ECONOMICS
in
Action
department of economics
UNIVERSITY OF CALIFORNIA, SAN DIEGO
WINTER/SPRING 2007
econ.ucsd.edu

For Sale - Reduced Price - Open House - Is the Boom Over?

Marjorie Flavin

It is impossible to ignore the signs that the superheated housing market of the last five years has come to an end. The literal signs – FOR SALE, REDUCED!, OPEN HOUSE SATURDAY – are the most obvious, but the statistical evidence is also unavoidable: inventories of real estate listings substantially greater, and monthly sales volumes substantially lower, than a year ago. The days of double digit annual appreciation in house prices are gone. However, having noted that the recent boom in the housing is over, the future course of the real estate market is nevertheless an open question.

A prediction of the future path of house prices depends on our interpretation of the dramatic recent run-up in home values. Since a house is a long-lived asset, like equities or bonds, the market price of a house will be strongly by buyers' expectations, or forecasts, of what a comparable house would sell for in the future, as well as the buyers' immediate demand for shelter. While it is not the only factor affecting house prices, this dependence of house prices on expected future house prices implies that the housing market is potentially subject to "bubbles", or speculative swings in the asset price.

Many media pundits seem to identify any dramatic increase in house prices as a bubble. However, economists reserve the notion of a bubble in an asset price to refer to a situation in which the price of the asset has diverged from is value based on economic fundamentals. To an economist, there is no bubble in house prices even if prices double over a five year period, if the fundamental determinants of the supply and demand for housing have changed sufficiently to understand the increase in house prices. If we interpret the dramatic recent appreciation of house values as a bubble, that is, a result of speculative transactions not grounded in the fundamentals, the current stall in the house price series will be enough to burst the bubble. If the current high level of house prices is, because of a bubble, in excess of the level of prices consistent with the fundamentals, we would expect house prices to fall, and possibly fall dramatically. If, on the other hand, the current high level of house prices is consistent with the fundamentals, and current slowdown in the housing market is also explained by fundamentals, we would expect house prices to be flat or rise at a more normal rate of 2% to 5% per year.

A super simple model of the fundamental determination of house values can be constructed by thinking of the house as an asset that generates, forever, a return in terms of the market value of the housing services it provides each year. Physical structures do not last forever, of course, but land, which accounts for much of residential real estate values in San Diego, does last forever. To account for the fact that physical structures depreciate over time, assume that the owner pays 3% of the value of the structure each year in the form of maintenance and repairs; assuming that the value of the structure contributes half of the value of the property, an owner pays 1.5% of the real estate value per year to repair the ravages of physical depreciation. In addition, the owner pays 1% of the real estate value as property taxes, and incurs interest expenses equal to the mortgage interest rate times the real estate value, denoted r. (All homeowners incur the interest expense, regardless of whether the interest expense is an explicit expense paid to a mortgage lender or, as in the case of homeowners who own their homes free and clear, the opportunity cost of having their wealth tied up in the form of the house.)

With this stripped down model, the asset value of a home that generates $2,000 worth of housing services per month ($24,000 per year) would be:

$24,000/(r + .01 + .015). Holding constant the size of the population and the level of per capita income, a decline in the mortgage interest rate from 8% to 5% would increase the value of the house, according to the fundamentals, from $228,571 to $320,000, or an increase of 40%. Any changes in fundamentals that would have the effect of bidding up the price of housing services (e.g., population growth, higher per capita incomes) would also generate an increase in the value of housing consistent with the fundamentals.

What has happened to the fundamental determinants of housing in the past five years? While new structures can be built, the supply of land is essentially fixed, the demand for housing continues to increase, fueled by both population growth and income growth, and mortgage interest rates have been extraordinarily low by historical standards. Given these fundamentals, it is difficult to imagine that anything other than a huge run up in house prices would have occurred over the recent past.

