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GUEST OF HONOR

THE HONORABLE ALAN GREENSPAN
Chairman, Federal Reserve System

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Barbara Hackman Franklin, Chairman of the Club: Good afternoon to all of you. I'm Barbara Hackman Franklin, Chairman of the Club, and it's my great pleasure to welcome all of you, our members and our guests, to the 382nd meeting in the 98th year of this wonderful institution. I know you're all eager to hear Chairman Greenspan and that's going to be our first order of business. And after he speaks, we'll have our usual question period with a questioner on each side of the dais. We will close that by 1:30 and then after that you can finish your lunch because your main course will be served. So we'll get right to it. Chairman Greenspan. To an audience like this, how does one introduce Alan Greenspan, a man who has been such a central part of our lives for so long. Well, first, briefly, and second I guess by saying, Alan, welcome home. Alan was the Economic Club's own Vice Chairman when President Reagan first chose him to head the Federal Reserve System and that was nearly 18 years ago. For all of these years, he has headed and wisely guided the most important financial institution in the most important economy in the world. In so doing, he's won worldwide acclaim for his skills at bringing a sophisticated new understanding of the multiple and interlocking ways in which a modern economy works and the way today's fast moving global economy operates. He's a professional without peer, a man for all seasons. And after all these years, he's still going strong. We still depend on him. We still need him. We still listen to him intently. So it's a great honor and pleasure to present our friend, my friend, the one and only Alan Greenspan, Chairman of the

Federal Reserve System.

The Honorable Alan Greenspan: I don't know what to do with that, Barbara. It's a delight to be back here. It's an old haunt so to speak, having appeared before this organization on many occasions and worried about its economic future and finances for a long time. But since I convinced Bart Hepburn to become the first chairman 98 years ago, I feel I have a commitment. In a much shorter time frame, over the past twenty years, the American economy has absorbed the major shocks of two stock market slumps, the terrorist attacks of September 11, and debilitating corporate scandals. But we have also been subject to other shocks, the most immediately prominent ones being the oil and gas price surges of the past two years. Indeed, most analysts attribute the economic soft spots of the past two years to energy shocks. Accordingly, I will devote the rest of my formal remarks to the developments in the oil and gas markets and will endeavor to address broader issues of the world economy in the question and answer period.

World markets for oil and natural gas have been subject to a degree of strain over the past year not experienced for a generation. Increased demand and lagging additions to productive capacity have combined to eliminate a significant amount of slack in energy markets that was essential in containing energy prices between 1985 and 2000. Reflecting a low short-term elasticity of demand, higher prices in recent months have slowed the growth of oil demand, but only modestly. That slowdown, coupled with expanded production also induced by the price firmness, required markets to absorb an unexpected pickup in the pace of inventory

accumulation. The initial response was a marked drop in spot prices for light, sweet crude oil. But that drop left forward prices sufficiently above spot prices to create an above-normal rate of return for oil bought for inventory and hedged, even after storage and interest costs are accounted for.

As I indicated in early April, this emerging condition could encourage the buildup of enough of an inventory buffer to damp the price frenzy. Indeed, since early April, private crude oil inventories in the United States have been accumulating at a seasonally adjusted rate of 250,000 barrels a day, rising as of last week to the highest seasonally adjusted level in three years. A somewhat lesser, but still important accumulation of crude oil is evident in other major countries. Inventory accumulation is likely to continue unless demand rises, output declines, or we run out of storage capacity.

In the United States, natural gas prices in recent weeks, seasonally adjusted, have come off their peak of early April, but those prices still remain significantly above the average level of 2004. Working levels of gas inventories are seasonally moderate, but domestic dry gas production plus net imports has not expanded sufficiently over the past few years to have prevented a marked rise in price. The inexorable rise in residential and utility use has priced the more marginal industrial gas users partially out of the market and has induced significant gains in gas efficiency among a number of gas users such as petroleum refineries, steel mills, and paper and board mills. Industrial gas use overall in the United States has declined 12 percent since 1998. For both oil and natural gas, the inventory, production, and price outlook beyond the current episode will

doubtless continue to reflect longer-term concerns. Much will depend on the response of demand to price over the longer run. Prices of spot crude oil and natural gas have risen sharply over the past year in response to constrained supply and the firming of overall demand. But if history is any guide, should higher prices persist, energy use over time will continue to decline relative to gross domestic product. In the wake of sharply higher prices, the energy intensity of the United States economy has been reduced about half since the early 1990s. (NOTE: Mr. Greenspan's speech text states "early 1970s") Much of that displacement was achieved by 1985. Progress in reducing energy intensity has continued since then, but at a lessened pace.

