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Accurate data will dictate success

But data collection needs to be inclusive and in the world of Internet options are aplenty



Teh Hooi Ling
 hooiling@sph.com.sg
 Senior Correspondent

In a paper entitled *Real Estate Prices in Beijing, 1644 to 1840*, Prof Susan Wachter of the Wharton School of the University of Pennsylvania and two other colleagues hand-collected from archival sources transaction prices and other house attributes from the 498 surviving house sale contracts for Beijing during the first two centuries of the Qing Dynasty (1644-1840). That was a long period without major wars, political turmoil, or significant institutional change in the Chinese capital.

They found that house prices grew steadily for the first half-century of the Qing Dynasty and declined afterwards in both nominal and real terms through the late eighteenth century. "Nominal prices grew starting in the late eighteenth century and declined from the early nineteenth century through 1840. But these price changes occurred with contemporaneous price changes in basic measures of the cost of living: there was little change in real terms to the end of our period," they concluded.

"Our results for the period 1644 to 1840 are consistent with the findings in Shiller (2005) and Eichholtz (1997), which show no significant price increase (in real estate) in real terms, for 150 years in Shiller and for nearly 350 years in Eichholtz."

At the Singapore Management University (SMU) Sim Kee Boon Institute for Financial Economics' annual conference on financial economics this week, Prof Wachter was asked if such an observation would hold true today and in the future?

"No, there has been a regime change," she said at the conference which tackled the topic *Indices: Theory and Application*.

Real estate prices will trend up over the long term because of the constraint of resources, be it of land or materials, she said. But the biggest restrictions will be those imposed by regulations, said the professor of real estate and finance who is also the distinguished fellow for SMU's Centre for Asset Securitisation.

Prof Wachter is in Singapore together with a panel of distinguished academics and economists for the annual conference.

The conference dealt with the usefulness of indexes, the different ways an index can be constructed, the pros and cons of different methods of index construction, the reliability of indexes, and development in the big data environment, among other things.

A number of interesting points were brought up in the half-day conference. I'd share some of what I found noteworthy.

For an index to be useful, it has to be inclusive, it needs to have integrity, and it has to be publicly available, said Prof Wachter. She gave the example of the housing market in the US. As far back as 2005, the Federal Reserve was already of the opinion that there was a housing bubble, and that prices were 20 per cent higher than they should be.

But what the Fed didn't have was the data on mortgage credits, that credit quality had deteriorated tremendously. Such data was privately owned. Consequently, nothing was done, and the bubble grew bigger. It grew so big that when it burst, it dragged the global financial market very close to the brink.

Data which is critical for public policy should be made publicly available, argued Prof Wachter.

And it is also her view that real estate price indexes should be publicly traded to allow the hedging of real estate positions. Real estate, she noted, is the single biggest investment for the average person. There should be a way to "short" or hedge these investments. Currently, the only real estate index which can be publicly traded in the US is the Case-Shiller Index on the CME. Sub-indices exist for a handful of cities. But the index was very thinly traded. On April 30, the total trading volume in all real estate-related futures was eight, for all 11 contracts combined, noted Prof Wachter.

I'm not sure if I agree with this view, though.

The availability of such instruments may encourage short-term trading of real estate, which may be detrimental to the average person. Our experience in at least the last two or three generations is that held over a long time, real estate tends to be a good store of value.

Shorting to prevent bubble

Another argument is that the ability to short the real estate will prevent a bubble from forming. Real estate bubbles matter because it is not just optimists who will go away in the bust, but the entire financial system since the financial sector has large exposure to real estate market and the underwriting is based on estimated market value, she said.

In the stock market, shorting is freely available. But that does not stop bubbles from forming. What shorting does is to exacerbate the decline when the bubble bursts, creating greater volatility and chaos in the market.

Perhaps there should be an index created to track how much shorting is allowed at any point in time on a systemic basis. The higher the market goes in a relatively



BUILDING OF US HOUSING BUBBLE

The US Fed knew way back in 2005 there was a housing bubble but it didn't have the data on mortgage credits, which was privately owned. PHOTO: REUTERS

short time, the bigger the amount of shorts are allowed to be put in place. But the faster the market declines, the more shorts will have to be unwound, and no new short positions can be initiated. That would act as a stabilising force in the market!

In any case, Prof Wachter pointed out that the US housing market has risen by 10 per cent compared with a year ago. But the commercial real estate market recovered much faster than the housing market. The "unsung hero" in this sector, she said, is real estate investment trusts or REITs which have enabled the continuous pricing of the commercial real estate assets.

On the topic of integrity of indexes, Prof Deng Yongheng, Provost's Chair professor and director of Institute of Real Estate studies at National University of Singapore, shared how the real estate indexes in China could be manipulated. The story goes that at one point, the central government said the real estate market was overheating. And the directive was given from the central government to the mayors of various cities to cool the market. What the mayors then did was to give instructions to the real estate developers in the respective cities that "only low-cost housing can be sold in the coming month". When the index was compiled the following month, obviously it showed that prices had come down.

Prof Deng said there is a big discrepancy between the official Chinese real estate numbers and those compiled by his department. His numbers outpaced the official numbers by a big margin.

Meanwhile, Prof Claes Fornell of University of Michigan and founder and chairman of the American Customer Satisfaction Index (ACSI) said he had set up a fund in 2000 to long companies with good customer satisfaction and short those with poor customer satisfaction.

The premise is that firms with satisfied customers do better and that customers (in the aggregate) have value-relevant information that investors don't have. His ACSI Fund, he said, chalked up 16.8 per cent return a year in the past 10 years. The abnormal returns of the stocks are largely channelled via earnings surprises, he surmised.

Finally, Fabien Curto Millet, senior economist at Google, gave a fascinating peek into what kind of data can be collected by the most used search engine.

We are in a golden age for data and index building online, given the vast number of people who have Internet access today, he said. Data which is ancillary to transactions, for example prices; data that is a by-product of online interactions, for example search queries; and fresh data collection for index-building, for example consumer surveys – can all be collected efficiently and accurately online.

For example, Google has calculated its own Personal Consumption Expenditure Price Index (PCEPI) based on the prices of different categories of goods and services listed on the various websites.

Era of data abundance

And, based on the frequency of searches done on the word "hangover" – the most was on Sunday – Google concluded that many people get drunk on Saturday night more than any other nights of the week. And incidentally, searches for "vodka" was highest on Saturdays.

Based on the types of search words, Google can also estimate, for example, unemployment rates or consumer sentiment.

Finally, for fresh data collection for index building, survey questions can be inserted, say, in a news website. In order for a reader to continue reading an article, he or she will have to complete the survey. If there are more male respondents than female respondents, then more of such surveys can be inserted into websites which have more female visitors.

In last year's US presidential election, Google's consumer survey of the election results was ranked the second most accurate, behind the IDB/TIPP poll.

So yes, we are in an era of data abundance. But Dr Millet reminded the audience of a quote by Herbert Simon, an American political scientist, economist, sociologist and psychologist.

Prof Simon, who passed away in 2001 had written in 1971 that: "... in an information-rich world ... a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information sources that might consume it".

Indeed, the ability to focus on the relevant information and accurately analyse it will increasingly be the key to success in our ever competitive world.

The writer is a CFA charterholder