

Side Door To Profit As Tech Booms

INVESTING

KATIE BENNER

SAN FRANCISCO — Airbnb's valuation has ballooned as large financial firms like Fidelity Investments have rushed to invest in the start-up. But a small hedge fund called Pier 88 Investment Partners has decided that the fervor for Airbnb shares creates a different kind of opportunity.

While other investors paid dearly to buy a piece of Airbnb — valued at \$24 billion — Pier 88 put money into HomeAway, a publicly traded vacation rental company that competes with Airbnb but has a market capitalization of just \$2.95 billion.

Frank Timons and LeAnne Schweitzer, the co-founders of Pier 88, believe there is money to be made on this big gap between public and private company valuations. In their view, the public companies are such relative bargains that they will make great acquisitions for purchasers who want to compete with upstarts like Airbnb. When those publicly traded companies are snapped up, Pier 88 can profit from the bet. "People think there's something inherently wrong with public assets because they're cheaper," Mr. Timons said. "But if I'm buying decent assets at a relative discount to the private marketplace, the risk-reward is probably in my favor."

Pier 88 is an example of how some investors are trying to take advantage of the current start-up boom without directly investing in the start-ups themselves. While venture capitalists and large investors like BlackRock and Tiger Global have the deep pockets and connections to buy into start-ups, other investors have neither the capital nor contacts to get a chunk of companies like Airbnb, Uber and Snapchat. As a result, they are coming up with roundabout ways to get a piece of the action.

For Pier 88, the growing valuation gap between start-up and publicly traded companies makes some stocks seem like better bargains for buyers, and there is an increasing number of such disparities to bet on. So much money has been poured into fast-growing start-ups that there is a herd of "unicorns," privately held companies valued at

Betting on unicorns' publicly traded competitors.

more than \$1 billion.

Some of these elite start-ups are vastly more expensive than their publicly traded cousins. The ride-hailing start-up Uber is valued around \$51 billion, compared with \$7.3 billion for the rental-car company Hertz. The storage start-up Dropbox has a valuation of around \$10 billion, while its publicly traded rival Box has a \$1.9 billion market capitalization.

It's not perfectly accurate to compare market capitalization and private company valuations, since private companies keep their financial pictures hidden. Still, "the easy private financing environment has created an interesting trade opportunity," said Kenneth J. Heinz of Hedge Fund Research, which tracks hedge funds. "With such a disparity between public and private multiples, it's a reasonable fundamental approach to believe that in this environment, the public company valuation will come up or the company will be acquired."

The last time so many private companies were more expensive than their public company counterparts was in the late-1990s dot-com bubble, said David Walrod, who sits on Pier 88's board. After that bubble turned into a bust, investors placed more value on the fact that publicly traded shares are easy to sell and the companies disclose financial information.

Mr. Walrod added that he was not as worried about the big valuation gaps this time around because the new boom is spurred by structural factors like low interest rates and lots of venture money, and many unicorn companies have legitimate businesses.

In the 22 months that Pier 88 has been in business, seven companies it has invested in have been acquired. And Pier 88 returned 8.9 percent in the first six months of the year, according to the firm.

In addition to HomeAway, Pier 88 has shares of companies like Pandora, the online radio company whose \$3.8 billion market capitalization is less than half that of privately held Spotify.

"These companies aren't perfectly analogous with their private counterparts, but we're looking at neighborhoods to find assets that could be useful to lots of different companies," Mr. Timons said.

Risks of a \$15 Minimum Wage

WORKING

NOAM SCHEIBER

As the campaign for a \$15 minimum wage has gained strength, even supporters have wondered how high the wage floor can rise before it reduces employment and hurts the economy.

The recent recommendation of a wage board in New York State to establish a \$15-an-hour minimum wage for workers at fast-food chains provided a case in point. Paying fast-food workers more in New York City, with its relatively high wages and high cost of living, is one thing. But mandating wages that high in less economically vibrant cities like Utica and Binghamton may be quite another.

Economists can gauge the likely impact of minimum-wage increases: the ratio of the minimum wage to the wage of workers in the middle of the income distribution, known as the median wage. The higher the ratio of the minimum to the median, the greater the boost to workers. But the higher that ratio, the greater risk of job losses.

Where is the point at which job loss risk exceeds the benefit to workers? There is some evidence that cities and states have managed to absorb increases when the minimum wage is about 50 percent of the median. But economists have few historical examples of increases that go beyond 60 percent. And some economists worry that a mini-



EMILY BERL FOR THE NEW YORK TIMES
LOW-PAYING A McDonald's in the Los Angeles area, where the median wage is relatively low.

mum wage in that 60 percent range or higher could produce job losses.

