

## U.S. NEWS

THE NUMBERS | By Jo Craven McGinty

## Saving Sunshine, Energy Not So Much



The state of Hawaii has never observed daylight-saving time. Arizona tried it and rejected it. Utah and Nebraska have considered dropping it. And this year, Vladimir Putin abolished the practice in Russia.

Meanwhile, one Alabama state senator likes the time change so much, he wants to stick with it year round.

The historic reason for observing daylight-saving time—which ends at 2 a.m. Sunday when clocks revert to standard time—is to conserve energy, by pushing sunlight forward into the evening, reducing the need for electric lights.

The U.S. government has found the strategy works. But two academic studies published in peer-reviewed journals rebut the idea, and one even concludes the policy increases demand for electricity.

The most recent government research, by the Energy Department, tested whether expanding daylight-saving time by four weeks in 2007 cut electricity use. The study examined the extra weeks of daylight-saving time using data provided by 67 utilities accounting for two-thirds of U.S. electricity consumption. It compared average daily use in 2006, when there was no daylight saving, with the same period in 2007, when the extension took effect, and found a drop in electricity use of 0.5% in the

spring and 0.38% in the fall.

Hendrik Wolff, an economics professor at the University of Washington whom the Energy Department consulted, said the analysis lacked a scientific control area, making it impossible to determine whether the changes were caused by daylight-saving time or other conditions. “We don’t know how the U.S. would have behaved without the daylight-saving time extension,” Mr. Wolff said.

The academic studies, including one by Mr. Wolff, took advantage of serendipitous circumstances. In Mr. Wolff’s study, two states in Australia started daylight-saving two months earlier than usual for one year to accommodate the 2000 Sydney Olympic Games.

“When we started, we wondered how can we isolate the effect of daylight-saving time from any other legislation that changes potential electrical demand,” Mr. Wolff said. “When the Bush administration extended daylight-saving time, there were many hundreds of other legislations concerning energy efficiency changes. How do you disentangle it?”

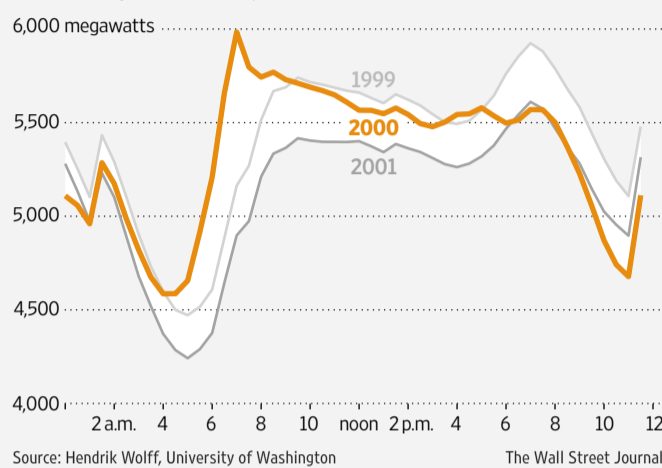
Australia, he said, offered a nearly perfect opportunity.

To control for any influence the Olympics had, the researchers excluded the two-week period of the games from their study. Using half-hourly data of electrical use, they examined the state of Victoria, which like New South Wales extended daylight-saving time, but didn’t host the games. As a

## Daylight Dilemma

Two states in Australia started daylight-saving time two months earlier than usual for one year to facilitate the 2000 Olympic Games in Sydney. Researchers found energy use declined in the evening, but increased in the morning, eliminating savings overall.

Average daily electricity use in Victoria, Australia, during the same two-month period of each year:



Source: Hendrik Wolff, University of Washington

The Wall Street Journal

control, they used neighboring South Australia, which didn’t extend daylight-saving time, and they compared electricity consumption in each of the two states over a seven-year period, from 1999 through 2005.

The study looked at differences between states, comparing use in Victoria’s electricity consumption with South Australia’s. It examined differences across time, comparing consumption during the period daylight saving was extended with consumption during the same period in different years. And it analyzed daily differ-

ences, comparing morning and evening consumption, when daylight-saving time is expected to have an effect, with use in the middle of the day, when no effect is anticipated.

The study, published in *Journal of Environmental Economics and Management*, found electricity use decreased in the evening but rose in the morning, resulting in no overall reductions in consumption.

“We can reject the hypothesis that there are electricity savings,” Mr. Wolff said. The report said the findings could carry over to the U.S., particu-

larly in California, whose climate resembles Victoria’s.

Similar circumstances arose when Indiana adopted daylight-saving time statewide for the first time in 2006. Previously, only 15 of its 92 counties had observed the practice.

The unusual situation allowed Matthew Kotchen, an economics professor at Yale, to examine electricity use before and after the policy changed, and compare a treatment group—counties changing time for the first time—with a control group—those that had observed daylight-saving before.

“The change in Indiana wasn’t just a change in the start of daylight-saving time,” Mr. Kotchen said. “It was a place that never had it before.”

The study, published in the *Review of Economics and Statistics*, used residential data only. Rather than saving electricity, the study found that daylight-saving increased demand. Conditions may differ in other parts of the country, but researchers said that Indiana is representative of much of the nation.

