japanese prospects out of all recognition. It saved the Americans from the consequences of their folly. It allowed the Japanese government to demonstrate its commitments to the Western alliance, accelerating the time-scale for the San Francisco peace treaty negotiations and the end of the occupation.

Japanese savings rose as soon as Japanese incomes started to rise. It was the Korean War in 1950 which “jump-started” the economy. Although Japan enjoyed exceptionally rapid growth during the 1950s and 1960s, it was far from stable growth. Periods of hectic growth were punctuated by sudden slowdowns. But even in the stop phase of this stop-go cycle, Japan’s economy expanded faster than those of the U.S. and U.K. in their boom years.

Japan operates a competitive market economy, but it is corporate rather than capitalist. This is to say that the attitude towards sharehold-

ers, ownership and profits is different from that in Western capitalist economies. The company union system fostered cooperation between management and employees in their joint interest in the success of the company. In the keiretsu and large companies generally, union resistance against redundancies during successive financial crises led to the system of lifetime employment.

The Bursting Bubble

Reading, just as Burstein, pays a lot of attention in his book to the strengthening of the yen and the weakening of the dollar, as well as the increasing U.S. deficits, as well as the ever increasing Japanese share prices during the Reagan administration. Burstein's book was published in 1988, he missed the burst of Japan's speculative bubble in 1990.

The speculative bubble burst early in 1990. The Tokyo stockmarket ended the year with share prices 40% lower. At the worst point during the year, 1 October 1990, the Nikkei was down to 20,221, almost half its December 1989 peak level. Property prices weakened, but only modestly. Even after interest rates started rising in May 1989, and particularly through 1990 when the stock market crashed, the easy investment spending went on. It took a long time before the message got through that money had become expensive and scarce. So investment continued to rise long after the conditions which supported it had changed. Domestic demand growth did not slow down significantly until 1991. When it did, the old problem of excess savings reappeared. The Japanese balance of payments surplus started rapidly to expand once more. Despite Gulf War support payments of \$9 billion, Japan's current account surplus rose to \$73 billion in 1991, 2% of GNP. By the end of the year it was running at an annual rate of \$120 billion.

"The Japanese credit system," as Brian Reading wrote in 1992, "has become viciously unstable. In the good old days, when the Tokyo stock

market was booming, rising share prices boosted bank reserves, allowing them rapidly to expand credit. Speculations with borrowed money boosted share prices, producing its own rich rewards in higher profits while plentiful credit also helped to stimulate the economy, further increasing company profits. The higher the stock market rose, the more it could be fed with further credit: the more the banks lent, the more they were able to lend. It was a fool's paradise. The 1990 stock market crash put this process into reverse: the more the market fell, the less the banks could lend. The resulting contraction of credit drove the economy into recession. The credit explosion of the late 1980s has been followed by a credit implosion in the early 1990s.

Confronted with all these problems, it is not difficult to envisage a financial meltdown. But the authorities are not standing idle by: the Bank of Japan has moved aggressively to lower interest rates and while the Ministry of Finance has proposed a cautious general accounts budget for fiscal 1992, public works spending through the off-budget Fiscal Investments & Loan Program was being substantially increased. More vigorous action would be taken if the economy continued to slide; the issue was whether it would work.

The success or failure of aggressive monetary easing depends upon whether the share prices recover. Failure to engineer a sustained recovery in share prices, for whatever reason, will lead directly to a financial collapse, which will push the economy into a protracted recession. But even if the stock market recovers and the banking system survives its present crisis, the problem will remain. The only way to save the financial system is to reflate the bubble by pushing stock market and property prices higher; but the only way to solve Japan's structural problem is to reduce them. Higher land and share prices will work only while they continue to rise, thus a system in which the shareholder and landowner expects to be rewarded by an endless stream of capital gain is fatally flawed. The next bubble, like the last, is bound to burst. The collapse of the Japanese financial system is inevitable, only the timing is uncertain—Japan's economy is doomed."

Brian Reading's predictions, just as those from Daniel Burstein, did not materialize. But there is a difference, Burstein was wrong as we know now in his assessment. Reading, however, scores much higher. His assessment that the Japanese economy is doomed is correct, only his timing was wrong. So far the Japanese economy did not collapse but the crisis deepened even further. The Japanese stock market did not recover; on the contrary, share prices dropped another 50% compared to 1992, today the TSE hovers around 10,000. It simply means that the bubble grew bigger, not smaller, this means that the collapse will even be bigger once it happens. The signs are ominous; Japan's credit ratings have dropped, making refinancing more difficult. But also the surplus on the balance of trade has risen. There are two more problems that aggravate Japan's problem: the fast graying of Japan's population and the lack of social security, sending millions of Japanese, mainly elderly people, into abject poverty. The only way out for Japan is a fundamental restructuring of its economy: a return to sound basic economics. If nothing is done Japan's economy will slide further down, the number of have-nots will rise by the millions, income inequality will increase sharply and a collapse of Japan's capitalism in the style as predicted by Karl Marx might be inevitable.

