### **Spending Well**

AUGUST 6-7, 2016 Copyright © 2016 The New York Times

#### **Talking Points**



**Their Salary History** Won't Follow Them ...

In an effort to close the wage gap between men and women, Massachusetts has become the first state to bar employers from asking about applicants' salaries before offering them a job. The new law will require hiring managers to state a compensation figure upfront — based on what an applicant's worth is to the company, rather than on what he or she made in a previous position. The law is being pushed as a model for other states.

#### ... But Work May Never End

Between May 2000 and May 2016, the percentage of people over age 65 who were still working grew from 12.8 to 18.8, according to a Pew Research Center analysis. The trend holds across several higher-age brackets too. Employment rose not only among 65- to 69-year olds (close to a third now work), but also among those 70 to 74 (about a fifth). In the 75-plus population, the proportion still working increased to 8.4 percent from 5.4 percent.

#### More Than a Video Stunt

Two summers ago, the Ice Bucket Challenge raised over \$115 million money for research into amyotrophic lateral sclerosis, also known as Lou Gehrig's disease. The money



research and development of treatment drugs and has been used to entice people to design technology for those with the

disease. In a recent development, it contributed to research leading to the discovery of one of the most common genes that contribute to A.L.S.

#### The Start-Ups of the East

Silicon Valley has long been the world's tech capital, but China's tech industry — particularly its mobile businesses - has in some ways pulled ahead, and Western companies are looking there for

ideas Already more people in China use their mobile devices to pay their bills, order services, watch videos and find dates than



anywhere else in the world. Mobile payments in the country surpassed those in the United States last year, and by some estimates, loans from informal online banks called peer-topeer lenders did too.

# Solar's Struggle to Pay for Itself

**TECHNOLOGY** 

DIANE CARDWELL

Changing rate structures mean an alternative power is less profitable.

LAFAYETTE, Calif. — Two years ago Elroy Holtmann spent about \$20,000 on a home solar array to help cover the costs of charging his new electric car. With the savings on his electric bills, he figured the investment would pay for itself in about a dozen years.

But then the utilities regulators changed the equation.

Pacific Gas & Electric did away with the rate schedule chosen by Mr. Holtmann, a retired electrical engineer, and many other solar customers in this part of California. The new schedule will make them pay more for the electricity they draw from the grid in the evening, while paying less for the excess power they send to the grid on sunny summer days.

As a result, Mr. Holtmann's solar setup may never pay for itself.

"They've taken any possibility for payback away," he said.

The paradox is playing out around the country. Even as policy makers at the federal and state levels promote clean energy to fight global warming, the economics of electricity can often be at odds with those goals.

Thrust in the middle are utility regulators. Even if they support greening the grid, the regulators are also responsible for ensuring the utilities can afford to supply power to the largest number of customers at the most equitable rates. That includes people without the money or inclination to install solar collectors.

"The grid is no longer just a cheap way to get electrical commodities to people," said Michael Picker, president of the California Public Utilities Commission. "People want choices, they want customized services."

For more than a century, the public utility rate system assumed a oneway flow of electricity from central power plants to customers. The role of utility regulators was to adjudicate reasonable rates for the consumer, while allowing an adequate rate of return for the power companies. But even though rooftop solar energy still accounts for less than half of a percent of the energy generated across the country, its growing popularity is challenging regulators and utilities to rethink their old ways.

Last year, Nevada and Hawaii moved to end retail-rate credits awarded to solar owners for energy sent back into the grid. In Arizona, a utility won the right to make solar customers pay mandatory monthly fees called demand charges, which have been common among large commercial and industrial customers but unusual for residential consumers

During the first quarter of this year alone, at least 10 states were weighing or approving rate design





POWER MOVES Elroy Holtmann figures he will not recoup the \$20,000 he spent to install solar panels on his home to charge his electric Chevy Volt.

measures that could undermine the economic appeal of home solar systems, according to data compiled by the North Carolina Clean Energy Technology Center.

The challenge is to design a new rate system — one that accurately values electricity that can now flow in different directions and at different volumes at different times of day.

"This is really about a revolution in the relationship between utilities and customers," said Adam Browning, executive director of Vote Solar, a policy and advocacy group based in California. "It's not just going to be about solar, but solar is forcing the regulatory construct to accommodate this."

Energy experts predict a bumpy transition. Nowhere has the rate wrangling been more urgent than in California, the nation's leading solar

market. In 2001, in response to soaring prices, electricity shortages and financial instability among the utilities, California lawmakers approved a multi-tier residential rate structure meant to encourage customers to use less power, with the largest consumers paying the highest rates.

But regulators also froze rates in the two lowest-priced tiers, covering a majority of residential users, to shield those customers from rising energy costs. That meant the brunt of utility costs were borne by the higher-use groups. Mr. Holtmann was occasionally among the highest users during the summer, so he was happy to save money, while doing something to reduce harm to the environment.