Changes in the fundamentals can cause a dramatic increase in the price of housing; likewise, the fundamentals can cause house prices to fall. The increase in the rates on variable rate mortgages since a year ago is associated with a decline in the value of housing according to the fundamentals. In my view, the recent boom in housing prices is, for the most part, readily understood in terms of the fundamental determinants of housing prices – interest rates, population growth, income growth – and not the effects of a bubble. With this interpretation of the past,

For Sale *continued on page 4*

New Chair, Same Corner: Our Goals and Values

Joel Watson, Chair
UCSD Economics Department

We owe a debt of gratitude to our colleague Richard Carson for his devoted stewardship of the department during the past four years. The Department can count many accomplishments during his tenure as Department Chair – extraordinary work recruiting top-notch faculty, a dramatic rise in the department's stature in the academic world, and greater visibility to policy makers and the local community, to name a few. Added to these is a host of accomplishments that did not make the headlines, but nevertheless are dear to the Department of Economics family. The result is a truly remarkable story of success, infused with the contribution of Richard's experience, wisdom, and fine leadership.

Our immediate challenge is to further the department's growth in size and stature, and to manage it within the challenging resource constraints that we face. The Economics Department, and the university as a whole, is a complex organization that, in principle, enriches the lives of all its participants–students, faculty, staff, and members of the greater community. An organization such as ours functions best when its participants agree on goals, work in concert to implement them, and share in the success.

Research and teaching is, of course, at the center of our work. It is important to me, personally, that each of our faculty has the support to conduct the highest quality research at the frontier of the profession and to provide exceptional instruction for undergraduate and graduate students, which includes engaging students in the process of scientific discovery. In addition, we should always look for new ways of attracting the best faculty recruits and graduate students.

Two aspects of this endeavor are particularly close to my heart and will receive my special attention as Department Chair. First, we need to make sure that the Department's environment is as positive as it can be for our junior faculty members. I reaffirm our commitment to provide moral support, guidance, and appropriate resources so that the junior faculty can be productive and thrive. UCSD's Economics Department was largely built from the junior ranks (hiring some of the best promising scholars, encouraging their development, and facilitating their transformation into senior members of the department's family). This theme is even more important today.

Second, we must continually work to deliver excellence to the great many undergraduates who take our courses and who major in economics and management science. In this regard, I salute Melissa Famulari, our vice-chair for undergraduate education, for leading the department's effort to redesign its undergraduate curriculum. This massive undertaking has relied on her important and tireless work. Dr. Famulari is also working on other creative ways of engaging our undergraduates, including initiating the Undergraduate Economic Society.

Our Goals and Values *continued on page 4*

Gordon Dahl: Disentangling Data By Applying Econometric Techniques

By Barry Jagoda, UCSD Communications

Gordon Dahl
UCSD Economics Department

Gordon Dahl received his doctorate at Princeton, in 1998, and was delighted with its graduate program in economics, particularly with the training provided in his fields of labor economics and applied econometrics. He went to work at the University of Rochester, also in 1998, before accepting a position at UCSD just this year. He is 38.

During a sabbatical in 2003 at UC Berkeley, Dahl, and a colleague, were exploring the question of the persistent wage gap between men and women, when they decided to look at the subject in a different way, wondering if parents favored male children over female. In an excellent example of how economists can use data to perform "natural" experiments, the two were able to untangle Census Bureau data to show that, unmistakably, couples with girls divorced more than those with boys.

But, as the years have gone by, these statistics have proven invalid when applied to the Dahl family, where Gordon and his wife Katherine, happily married now for 14 years, three months ago had their fourth child, Meredith. She joins her three sisters, Natalie, 3, Allison, 6 and Sarah, 9. Coincidentally, while Gordon was doing his graduate work at Princeton, Katherine earned a master's in physical therapy at nearby Rutgers. These days her interest is in working as a birth doula, a practitioner who provides emotional support to women during childbirth.

Gordon grew up in Davis, California where his father was director of the Mormon Student Center adjacent to UC Davis. He majored in economics at Brigham Young University where he took his first economics course and came to think the field provided "an exciting way to think about the world." Later, with a National Science Foundation fellowship in economics he had good choices of graduate schools and decided on Princeton largely because of its strong program in labor economics.