"We don't know at what point that kicks in," said Michael Reich, a professor of economics at the University of California, Berkeley. "We know that hasn't happened at 50 percent or 55 percent." (Other minimum-wage scholars, like David Neumark of the University of California, Irvine, believe this happens much sooner.)

Mr. Reich said that a handful of affluent European countries had or would soon have minimum-to-median ratios in the 50s and low 60s and did not appear to show many ill effects. (Some, like France, have

significantly higher unemployment rates than the United States, but others, like Germany, do not.)

With that in mind, I calculated what the minimum-to-median ratio for 25 cities would be if the minimum wage were to rise to \$15 an hour in 2020. The exercise revealed a fair amount about the ability of each city to withstand a \$15-an-hour minimum wage.

Some of the results are what you'd expect: The San Francisco area has the highest current median wage on our list (\$25.27), and in 2020 would have a resilient minimum-to-median ratio of 0.47, assuming 2 percent annual growth of the median wage in the interim. Washington at 0.49, Boston at 0.50, Seattle at 0.54 and New York at 0.55 would round out the top metro areas that could sustain a \$15-an-hour minimum wage without much fallout.

But some of the other numbers are worrying. For example, Los Angeles may have more trouble handling the change. The city's current median wage is relatively low — \$18.32 in the metro area versus \$21.73 in New York and \$24.58 in Washington — leading to an estimated minimum-to-median ratio of 0.65 in 2020. This would put it behind Minneapolis (0.61), Philadelphia (0.63) and Detroit (0.64), and in line with Chicago (0.66).

Granted, there are other reasons to believe that Los Angeles will be able to weather its minimum-wage increase better than less glamorous cities. For one, businesses in cities

with a lot of transient customers, like tourists and business travelers, may have an easier time increasing prices to offset minimum-wage increases.

A handful of cities appears to be distinctly ill-equipped for a \$15-an-hour minimum. Wages are so low that \$15 is fairly close to the median wage there. The minimum-to-median ratio in Las Vegas and New Orleans comes to 0.75 and 0.76. Oklahoma City would come to 0.75. Miami has a minimum-to-median ratio at a staggering 0.8.

The wide variation in minimum-to-median ratios does seem to recommend some variation when raising the minimum wage. A number of the cities that have recently passed minimum-wage laws — like Albuquerque, Louisville and Portland, Me. — have stopped far short of \$15 an hour.

Still, as a general rule, this list is filled with prosperous cities — places it might make sense to single out with high-impact minimum-wage increases. It's their affluence that fuels the demand for low-wage jobs, exacerbating inequality.

"The demand is essentially either driven by higher-income consumers in that area, or by tourism," said Arindrajit Dube, an associate professor of economics at the University of Massachusetts, Amherst. These are the very people, he added, who can afford to subsidize a higher minimum wage by paying more at restaurants and clothing stores.

Diving Headfirst Into the Internet of Things

TECHNOLOGY

ERIC A. TAUB

Just because you can do something, does it mean you should?

That question may come to mind when considering the Internet of Things — the idea that one day, products of virtually all kinds will be connected to the Internet and integrated. Many of us take for granted simple things that Internet-connected devices can do, like starting a car from inside the house and turning off air-conditioning with a smartphone app.

Device makers are expanding their imaginations. It remains to be seen whether these devices, and the myriad others coming our way, will become commonplace or simply represent a passing fancy.

PicoBrew Zymatic, \$2,000

The PicoBrew — a 50-pound brewing unit and separate metal keg — largely automates the beer-making process. To use the unit, you connect it to the Internet and then choose one of the more than 100 recipes available to download. You load the unit with the amounts of barley, hops and water called for. From there, the PicoBrew's technology takes over, choosing the proper brewing time and temperature.

You can monitor the temperature of the brew and of the unit on the company's website. You can also come up with your own recipe and share it with others — bringing a new social aspect to having a beer.

Sengled Boost, \$50 to \$60

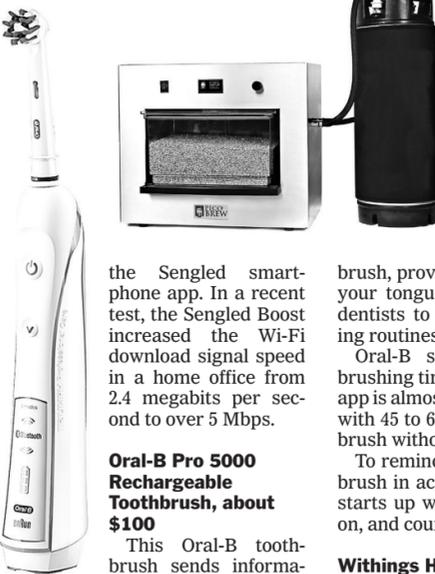
Wi-Fi signals are often unable to reach where you most want them. The signal can be amplified by adding a range extender, typically in an ugly box.