This more moderate rate of decline in energy intensity should not be surprising given the generally lower level of real oil prices that prevailed between 1985 and 2000. With real energy prices again on the rise, more-rapid decreases in the intensity of use in the years ahead seem virtually inevitable. As would be expected, long-term demand elasticities have proved noticeably higher than those evident in the short term.

Altering the magnitude and manner of U.S. energy consumption will significantly affect the path of the U.S. economy over the long term. For years, long-term prospects for oil and gas prices appeared benign. When choosing capital projects, businesses in the past could mostly look through short-term fluctuations in oil and gas prices, with an anticipation that moderate prices would prevail over the longer haul. The recent shift in expectations, however, has been substantial enough and persistent enough to direct business investment decisions in favor of energy-cost reduction. Of critical importance will be the extent to which the more than 200 million light

vehicles on U.S. highways, which consume 11 percent of total world oil production, become more fuel efficient as vehicle buyers choose the lower fuel costs of lighter hybrid vehicles.

We can expect similar increases in oil and energy efficiency in the rapidly growing economies of East Asia as they respond to the same set of market incentives. But at present, China consumes roughly twice as much oil per dollar of GDP as the United States, and if, as projected, its share of world oil consumption continues to increase, the average improvements in world oil-intensity will be less pronounced than the improvements in individual countries viewed separately would suggest.

Aside from uncertain demand, the resolution of current major geopolitical uncertainties will materially affect oil prices in the years ahead. The effect on oil prices in turn will significantly influence the levels of investment over the next decade in crude oil productive capacity and only slightly less important, investment in refining facilities. Because of the geographic concentration of proved reserves, much of the investment in crude oil productive capacity will need to be made in countries where foreign investment is prohibited or restricted or faces considerable political risk. Unless those policies and political institutions and attitudes change, a greater proportion of the cash flow of producing countries will be needed for oil reinvestment to ensure that capacity keeps up with projected world demand. Concerns about potential shortfalls in investment certainly have contributed to recent record-high long-term futures prices.

To be sure, world oil supplies and productive capacity continue to expand. Major advances in recovery rates from existing reservoirs have enhanced proved reserves despite ever-fewer

discoveries of major oil fields. But investment to convert reserves to productive capacity has fallen short of the levels required to match unexpected recent gains in demand, especially gains in China. Besides feared shortfalls in crude oil capacity, the status of world refining capacity has become worrisome as well. Of special concern is the need to add adequate coking and desulfurization capacity to convert the average gravity and sulphur content of much of the world's crude oil to the lighter and sweeter needs of product markets, which are increasingly dominated by transportation fuels that must meet ever-more stringent environmental requirements. The extraordinary uncertainties about oil prices of late are reminiscent of the early years of oil development. Over the past few decades, crude oil prices have been determined largely by international market participants, especially OPEC. But such was not always the case.

In the early twentieth century, pricing power was firmly in the hands of Americans, predominately J. D. Rockefeller and Standard Oil. Reportedly appalled by the volatility of crude oil prices in the early years of the petroleum industry, Rockefeller endeavored with some success to control those prices. After the breakup of Standard Oil in 1911, pricing power remained with the United States—first with the U.S. oil companies and later with the Texas Railroad Commission which raised allowable output to suppress price spikes and cut output to prevent sharp price declines. Indeed, as late as 1952, U.S. crude oil production, 44 percent of which was in Texas, still accounted for more than half of the world total. However, the historical role came to an end in 1971, when excess crude oil capacity in the United States was finally absorbed by rising demand. At that point, the marginal pricing of oil, which for so long had been resident on the Gulf Coast of Texas, moved to the Persian Gulf. To capitalize on their newly

acquired pricing power, many producing nations in the Middle East nationalized their oil companies. But the full magnitude of their pricing power became evident only in the aftermath of the oil embargo of 1973. During that period, posted crude oil prices at Ras Tanura, Saudi Arabia, rose to more than \$11 per barrel, significantly above the \$1.80 per barrel that had been unchanged from 1961 to 1970. A further surge in oil prices accompanied the Iranian Revolution in 1979.