DAVID P. CALLEO: THE BANKRUPTING OF AMERICA, HOW THE FEDERAL BUDGET IS IMPOVERISHING THE NATION.

David P. Calleo is Dean Acheson Professor and Director of European Studies at the Nitze School of Advanced International Studies, The John Hopkins University. His book was published in 1992.

The Bankrupting of America is a broad book with an urgent message based upon research and reflection by one of the America's distinguished political economists. As David Calleo shows, the federal budget deficit is both a symptom and a cause of America's ungovernability and decline. Slowly, it has been forcing a crisis in the U.S. domestic and foreign policy, and in the federal system itself. This progressive

breakdown is not simply the fault of mistakes made in the last two or three administrations, but is deeply rooted in fiscal and monetary practices that began more than two decades ago. Step by step since the 1960s, one president after the other, cheered on by the fashionable economists of the hour, has taken the geopolitical and domestic decisions that have brought the country to its current economic situation.

The book deals directly with the fiscal breakdown and the context necessary to understand it. It raises—and answers—four basic questions:

1. What is a budget deficit and what does it mean?
2. How did America get into the present budget crisis?
3. What is it doing to the U.S.?
4. What needs to change to get the country out of it?

As Calleo sees it, the weakness of America's public sector is a heavy burden for the nation. The federal political machinery is in extremely bad working order—even by its own historical standards. The federal government has grown incapable of conceiving, enacting or sustaining coherent and efficacious public policies. In a world of heightened global competition, such a government is a grave handicap. Meanwhile, political and legal theory, instead of offsetting the natural discipline and incoherence to celebrate and encourage its excesses.

America's geopolitical role also urgently needs reconsideration. America's excessive military spending and excessive preoccupation with global leadership distracts the country's political system from putting its own house in order, and are more and more dysfunctional with today's more pluralistic international system. Increasingly, America's international power is called upon to compensate for its national economic inadequacy. As its pluralism unravels at home, the United States grows excessively hegemonic abroad—a pattern that points toward both global conflict and national decay.

In short, the state of the budget faithfully reflects the state of the nation. Noble traditions and abundant human and physical resources are frustrated and perverted by an inadequate public sector. Renewal requires a more serious understanding of America's present difficulties, and a fresh vision of the nation's place in the world.

As we saw earlier, it is very difficult to predict what will happen in the future. Professor Calleo's book was hardly published or the federal budget deficit disappeared as snow in the sun. But reality is not as positive as it looks. The main reason why the budget disappeared is the economic boom that started in the early 90s and that lasted until 2001. During a boom tax collections are higher than in a recession, that is simply a fact. Structurally nothing much changed.

The signs of a renewed budget deficit are already on the horizon again. The combination of sharply increasing military spending, an economic recession that is ongoing and President Bush's tax cuts are sure guarantees that the budget surplus soon will be wiped out. Basically that does not have to be a problem, during a recession budget deficits are standard methods to "prime the pump." The problem is that this only works if the economic basics are sound. The question is whether or not the defects signaled by Professor Calleo have been repaired. If not the problems pointed out by him will simply reappear.

Taking into account the financial problems in Japan and the huge American trade deficit (\$375 billion in 2001) the situation might even be far worse than ever in American history. In this regard it is important what the Enron case really means. If American stocks are bloated in the same way as the Japanese stocks than a financial meltdown might be around the corner. As we wrote earlier, there are signs to that effect. In Japan it were unrealistic real estate prices that caused the damage, in the U. S. it might be unrealistic asset values in the companies books that might have the same effect. Companies using their own stock as collateral, as Enron did do, might make things even far worse.

**LESTER THUROW: HEAD TO HEAD, THE COMING ECONOMIC BATTLE
AMONG JAPAN, EUROPE, AND AMERICA**

Lester Thurow is the Dean of MIT's Sloan School of Management and author of several books and studies over economics and international politics. This book was published in 1992.

The book deals with the question "Can the United States win a war *without* guns, bullets, or bombs?" For the first time in history, head-to-head competition—not military might—will produce the world's next leader, and already the U.S. is starting the fight at a severe disadvantage. Both the European Community and Japan have developed long-term strategies that in America are illegal. In the seven key industries destined to control the next few decades, the U.S. has a stronghold in only one. Even in the educational system needed to support emerging high-tech jobs, the U.S. ranks well behind its competitors.