Sengled offers another option, combining a Wi-Fi range extender with an LED light bulb. The three options for the light are one that looks like a standard incandescent bulb similar in brightness to a 40-watt bulb (\$50), a recessed lamp with the brightness of about 60 watts (\$60), and a larger model that is similar in brightness to a 75-watt recessed lamp (\$60).

You can control the lights with



CLOCKWISE FROM ABOVE, TOBIAS SCHWARZ/AGENCE FRANCE-PRESSE — GETTY IMAGES; DAVID ROSE; ORAL-B



NEW PRODUCTS

The Withings Home is more than a surveillance camera. The PicoBrew Zymatic brews beer. The Oral-B Pro 5000 helps you brush more.

the Sengled smartphone app. In a recent test, the Sengled Boost increased the Wi-Fi download signal speed in a home office from 2.4 megabits per second to over 5 Mbps.

Oral-B Pro 5000 Rechargeable Toothbrush, about \$100

This Oral-B toothbrush sends information to a smartphone app to help you brush for the recommended length of time, and in all the right ways. The device is connected to the app with Bluetooth. The app points out the best ways to

brush, provides reminders to brush your tongue and floss, and allows dentists to enter additional brushing routines.

Oral-B says that the average brushing time for those who use the app is almost 2.5 minutes, compared with 45 to 60 seconds for those who brush without it.

To remind you to keep the digital brush in action, a timer on the app starts up when you turn the brush on, and counts down the seconds.

Withings Home, \$200

Many home monitoring systems upload video to the Internet. But Withings, the maker of Internet-connected health care products such as scales, has come up with a multifeature approach. In addi-

tion to standard video surveillance, Home detects motion, sounds, air quality and, eventually, it can recognize babies' cries and faces. If chemicals emitted from things like cleaning products and nail polish remover reach a dangerous level, the app sends out an alert to open the window.

Home records the last 48 hours of movement in time-lapse mode. Motion and video playback are accessible via its app.

Quirky + GE Aros Smart Window Air-Conditioner, \$200

The Aros connects via Wi-Fi to Wink, an app that controls other connected home products from companies like General Electric, Philips and Nest, among others.

Using GPS, the Aros knows when you're home and when you're away, turning the unit on and off to save energy and get your room comfortable before you arrive. Set your monthly electricity budget on the app, and it will suggest temperature and power-on times to fit. It also tracks energy use over time, so you can adjust the air-conditioner's temperature to save money.

A Budget Should Reflect Your Values

SKETCH GUY

CARL RICHARDS

A friend recently shared the process he and his wife use in place of traditional budgeting. It takes them less than 15 minutes a month, and it's had a massive impact on the way they use money. Think of this as a case study, one that shows how easy it can be to align your spending with what you say is important to you.

First, they started by tracking their spending. Write down a simple list of all your monthly spending. You might even use budgeting software or a spreadsheet. It doesn't matter.

Second, they asked three questions for each transaction:

1. Does this expense align with our values?
2. What value does it align with?
3. Is there a substitute that might

cost less?

As they went down the list of transactions, they answered the first question with a "yes" or "no." I find the physical act of writing yes or no makes the intangible nature of money a bit more real.

The second question challenged them to define what they valued and why. This conversation was eye-opening and helped them better understand each other's buying decisions.

The third question represented a shortcut to finding a "third way." Asking what they could substitute offered a better way forward.

My friend shared a great example of the process with me. He has a close friend who always seemed to be experiencing hard times and never had any money. Every time they got together, they went out to eat. No surprise, my friend always

paid. After looking back at their expenses over the years, my friend and his wife discovered that those meals were costing them about \$70 a month.

My friend made the case that buying those meals aligned with their values. Then they moved to question 2 and explored what value it was aligned with.

"I just want to be there for him," said my friend. "He's there for me. There's value in that relationship."

Notice that the value he expressed — spending time with someone — had nothing to do with spending money, let alone \$70.

With the third question, my friend and his wife found a third way. Both men loved to hike and mountain bike, so they decided that instead of meeting for a meal, they would find an activity to do together that didn't cost money, or at least cost



CARL RICHARDS

less than \$70.

By exploring what was actually valuable about the experiences with his friend, they found a better way to honor that value.

But they didn't stop there. They immediately went to their automated investment account and increased their monthly savings by \$70. At the end of our conversation, my friend made it clear that they were fired up to see how much they could find next month. And it took them all of 15 minutes.

Track your spending, ask the questions, and when you find the savings, do everything you can to automate the best behavior possible.