The higher prices of the 1970s brought to an abrupt end the extraordinary period of growth in U.S. consumption of oil and the increased intensity of its use that was so evident in the decades immediately following World War II. Between 1945 and 1973, consumption of petroleum products rose at a startling average annual rate of 4 ½ percent, well in excess of the growth of real GDP. However, between 1973 and 2004, oil consumption grew on average only ½ percent per year, of course far short of the rise in real GDP.

Although OPEC production quotas have been a significant factor in price determination for a third of a century, the story since 1973 has been as much about the power of markets as it has been about the power over markets. The signals provided by market prices have eventually resolved even the most seemingly insurmountable difficulties of inadequate domestic supply in the United States. The gap projected between supply and demand in the immediate post-1973 period was feared by many to be so large that rationing would be the only practical solution. But the resolution did not occur quite that way. To be sure, mandated fuel-efficiency standards for cars and light trucks induced slower growth of gasoline demand. Some observers argue,

however, that even without government-enforced standards, market forces would have produced increased fuel efficiency. Indeed, the number of small, fuel-efficient Japanese cars that were imported into the United States markets rose throughout the 1970s as the price of oil moved higher. Moreover, at that time, prices were expected to go still higher. Our Department of Energy, for example, had baseline projections showing prices reaching \$60 per barrel—the equivalent of about twice that amount in today's prices.

The failure of oil prices to rise as projected in the late 1970s is a testament to the power of markets and the technologies they foster. Today, despite its recent surge, the average price of crude oil in real terms is still only three-quarters of the price peak of February 1981. Moreover, the effect of the current surge in oil prices, though noticeable, is likely to prove less consequential to economic growth and inflation than in the 1970s. Since the end of 2003, the rise in the value of imported oil, essentially a tax on U.S. residents, has amounted 3/4 percent of GDP. The effects were far larger in the crises of the 1970s. But obviously, the risk of more serious negative consequences would intensify if oil prices were to move materially higher.

U.S. natural gas prices have historically displayed greater volatility than prices of crude oil, doubtless reflecting in part, the less-advanced development of price-dampening global trade in natural gas. Over the past few years, notwithstanding markedly higher drilling activity, the U.S. natural gas industry has been unable to noticeably expand production or to increase imports from Canada. Significant upward pressure on prices has ensued. North America's limited capacity to import liquefied natural gas has effectively restricted our access to the world's abundant supplies

of gas. Because international trade in natural gas has been insufficient to equalize prices across markets, U.S. gas prices since late 2002 have been notably higher, on average, than prices abroad. As a result, significant segments of the North American gas-using industry are in a weakened competitive position. Indeed, ammonia and fertilizer plants in the United States have been particularly hard hit as the costs of domestic feedstocks have risen relative to those abroad. The difficulties associated with inadequate domestic supplies will eventually be resolved as consumers and producers react to the signals provided by market prices. Indeed, the process is already under way. As a result of substantial cost reductions for liquefaction and transportation of LNG, significant global trade in natural gas is developing. This activity has accelerated sharply over the past few years as profitable arbitrage has emerged in natural gas prices across international markets. At the liquefaction end of the process, new investments are in the works across the globe. Enormous tankers to transport liquefied natural gas are being constructed even though they are not dedicated to specific long-term delivery contracts. The increasing availability of LNG around the world should lead to much greater flexibility and efficiency in the allocation of energy resources. According to tabulations of BP, worldwide imports of natural gas in 2003 were only 24 percent of world consumption, compared with 59 percent for oil. Clearly, the gas trade has significant margin to exercise its price-damping opportunities.