According to Thurow, left to itself, unfettered capitalism has a tendency to drift into either financial instability or monopoly. Tulipmania, the South Sea Bubble, numerous nineteenth-century financial panics, and the stock-market collapse of 1929 were all forerunners of the current mess in America's deregulated financial markets. The current consolidations in the U.S. airline industry are not unlike the great monopolistic trusts of the last half of the nineteenth century.

If the U.S. government had not come to the rescue of finance capitalism, as it is practiced in the United States, it would now be collapsing. Most of America's savings and loan banks (S&L) were in government receivership. If the banking system had not been bailed out by government, panic would have set in as individuals lost their savings accounts, and a repeat of the Great Depression would probably now be under way.

Thurow pays a lot of attention to the way workers are treated in the U.S. in comparison to Japan and Europe. Differences in the way workers are viewed can be seen, he writes, in the takeover and buyout wave in the United States. Company divisions, including the employees, are

bought and sold or restructured in a manner reminiscent of kings buying and selling provinces in medieval Europe. As in medieval Europe, the employees are chattel serfs who are not consulted on whether they want to have different masters. Nor much corporate loyalty can be expected if one can expect to be treated as a slave and sold to the highest bidder. The buying and selling of provinces ended in Europe with the rise of nation-states that could command nationalistic loyalties. People were bonded to the state, and states where this bond was constructed were simply able to defeat armies and conquer territories where this bond had not been created. Lack of bonding may be no less damaging to the survival ability of business firms.

In America the goal is money. Start with salaries at the top. In keeping with the practice of maximizing consumption, one would expect American CEOs to be paid more than those running similar companies in the world of producer economics. And so they are. In 1990 American CEOs were making 119 times as much as the average worker. Japanese CEOs had a better record in the 1980s (productivity had grown three times as fast), yet they earned only 18 times as much as their average worker. "When Steve Ross, the CEO of Time Warner, pays himself seventy-eight million dollars and then lays off six hundred people because of declining advertising revenue, he is just practicing what Americans preach. Income-maximizing generals pay themselves the highest incomes they can get away with," Thurow argues.

Other areas of Thurow's concern are the increasing uncompetitiveness of the American industry and the growing trade deficit. The two issues are interconnected, imported goods are cheaper than locally produced. These leads to substitution of locally made goods by imported and that creates loss of jobs. Unless the U.S. becomes competitive again the deficit will only grow. The trade shortfall has to be borrowed from abroad and this creates increasing interest payments to other countries. Eventually, the rest of the world will be unwilling to lend the necessary sums. Nations will refuse to lend because the risks of not

being repaid by the Americans in currencies of equal value to those that were lent is too high, or because the sums that must be lent require them to save more than they are willing to save—they wish to consume their income rather than lend it to Americans.

In his final analysis Thurow concludes that the battle for supremacy is still open. Japan, however, has a competitive edge, and is very much future oriented. Japan invests enormously in future activities such as education. Another advantage for Japan is that it enjoys the current momentum. Europe is probably in the best strategic position. It has the largest market and the best average education and its economies are extremely well balanced. If the United States wants to play a role of importance the country, according to Thurow, will have to shift from being a high-consumption, low-investment society in the 1980s to being a high-investment, lower-consumption society in the 1990s. From being present-oriented, it will have to become future-oriented. To raise investment, consumption (public and private) must grow more slowly than output for some extended period of time, so that investment (public and private) can rise as a fraction of GNP.

It is very remarkable that Thurow, in his assessment, does not pay any attention to Japan's financial troubles. His book was published in 1992, that means after the crash of the Tokyo Stock Exchange. At that point in time the seriousness of the financial situation in Japan was already quite clear. This situation plunged the Japanese economy in a recession that actually still continues. Recently Japan's credit ratings were even reduced, for the proud Japanese a humiliating fact.

As far as the U.S. is concerned none of the problems cited by Thurow were addressed in the last decade. The U. S. competitiveness dropped further, its trade deficit slashed record after record and the U.S. is more present-oriented than ever before. In fact the situation deteriorated quite a lot if we take into account the credit situation. Not only the U.S. as a coun-

try lives on foreign credit, its inhabitants drove the use of credit cards to unknown records.

Thurrow was quite optimistic about Europe. Actually in Europe only good things happened. The European Economic Community not only expanded but managed to synchronize its policies and was able to introduce one common currency: the Euro.

ENRON: THE BEGINNING OF THE END?