Not long after moving into his house in 1973, he installed a solar water heater. The first set of solar panels went on the roof around 2008. That slashed his annual electric bill to \$78 from about \$1,300. But the bill shot up again after he bought the new car, a Chevy Volt electric hybrid, so he bought a second set of panels in 2014.

The rate schedule Mr. Holtmann chose was based on PG&E's longstanding assumption that the highest demand for the utility's electricity was occurring between noon and 6 p.m. But now, because there is so much solar energy pouring into the grid from morning through late afternoon, the utility's peak demand comes closer to the evening, when the solar supply drops.

Thus the new rate schedules. The new rate plan shifted the peak times to later in the day — either 3 to 8 p.m., or 4 to 9 p.m. — when solar arrays are less productive. That change provoked so many

customer complaints that the California Public Utilities Commission directed PG&E to delay it - but only until 2022. Mr. Holtmann said he was not

yet sure how his annual electric bill would change. But the one certainty, he says, is that he will end up spending much more.

Mr. Picker, the utilities commissioner, defended the new structure, saying it was more in line with the evolving needs of the grid and the overall customer base.

For solar customers, he said, "there was no guarantee that the rates were going to stay the same as the world changed."

Mr. Holtmann said he felt misled. He installed his panels "with the understanding that the rules were going to be the rules," he said. "Then they changed the rules."

## Portfolio Managers Say Emerging Markets Are Still Worthy

**INVESTING** TIM GRAY

Over the last five years, investors in emerging-markets mutual funds have paid plenty and gotten little in return. Emerging-markets funds lost an annualized average of 3.19 percent, Morningstar said. Yet they are far more expensive, on average, than actively managed domestic large-cap funds, which returned about 10 percent a year annualized for the same period. Expense ratios for actively managed emerging-market funds were 1.55 percent, compared with 1.15 percent for domestic large-caps.

Investors have responded by fleeing emerging markets. In June, the British referendum to leave the Eu-

ropean Union roiled markets worldwide. MSCI's Emerging Markets Index fell as much as the British-focused FTSE 100 in the days just after the vote. It was an additional bedevilment for emerging markets already made skittish by slower growth in China and a political crisis in Brazil. On top of that, low prices for commodities, especially oil, sapped stock markets in places like Russia, South America and the Middle East.

"In terms of history, the last couple of years isn't remarkable," said James F. Syme, senior fund manager of the JOHCM Emerging Markets Opportunities Fund. "Emerging markets is a riskier asset class, so the booms and busts are bigger."

Today's economic challenges are real but manageable, said Joanne

C. Irvine, a portfolio manager for the Aberdeen Emerging Markets Fund. "Global growth has been very weak, and that's led to weak emerging-market exports," she said.

Many emerging countries remain healthier than developed ones, with higher growth rates and lower debt levels, she said. The emerging-markets sector is split by the debate over active management versus indexing just as every sector is. Much of the discussion comes down to costs: It's usually cheaper to run an index fund than an active one, and costs eat away at investors' bottom line. The average emerging-markets index fund carries an expense ratio of 0.52 percent, compared with the 1.55 percent charge levied by the average actively managed emerging-markets fund, according to Morningstar.

Some of the better-known index funds levy even lower fees. The Vanguard Emerging Markets stock index fund charges 0.33 percent for its investor shares, while BlackRock's iShares Core MSCI Emerging Markets E.T.F. charges 0.16 percent.

For the most part, the higher costs for active management haven't translated into better performance, said Todd L. Rosenbluth, director of E.T.F. and mutual fund research for S&P Global Market Intelligence. Just as portfolio managers damp risk by diversifying, individual investors can do the same with their personal portfolios. Patricia Oey of Morningstar said holding 10 percent of a stock portfolio would make sense for a long-term investor. A person with 60 percent of her money in stocks would then put 6

percent in emerging markets. Campbell R. Harvey, a finance professor at Duke University, said he saw 10 percent as a floor, not a ceiling. In a 2014 paper, professors Harvey and Geert Bekaert of Columbia University noted that emerging markets account for about 30 percent of world G.D.P.

Whatever else investors do, they should guard against the tendency to dump their holdings based on recent discouraging news or weak returns, Professor Harvey said. "Just because emerging-markets equity has had low returns recently does not mean you should sell. One-third of world G.D.P. is being driven by emerging-market economies, and it makes sense that a globally diversified portfolio should have exposure to them."



You've worked, sweated, and sacrificed. You've made good on a few of life's dreams. Our team will honor this lifelong effort with the same level of dedication—and the same work ethic—that it took to realize your dreams.



PROTECTING DREAMS | First Advisors Investment Management. Retirement Planning. Trust Services

firstadvisorsonline.com | 866-563-1900