In the United States, import terminals in Georgia and in Maryland have reopened after having been mothballed for more than two decades. The added capacity led to a noticeable increase in imports of LNG last year, but LNG imports still accounted for less than 3 percent of U.S. consumption. Additional import facilities, both onshore and offshore are being developed. A

new offshore facility in the Gulf of Mexico received its first delivery of liquefied natural gas a little more than a month ago. According to the Federal Energy Regulatory Commission, the number of approved and proposed new or expanded LNG import terminals in the United States stood at thirty-three earlier this month. Together they have capacity of 15 trillion cubic feet of imports annually, far in excess of any pending consumption needs, which in 2004 amounted to only 22 trillion cubic feet. Clearly, not all of these projects will come to fruition. Some will be abandoned for economic and business considerations, and others will fail because of local opposition, motivated by environmental, safety, and other concerns. The larger question, of course, is what will increase world trade in LNG and expanded U.S. import capacity do to natural gas prices in the United States? During the past couple of years, when U.S. prices of natural gas hovered around \$6 per million Btu, import prices of LNG in Europe have ranged between \$2 and \$4, and those in Japan and Korea have generally been between \$3 and \$5. Estimates of production and delivery costs of LNG to North America appear now to hover around \$3 compared with \$6 currently being traded at. In the short run, exporters to the United States are likely to receive our domestic price, which is as I said \$6 per million Btu. But unless world gas markets tighten aggressively, competitive pressures will arbitrage the U.S. natural gas price down, possibly significantly, through increased imports. In addition to expanded supplies from abroad, North America still has numerous unexploited sources of gas production. Significant quantities of recoverable gas reserves are located in Alaska and in the northern territories of Canada. Negotiations over the construction of pipelines connecting these northern supplies to existing delivery infrastructure are currently under way.

The dramatic changes in technology in recent years have made existing oil and natural gas reserves stretch further while keeping energy costs lower than they otherwise would have been. Seismic imaging and advanced drilling techniques are facilitating the discovery of promising new reservoirs and are enabling the continued development of mature fields. But because of the inexorably rising demand, these improved technologies have been unable to prevent the underlying long-term prices of natural gas in the United States from rising. Conversion of the vast Athabasca oil sands reserves in Alberta to productive capacity has been slow. But at current market prices they have become competitive. Moreover, new technologies are facilitating U.S. production of so-called unconventional gas reserves, such as tight sands gas, shale gas, and coal-bed methane. Production from unconventional sources has more than doubled since 1990 and currently accounts for roughly one-third of U.S. dry gas production. According to projections from the Energy Information Administration, most of the growth in domestic supply of natural gas over the next 20 years will come from unconventional sources. In many respects, the unconventional is increasingly becoming the conventional.

In the more distant future, perhaps a generation or more, lies the potential to develop productive capacity from natural gas hydrates. Located in marine sediments and the Arctic, these ice-like structures store immense quantities of methane. Although the size of these potential resources is not well measured, mean estimates from the U.S. Geological Survey indicate that the United States alone may possess 200 quadrillion cubic feet of natural gas in the form of hydrates. To put this figure in perspective, the world's proved reserves of natural gas are on the order of 6 quadrillion cubic feet. In the decades ahead, natural gas and oil will compete in the United

States with coal, nuclear power, and renewable sources of energy. As the manner in which energy is produced and consumed evolves, it is not unreasonable to expect that in the long run, the prices per unit of energy from various sources would tend to converge. At present, long-term futures prices for natural gas are, on a Btu-equivalent basis, notably less expensive than those for crude oil. Clearly, limited substitution possibilities across fuels have resulted in persistent cost differentials, but those very differentials inspire the technologies that over time reduce such limitations. A clear example is gas-to-liquids technology, which converts natural gas to high-quality naphtha and diesel fuel. Given the large-scale production facilities that are currently being contemplated, GTL is poised to become an increasingly important component of the world's energy supplies. Current projections of production, however, remain modest. GTL promises to add a good measure of flexibility in the way that natural gas resources are utilized. In addition, given the concerns over the long run adequacy of liquid production capacity for conventional oil reserves, gas to liquids may provide an attractive, competitively priced option for making use of stranded gas, which, for lack of access to transportation infrastructure, cannot be brought to market.