Looking at the four books we discussed above and the Enron issue there is one conclusion we can draw without risking being wrong, and that is that predicting the economic future is extremely difficult. We might say, almost as difficult as predicting the weather. But there are some other things we can conclude also:

1. After decades of breath-taking economic development Japan stumbled seriously. Japan's derailment is caused by the keiretsu system in combination with a failing financial system. The keiretsu conglomerate is a system that is kept together by non-economic issues such as communal support and cross share holdership. The financial system collapsed because of speculation in combination with unrealistic land policies. It led to totally unrealistic stock prices. In other words Japan's problem is that it violates common economic principles. The only way to address this is a return to proper economic principles that, however, means the dismantling of the keiretsus and the return to proper land and monetary policies. These are very serious issues in post-war Japan. It is doubtful whether or not there is sufficient political support for such things, among others, it would need a massive bailout of the Japanese banking industry. From whatever point of view we look at these issues things will go wrong in Japan. The lack of social security in Japan is another factor of importance, it will push millions of Japanese in poverty and as such it might create the collapse predicted by Karl Marx.

2. Japan's ever-increasing trade surplus cannot go on forever. It illustrates an economic in-balance that also cannot continue indefinitely. Japan's trade surplus plus its own savings surplus leads to the hoarding of enormous amounts of capital. This drains money from the world-money circuit, and as such has a deflationary effect of substantial proportions. This situation might create serious monetary problems. The problem hangs very narrowly together with the U.S. trade deficit, which is in effect a so-called "mirror-effect."
3. The U.S. budget deficit might have disappeared but the question is for how long? President Bush's tax cuts, together with substantial increases in defense spending, might very easily wipe out the budget surplus. Together with the U.S. trade deficit a budget deficit would only worsen the financial problems of not only the U.S. and Japan, but would effect the whole world. The increasing trade deficit proves that the United States is still losing its competitiveness. Such a situation cannot continue forever. In fact the U.S. is selling out. A situation where one party only sells, and one party only buys ends automatically when the buying party runs out of money.
4. The unbridled and unhindered capitalistic economic vision of the U.S. has put all emphasis on the production factors capital and management. Very illustrative, in this regard, was the issue of the Wall Street analysts. Out of the 16 analysts covering Enron 11 qualified the stock as a "buy" as late as November 12, 2001, that was two weeks after the SEC started its Enron investigation! At that point in time the stock price was already down to less than \$10 a share from a high of \$90 less than a year earlier. During congressional hearings the analysts "explained" that they were fooled by Enron with incorrect information! Of course, that was nonsense. Qualifying Enron stock as a "sell" would have been equal for many analysts as asking to be fired. There was information enough, the problem is that the system is rotten. Another issue

that became very clear is the position of labor in the U.S. Labor is pushed in a far-away corner. There is no social protection and no social plan. More and more elderly workers end up in the ranks of the have-nots, the forgotten citizens. The Enron case illustrates this very clearly. The severance plan for the workers was simply stolen, the 401(k) plans were worthless, but management amassed millions of dollars at the same time. Today there are some 35 million Americans living in abject poverty with no chance ever to improve their position. Some 40 million Americans do not have any form of medical insurance. Income inequality in the U.S. has risen sharply over the last 20 years. In other words also the U.S. is threatened by a Marxian collapse.

5. Japan finally succumbed because of an overvalued stock exchange caused by wrong economic fundamentals. The Enron case has taught that similar tendencies might be at work in the United States. The policy to do whatever it takes in order to show profit in the books has led to the so-called systems of "creative accounting." These systems leave certain things out of the books or blow certain things up. Creative accounting in combination with inflated asset values creates severely bloated stock prices, a situation very similar to Japan at the end of the 80s. Stocks in the U.S., just as was the case in Japan, are widely used as collateral or as investment in saving-plans such as for instance 401(k)-plans, if these collapse a situation far worse than the Savings & Loan scandal of the 80s would erupt. Such a situation might lead to a meltdown of the U.S. financial system. The present stagnation at the DOW, for almost three years prices are stuck up at a level of around 10,000, might be an indication of what is brewing.

The bottom line of all of this is not so much "creative accounting," the real problem is "wrong economics". Following Adam Smith, with his invisible hand policies, without designing a proper context within which the system has to work is a misinterpretation

of economic theory. It is like playing football without rules and without referee, that never works, any coach can vouch for that.

Since the election of Ronald Reagan, the apostles of an unregulated market, lavishly financed by business lobbyists, have demolished barriers to corporate greed and corruption that for most of a century had served the country well.

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Drs. Dirk Jan Barreveld was born in the Netherlands in 1941. After a career in the Dutch merchant navy, he was active in the Dutch international transport world. In 1987 he became a permanent resident of the Philippines. In the Philippines he works as international consultant, teaches Economic Science at universities and publishes books. Drs. Barreveld holds a degree in Economic Science from the Erasmus University in Rotterdam.

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