That doesn’t mean daylight-saving has never worked since its introduction during World War I. But, said Mr. Kotchen, “the world has changed. Lighting is a small amount of energy and electricity use in households. The big things are heating and cooling ... We’re fooling ourselves to continue calling it an energy policy given the studies that show it doesn’t save energy.”

## A Pickup In Wages; A Hiccup In Spending

BY BEN LEUBSDORF  
AND JOSH MITCHELL

Workers are starting to see a little spring in their paychecks and benefits, which have sagged since the recession ended more than five years ago.

U.S. employers’ compensation costs grew in the second and third quarters at their fastest pace since 2008, the Labor Department said Friday, a sign—though still tentative and not reflected in the latest consumer-spending data—that falling unemployment and steady economic growth may be generating a long-awaited acceleration in worker pay.

“Our expectation has been that it should show up any day now, and this might be the beginning of it,” PNC Financial Services Group’s Gus Faucher said.

The employment-cost index, a broad gauge of wages and benefits, rose by a seasonally adjusted 0.7% in the third quarter, Friday’s report said. That matched its pace in the second quarter and beat the postrecession quarterly average of 0.5%.

In theory, as unemployment falls and workers become more scarce, employers ought to be willing to pay more for talent. But average hourly earnings for private-sector workers have grown at a sluggish 2% annual pace since the end of 2009, with no sign of acceleration in recent months, according to Labor Department data. Growth in inflation-adjusted disposable personal income has been largely flat this year, according to the Commerce Department.

The weak wage growth is showing in how U.S. workers are spending their money. Consumers reduced their spending in September for the first time since January, the Commerce Department said Friday.

But September’s 0.2% drop may be a blip rather than an ominous sign ahead of the holiday shopping season. Falling gasoline prices should add to Americans’ purchasing power in coming months. And Friday’s reported drop in spending came after a healthy 0.5% gain in August.

“The general pattern of buying is splurge and then pullback,” IHS Global Insight economist Chris G. Christopher Jr. said.

Indeed, the September drop in spending reflected a big decline in purchases of durable goods, long-lasting items like cars and refrigerators. Spending in that category, adjusted for inflation, posted the biggest one-month drop since September 2009. Meanwhile, the share of incomes that Americans put away in savings clicked up to match the highest level since December 2012.

Most economists expect consumers to pick up spending in the final months of the year. But those forecasts rely partly on employers continuing to hire steadily and households maintaining an optimistic outlook.

There are green shoots on the wage front. The Labor De-

## Faith in Bible Led Man to North Korea Prison

BY FELICIA SCHWARTZ

MIAMISBURG, Ohio—The plan was always to leave behind a copy of the Bible, in the hope it would find its way to someone in North Korea who needed its inspiration.

Jeffrey Fowle, a 56-year-old road-maintenance worker and father of three from Ohio, had done the same thing once before in a communist country, he said in an interview on Friday at his lawyer’s office in Lebanon, Ohio, with his wife and children at his side. That was in Turkmenistan, in 1989.

When he was planning a trip to North Korea in the spring, he went on Amazon.com to buy Korean language books so he could pick up a few key phrases before the trip.

He also purchased a Korean-English study Bible, which he said he planned to leave behind so that a member of North Korea’s underground Christian community would find it.

“It’s only one Bible, but I thought I’d put that in the hands of the underground church to give them something to pass around and help them with their faith,” Mr. Fowle said.

Mr. Fowle discussed his plans to travel to North Korea with

members of Bethel Baptist Church before he left, and they expressed concerns about the trip, said Jim Shihady, the pastor. Some told Mr. Fowle that little could be done to improve life in such a strict dictatorship.

Mr. Fowle said he didn’t tell anyone of his plans to leave the Bible behind, including his wife or members of the two churches he attends.

When he arrived in North Korea, Mr. Fowle knew it was a “closed” and “hard-line” country. His experience there didn’t change that view, but the chance to meet average citizens softened his view of them, who he said simply wanted to live “peaceful, prosperous” lives.

Traveling on a group train tour of the country that included stops on the country’s east and west coasts, Mr. Fowle chose to leave the Bible behind on one of the tour’s last stops, at the Seamen’s Club in Chongjin, North Korea. There, he thought, it wouldn’t be noticed by strict North Korean authorities, as the club was located away from the hotel he was staying in and away from security.

“I thought it would be under less scrutiny there,” he said.

With time running out at the club, Mr. Fowle went into the

bathroom to leave the Bible behind.

“I was kind of panicking,” he said, describing how he placed it under a trash bin and covered it with a piece of paper.

He realized that this would make it impossible for him to say later that he left it behind by mistake.

He was arrested and faced charges for committing “hostile acts” against the country, but the charges were never formally filed and he never faced trial. He admitted guilt and requested forgiveness.

Mr. Fowle was released last week after nearly six months in captivity, returning home to his wife Tatyana and three children—Alex, 13, Stephanie, 9, and Chris, 11. He missed all of their birthdays while he was in North Korea.

Mr. Fowle considers himself deeply religious, and said he goes to church every day. In addition to Bethel Baptist Church in West Carrollton, he attends Urbancrest Baptist Church in Lebanon, where his lawyer, Timothy Tepe, also is a member.

In 1980, he underwent a religious awakening that stirred his faith and ultimately led to his decision to leave a Bible in North Korea.



Jeffrey Fowle in Lebanon, Ohio, on Friday.

Andy Snow for The Wall Street Journal