In summary, improving technology and ongoing shifts in the structure of economic activity are reducing the energy intensity of industrial countries and presumably recent oil prices increases will accelerate the pace of displacement of energy-intensive production facilities. If history is any guide, oil will eventually be overtaken by less-costly alternatives well before conventional oil reserves run out. Indeed, oil displaced coal before still vast untapped reserves of coal, and coal displaced wood without denuding our forest lands. Innovation is already altering the power

source of motor vehicles and much research is directed at reducing gasoline requirements. Moreover, new technologies to preserve existing conventional oil reserves will emerge in the years ahead. We will begin the transition to the next major sources of energy perhaps before mid-century as production from conventional oil reservoirs, according to central tendency scenarios of the Energy Information Administration, is projected to peak. In fact, the development and application of new sources of energy, especially non-conventional oil, is already in train. Nonetheless, the transition will take time. We, and the rest of the world, doubtless will have to live with the geopolitical and other uncertainties of the oil markets for some time to come.

We are unable to judge with certainty how technological possibilities will play out in the future but we can say with some assurance that developments in energy markets will remain central in determining the longer-run health of our nation's economy. The experience of the past fifty years, and indeed much longer than that, affirms that market forces play the key role in conserving scarce energy resources, directing those resources to their most highly valued uses. The availability of adequate productive capacity of course will also be driven by non-market influences and other policy considerations.

To be sure, energy issues present policymakers and citizens with difficult tradeoffs to consider and decisions to make outside the market process. The concentration of oil reserves in politically volatile areas of the world is an ongoing concern. But that concern and others, one hopes, will be addressed in a manner that, to the greatest extent possible, does not distort or stifle the

meaningful functioning of our markets. We must remember that the same price signals that are so critical for balancing energy supply and demand in the short run also signal profit opportunities for long-term supply expansion. Moreover, they stimulate the research and development that will unlock new approaches to energy production and use that we can now only barely envision. Thank you very much. I look forward to your questions.

Question Period

Barbara Hackman Franklin: Well, now you know why we listen to him intently. It was a wonderful, fascinating speech, Alan. Thank you. We have two distinguished questioners. On this end of the dais, we have Henry Kaufman. He is President of Henry Kaufman & Company, and I might add every time I think over the years that Alan has spoken at the Club, Henry has been one of the questioners. And on the other side of the dais is Ed Hyman who is Chairman of ISI. Glad to have both of you here. Henry, the first question is yours.

Henry Kaufman: Thank you very much. Mr. Chairman, I'm delighted that you're allowing us to talk to you about subjects beyond oil today. So to begin, assuming for the moment that China would raise the value of its currency over the next year or two by 20 percent, what impact will this action have on the American economy and what would be the implications for U.S. monetary policy?

Alan Greenspan: I think Henry practices before these meetings to find out...well, first let's, this is a hypothetical question and I'm not going to presume that that's what's going to happen,

but let me just say this, that there is no question that there is significant pressure on the Chinese financial system to move the RMB. And the reason basically, as I'm sure you're all acutely aware, is that because they have got a very large amount of U.S. Treasury securities to accumulate in order to hold their exchange rate locked against the dollar, they have to find a way to essentially eliminate the inflationary implications of building up very large reserves in the Central Bank which occur as a consequence of using yuan or the RMB to purchase the U.S. dollars. They, therefore, have to engage in what Central Bankers call sterilization. A sterilization essentially occurs as the bank issues the RMB notes against itself in longer maturities to essentially sop up that excess of RMB which was used to buy the dollars. The trouble with the sterilization issue is that they're only able to sterilize about half of what they are accumulating. And this means, actually a little more than half, but this means that they're basically allowing a significant buildup in bank reserves which while it has not as yet induced a significant acceleration in money supply, will, if all monetary history is relevant, will occur. The consequence is that their current state, so long as they keep capital controls, I might add, is one in which they have an unstable situation going forward, and the way you spot this is the amount of sterilization that they're engaged in is gradually increasing in amount month by month and consequently if you project into the future, it's very evident that something has to move with the exchange rate unless they un-blind their capital controls and for reasons which I don't think are likely, you get a significant demand for U.S. dollars from the private sector to essentially offset the need on the part of the Central Bank from accumulating dollars. So I will accept the premise that the RMB will be at some point revalued upward but I will not necessarily put a number on it. But let's remember that if you get a significant rise, you will undoubtedly, by raising the prices