Gordon was particularly pleased with the broad lens the field provided and he has researched and written widely, publishing on such topics as teenage marriage, family income impact on scholastic achievement, arbitration, domestic violence and others. He also has done much work applying econometrics to labor issues such as models of choice, censoring, unemployment insurance and a swath of topics on how people make decisions.

Explaining the utility of combining the tools of econometrics with data work in labor economics, Gordon says, "In a lot of other disciplines you can easily set up random experiments. But in labor economics, we usually cannot experiment with people's lives. So we try to take observational data and make sense of it using alternative statistical approaches. We are often working on what is causal versus how much is correlational."

Disentangling Data *continued from page 2*

Responding to a question about the difficulties of merging data work with statistical approaches, Gordon says, "It can be a hard thing to do. You have to make assumptions. The disadvantage is that it is probably never going to be as good as running a real experiment, but I believe it's much better that not doing anything at all."

During his years at Rochester, Gordon taught graduate courses in labor and undergraduate courses in econometrics and microeconomics. He also became a Faculty Research Fellow of National Bureau of Economic Research. But eventually he began to have overtures from other universities, including UCSD.

"I am very excited about the department here at San Diego. There is such a fabulous group of researchers with so many significant strengths. The applied group has people in labor, public finance, and several allied fields, including people at IR/PS. UCSD has an incredible history of top econometricians and theorists, and the rest of the department is very strong as well. Having these people together is just wonderful. I am also particularly excited about the promise of additional faculty growth in the near future."

Settled into a home in Rancho Penasquitos, Gordon expresses enthusiasm about work at UCSD, "I'm looking forward to teaching undergraduates and the second year paper for graduate students later this year, and graduate labor courses in the future." And, he adds, "I've got a number of compelling and exciting research projects waiting to be tackled."

Irina Telyukova: Computational Macroeconomist, Specialist in Household Economics, Joins Faculty

By Barry Jagoda, UCSD Communications

Irina Telyukova
UCSD Economics Department

When Irina Telyukova left home and high school in Moscow, in 1993, for a junior year abroad she expected to be back the next year to finish her studies at her same specialized English-language-oriented school. She would then probably attend Moscow State University to pursue economics, a field in which she already had taken an interest.

But, by the early 90's, the former Soviet Union had become the deeply troubled Russia. Irina's parents, her father a health economist and her mother with a Ph.D in history, ended up moving to the United States for a job. And the rigorous prep school in Cambridge, Massachusetts, Buckingham, Brown and Nicols (BB&N), which she had fortuitously selected, was happy for her to finish up and to prepare for an American college education. It was as if, in the blink of an eye, this prize-winning Russian pianist, with excellent high school grades, had become transformed into a Russian-American undergraduate at Connecticut College, in New London, Connecticut, who within a few years was to earn her Phi Beta Kappa key and, as an economics/math major, be ready to apply for graduate school.

Not sure of how her grad school applications would be treated–she went for the most highly ranked programs–Irina also sought jobs. "I got my dream job and took it, postponing graduate school," is how she put it, becoming a research assistant at the Federal Reserve Bank of New York. After two years in this position ("I helped on many papers; it was a lot of fun.") Irina left New York City–which she loved and which had gotten into her blood–and accepted entry, with 17 others, into the highly competitive graduate program in the Department of Economics at the University of Pennsylvania.

"It was difficult at first, particularly some of the theory and math, and the adjustment from working in New York to getting back to school was tough," says Irina, "but I survived and now could not be happier with my choice of graduate programs."

She decided to pursue computational macroeconomics, eventually producing a dissertation which focused on "Household Need for Liquidity and the Credit Card Debt Puzzle." She had wondered why people would pay high interest rates for borrowed credit on plastic cards while simultaneously having money in the bank. Her research concluded that "having money in the bank provided a lot of security, even if they had to pay high interest rates on their credit borrowings."