in essentially the price of imports into the United States from China and in the process unquestionably reducing the demand for Chinese goods in the United States, and therefore the very large trade surplus that they have with respect to the United States, it does not follow that that will lower our overall trade balance. Indeed, it's probably quite unlikely because of most what essentially is shipped to the United States is essentially at a fabricated level in which most, in many cases, not all, in a large number of cases most of the value added that has been applied to goods shipped from China to the United States occurred in other countries. So if there is a significant increase in import prices of Chinese goods, it does not mean that American retailers and consumers generally will shift to domestic U.S. sources. It almost surely will mean that they will shift to other foreign sources where in effect China competes significantly, Malaysia, Thailand, a whole series of other countries like the Philippines. And, of course, in many respects, for a lot of goods, Latin America. So essentially what we will find is we're importing from a different area but we'll be importing the same goods. The effect will be a rise in domestic prices in the United States. And as a consequence of that, we will have other impacts, which I could trace through but I unfortunately have run out of time on this question.

Edward S. Hyman: I have a question generally regarding the neutral funds rate, the idea of “you know it when you see it” idea. And some are pointing out that a number of developments that are occurring now would suggest that the Fed Funds Rate is already beyond neutral. For example, the stock market has been flat for about a year. Money growth has slowed. There are some early signs of a financial crisis in the auto industry. The dollar is up a little bit. Gold is down a little bit. And there are some signs of the economy slowing such as the Philly Fed. So

my question is what are they missing?

Alan Greenspan: The other side of the balance sheet. Ed, I don't want to get into detail of this discussion and obviously I can't. In general, the notion of what constitutes so-called neutral rate goes all the way back, as you know, to Wicksell back in the 19th century. And it's a very interesting concept which essentially endeavors to say what is the interest rate which so balances the economy that aggregate and supply and demand remains in balance and the system moves forward without creating disequilibrium. It's an amorphous concept and obviously in a highly complex, to use another, old economist phrase, creative destruction, when you're in a context like that and the economy is churning, the markets are churning, it's very difficult to figure out exactly where balances are because there are always things, no matter how wonderfully fine-tuned a system is, there are always significant parts of an economy which look out of balance. And so it's a judgment as some people have put it and I think quite correctly, we'll see it when we, we'll know it when we see it. That is probably correct. And the reason is we can't forecast it because it's a such an amorphous complex issue that trying to, not only anticipate the events that will occur in a forecast, but also how they will affect the economy so you essentially get down to the point that we will not know it until we're actually there and maybe we'll miss it. Maybe it is conceivable. But at the moment we are not in agreement with those whom you quote.

Edward S. Hyman: Thank you.

Henry Kaufman: Returning to home a little bit, what external, well, what developments would

lead you to conclude that there is a housing bubble in the United States?

Alan Greenspan: There are a number of things which I think suggest at a minimum that there's a little froth in this market. Let me start off by saying, however, that the American housing market is an extraordinarily heterogeneous market and it does not have the capacity to move excesses from one area to another like you have with commodities and hence create a single market. We have a whole series of regional, not even regional, they're basically a whole series of local markets, meaning remember that a market requires that you compete with different products. And you may be able to arbitrage say aluminum prices between Portland, Maine and Portland, Oregon, but you can't do it with housing prices because you can't move the houses. So the problem here is that you've got a whole series of local markets and because of that it's very difficult, especially with the very significant closing costs and transaction costs in essentially creating realized capital gains, you don't move to speculative markets very rapidly or very extensively at least on a country-wide basis. So we don't perceive that there is a national bubble, but it's hard not to see, one, that there are a lot of local bubbles. And indeed, even without calling the overall national issue a bubble, it's pretty clear that it's an unsustainable underlying pattern. And what we see is a number of forces, which are, as far as I can judge, not infinitely projectable. First of all, still the vast majority of homes that are sold, are bought and sold by owner occupants. And as I've always said in the past, one of the considerable barriers to achieving realized capital gains on the sale of a home is if you live there, you have to move. And that's a formidable barrier and it's really been a major factor why until very recently we've had very little in the way of frothy markets of the type we currently have. One issue that we have observed that's different in this particular period is the very significant acceleration in turnover

of existing houses meaning the rate at which sales, the ratio of existing home sales to the stock of existing homes. That ratio has gone up significantly after being rather stable for a very significant period of time. On the basis of preliminary analysis that we've been involved with recently, endeavoring to segregate the owner-occupied sales from those which are second homes, either for investment, vacation or otherwise, having done that, what is very clear is that a very substantial part of the acceleration in turnover are second home purchases. And second home purchases do not have the inhibition that owner occupants have because you can sell without having to move obviously. The transaction costs are still quite high. But there is a good deal of accelerated, speculation, there's no better word to use, in the markets. And we're also seeing it in the mortgage market because as a number of you are acutely aware, there is a major move in mortgage originations now to interest only and another, and all sorts of adjustable rate mortgages with very hybrid, very imaginative constructions. People are reaching to be able to pay the prices to move into a home and this clearly is beginning to stretch the general pressures in the market place, which leads me to conclude that this big price surge is going to soon simmer down. And because of the heterogeneity of the market and the inability to get a really major reduction in price in this country, we don't perceive of it as a serious macroeconomic issue although it will, if it occurs, and eventually it will in one form or another, reduce the fairly large and still accelerating degree of extraction of equity from existing homes. And this has been a major force in financing consumption expenditures, that is through the mortgage market. We have almost, the number of occasions in which the average level of prices in the United States has actually gone down are very rare. And one of the reasons is there is a fundamental uptrend that exists in home prices and the reason is that because we are all looking for our own special types of

idiosyncratic homes, the chances to get a very significant amount of productivity going in the building of homes is inhibited so that even though there's a lot of technological advance, residential construction productivity has significantly lagged over the decades the average productivity in the United States which means that there's a gradual increasing upside tendency for residential house prices to rise relative to the general price level. So there is a very considerable unlikelihood of a major decline when you're running up against this type of trend. But I might just say finally that even if there are declines in prices, the significant run-up to date has so increased equity in homes that only those who have purchased very recent, who have say purchased just before prices actually literally go down, are going to have problems. So that the presumption that there are a lot of bankruptcies out there doesn't seem credible to any of my associates and myself.

Barbara Hackman Franklin: I think that's going to be it. That's going to be the last word. Do you want to do one more question?

Alan Greenspan: Let's do one more.

Barbara Hackman Franklin: He will do one more. Thank you Alan, that's wonderful.

Edward S. Hyman: Mr. Chairman, thank you. If you don't mind, I have a really open-ended question. I'm thinking about the issues that you might be thinking about would face the Fed in the next five years, be it housing or a housing bubble or a current account or the dollar issue,

whatever. And so my question is other than finding your replacement, what do you think will be the key issue facing the Fed over the next five years?

Alan Greenspan: You know it's an interesting question and you're quite right, it's a very large open-ended question. But if I could answer the question, it wouldn't be a problem. The real, the thing you learn...

Edward S. Hyman: I give up.

Alan Greenspan: The thing you learn when you've been in the markets for a number of decades is that the, your real concern should not be what you see on the front page of the newspapers. Most of the stuff that you see that people are concerned about, are wringing their hands about, are gravely projecting disaster, don't happen. And the reason they don't happen is that we have a marvelously flexible economic system which tends to adjust to a vast, vast majority of imbalances, to the extent that we rarely even see most of the problems that get absorbed in the price structure. The thing that we have to be worried about is the things that come out of left field so to speak that we have no anticipation of and it comes without any real early indications. That's what worries me now. That's what worried me, I must say, when I first joined the Fed. And I have no doubt that that's going to be the major concern of my successor and his colleagues, or her colleagues.

Barbara Hackman Franklin: He really is the one and only and not replaceable. But, Alan,

thank you so much again for sharing your wisdom with us, but especially for your wonderful, wonderful service to our country for all these years. And join me in a round of applause for our wonderful questioners, Henry and Ed.