"I suppose I was always interested in the culture of consumerism," she says. "It first hit me when I came to the U.S. as a high school student. In Moscow we had the basics but there was not a lot of variety in consumer goods and hence, there was no culture of shopping. Friends, at least in my circle, spent their time chatting over a cup of tea or going for a walk, rather than shopping together–and I think that really could be seen in how people related to each other." Reflecting on the Soviet economy Irina said, "Buying was always more of a chase than a pleasure."

When it came time to look for a job, again focusing on highly rated programs, Irina says she was delighted to join the Department at UCSD. "I came here with a computational macroeconomics profile specializing in household consumer issues. We have a number of superb macroeconomists and we are building a larger and even more powerful department. I am especially happy to be on the recruitment committee," she says.

Asked if she had "stopped being a Russian" after so many years in the U.S., Irina, who is 28 and holds dual citizenships, said, "I will always be Russian, but I've definitely made a big transition, so I am probably a Russian-American and I am definitely interested in having the best of both worlds. I'm very proud of my heritage. I go back to Moscow every year."

An ardent traveler, Irina says she enjoys playing guitar, using her digital camera and is a fan of movies and modern art. She'll be teaching her first graduate and undergraduate courses at UCSD in the winter and is currently working hard, continuing her household consumption and saving research, and wrapping up work on several papers.

Economics in Action is published twice a year by the Department of Economics at UC San Diego.

To be added or deleted from our electronic mailing list, please write to: econonline@econ.ucsd.edu.

General correspondence may also be emailed to: econnews@econ.ucsd.edu or sent to:

Economics in Action
Department of Economics
University of California, San Diego
9500 Gilman Drive # 0508
La Jolla, California 92093-0508

For Sale *continued from page 1*

my prediction ffr the future is that house prices will stabilize, resume a more normal rate of appreciate, or possibly decline modestly. I'm not expecting the crash in house prices predicted by pundits who interpret the recent past as evidence of a speculative bubble.

Our Goals and Values *continued from page 2*

UCSD's economics department has come a long way since I was an undergraduate student here in the mid-1980s. It is gratifying to see that the department's quality and great strengths are more and more being recognized in the rankings. We do face the difficult challenge of trying to increase the number of faculty to keep pace with our rapidly growing undergraduate population, but I look at this as an opportunity to further strengthen the department. In the least, it helps perpetuate the department's lean-and-hungry spirit, which is one reason why UCSD is such an exciting place to be.

Economics RoundTable

The Economics RoundTable presents: **Douglas Holtz-Eakin,** Former Chief Economist of the White House Council of Economic Advisors, speaking on "Five Steps Toward American Competitiveness." During his nearly three years heading the Congressional Budget Office, Holtz-Eakin won a reputation for being fair and candid when discussing tough financial issues. Liberal columnist Mark Shields called him "one of the most intellectually honest men in Washington." And The Washington Post stated "we are sorry to see him go."

In 2005, Holtz-Eakin left Congress to become the Director of the Maurice R. Greenberg Center for Geoeconomic Studies and the Paul A. Volker Chair in International Economics at the Council on Foreign Relations in Washington, DC. In early 2007, he left the Council to serve as the Economic Policy Chair of Senator John McCain's Exploratory Committee.

Join us on **Wednesday, July 18th, 7:30–9:00 a.m**. at the UCSD Faculty Club.

For more information, visit http://econ.ucsd.edu/roundtable/index.shtml or contact Edie Munk at (858) 822-0510, emunk@ucsd.edu or visit http://econ.ucsd.edu/roundtable/index.shtml.

UNIVERSITY OF CALIFORNIA, SAN DIEGO
DEPARTMENT OF ECONOMICS
9500 GILMAN DRIVE # 0508
LA JOLLA, CALIFORNIA 92093-0508

NONPROFIT ORG.
U.S. POSTAGE
PAID
SAN DIEGO, CA
PERMIT NO. 1909