

# THE WEEK

## WORD ON THE STREET: BEN ZIMMER

### The Bubble For 'Bubble' Shows No End



**PRESIDENT OBAMA** has gone on an anti-bubble offensive. In a series of speeches earlier this month, Obama warned of duplicating policies that led to the housing bubble and its inevitable burst. He said he wants a Fed chairman who "makes sure that we're not seeing artificial bubbles in place," and the next day he spoke of the need to "turn the page on the bubble-and-bust mentality."

Jeremiads against financial "bubbles"—speculative schemes that inflate equity prices before a sudden selloff—have been commonplace for nearly three centuries. The "bubble" metaphor is often attributed to Jonathan Swift, who wrote a poem in December 1720 about the South Sea Bubble, which ruined British investors in the South Sea Company: "The nation then too late will find,/ Computing all their cost and trouble,/ Directors' promises but wind,/ South Sea at best a mighty bubble."

A stroll through historical newspaper databases, however, reveals that complaints about "bubbles" filled London journals for a year before Swift penned his verse. The South Sea Company, which had been granted a monopoly on commerce with Spain's South American colonies, wasn't the only source of bubble-bursting. Months earlier, the French economy had been thrown into chaos by the Mississippi Scheme of Scottish economist John Law, who had become France's controller-general of finances.

### 'Hubble bubble' and when old is new again.

On Dec. 12, 1719, Nathaniel Mist's Weekly Journal published a letter from a correspondent calling himself "Anti Bubble." After satirizing financial intrigues as "new and old bubble," and even "hubble bubble," he inquires, "Now, good Mr. Journalist, tell us, since Bubbles are so much in Fashion, what Bubble will come upon the Stage next? And how must an honest Man do among them all, that he may not be bubbled out of his Money?"

Who was the mysterious "Anti Bubble"? All signs point to Swift's literary colleague Daniel Defoe, who wrote for Mist's newspaper under various pen names. Ross B. Emmett, a professor of political economy at Michigan State University and compiler of the three-volume work, "Great Bubbles," told me that Defoe's weekly contributions were "full of concocted stories" about entrepreneurs manipulating the stock market based on false pretenses. But soon Defoe's "bubble" talk came to be applied to the real-life schemes of the Mississippi and South Sea trading companies.

It helped that "bubble" was in use as a verb meaning "to cheat." For investors bamboozled by promises of great wealth, the noun "bubble" was a perfect fit. As Charles Mackay wrote in his 1841 classic, "Extraordinary Popular Delusions and the Madness of Crowds," the "bubble" nickname was "the most appropriate that imagination could devise." And we can evidently thank Defoe's imagination for devising it.

## R&D: DANIEL AKST



### Tiny Artwork Aims Big

**PROOF ONCE AGAIN** that small is beautiful: Scientists have succeeded in copying the Mona Lisa onto a piece of plastic a third the size of a human hair in height and width.

Researchers at Georgia Tech and elsewhere managed the feat with a technique known as ThermoChemical NanoLithography. Using specialized equipment capable of the necessary precision, they applied a kind of heated needle to a surface at points 125 nanometers apart.

"We defined the heat at more than 57,000 spots...each of which is about 1/1000 the thickness of a hair," says physicist Jennifer E. Curtis, lead author of the paper reporting the work.

By varying the heat at each locale, the scientists were able to produce varying molecular changes. More heat produced lighter colors, for example, as seen on the forehead of the image they've dubbed Mini Lisa. The result is a surprisingly detailed grayscale version of the renowned da Vinci painting.

The image is so small it can't be seen with conventional micro-

scopes, but the scientists produced an enlarged version using fluorescent dye. Ms. Curtis says the hope is that her team's research will lead to innovations in nanoelectronics, optoelectronics and bioengineering.

The heat-etching technique could be used to create tiny devices sensitive to light, or that conduct electricity. End uses could include highly sensitive medical diagnostic tools, she says.

Beyond scientific applications, might the technique not also spawn a new art form? In addition to the Mona Lisa's enigmatic smile, the researchers reproduced a nanoscale version of a photograph by Ansel Adams. Why not original images as well, perhaps ones chosen to exploit the advantages and limitations of nanoscale etching? Sculptor Willard Wigan has already found fame creating art that fits on the head of a pin. In the nanoscale world, that is downright monumental.

"Fabricating Nanoscale Chemical Gradients with ThermoChemical NanoLithography," Jennifer E. Curtis et al., *Langmuir* (online June 10)

## NEWS QUIZ

From this week's Wall Street Journal

1. Leonard Riggo withdrew his offer to buy what iconic business?

- A. A national chain of Zeppelin lube joints
- B. A franchising operation focused on typewriter repair
- C. USA Today
- D. The Barnes & Noble consumer bookstores



Kong's hands are tied in battling inflation. Why?

- A. Hong Kong's currency is pegged to the U.S. dollar
- B. Beijing controls Hong Kong's monetary policy
- C. Hong Kong habitually prints money to finance its deficit
- D. Officials fear raising interest rates might upset revered ancestors

2. Quick, what's a beta-agonist?

- A. A risky form of arbitrage that can produce some extra alpha
- B. A drug used to fatten cattle
- C. The name for early adopters who trash trial software
- D. Blood pressure medication taken by millions

3. Hellbenders are moving from the Bronx into the bucolic Allegheny River watershed. Should locals be alarmed?

- A. Yes; Hellbenders are members of a particularly violent street gang
- B. No; they're just salamanders bred to replenish a scarce species
- C. Yes; Hellbender is police slang for ex-cons who emerge with sophisticated crime skills
- D. No; the Hellbenders are just a senior citizen a capella group

4. While it faces higher food and housing costs, Hong

Associated Press; Reuters (Merkel)

5. Bradley Manning was sentenced for leaking classified information. How soon will he be eligible for parole?

- A. 4 years
- B. 6 years
- C. 8 years
- D. 35 years

6. What does Angela Merkel drive, according to Angela Merkel?



- A. The European economy
- B. A hard bargain at the local fishmonger
- C. An Opel Adam
- D. A Volkswagen Golf

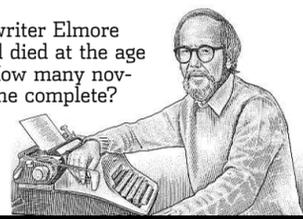
7. This "rock star" of China debt analysis has been raising the alarm about its shadow banking system. Name her.

- A. Gu Kailai
- B. Ziyi Zhang
- C. Charlene Chu
- D. Jiang Qing

To see answers, please turn to page C13.

# 87

Crime writer Elmore Leonard died at the age of 87. How many novels did he complete?



## PHOTO OF THE WEEK



Associated Press

### Up in Smoke

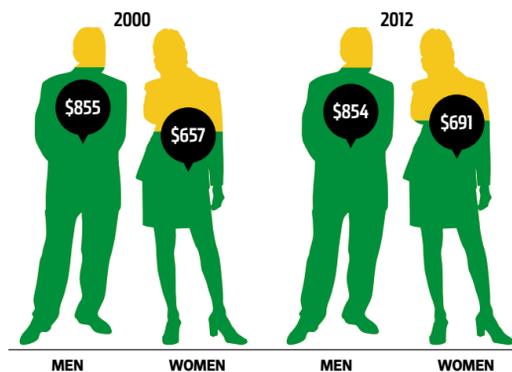
A villager in India smokes tobacco as he joins other protesters in a rally demanding a pension for elderly citizens in New Delhi on Thursday.

For more images: [WSJ.com/Photos](http://WSJ.com/Photos)

## STATSHOT: DAVID GOLDENBERG

### Stagnant Paychecks

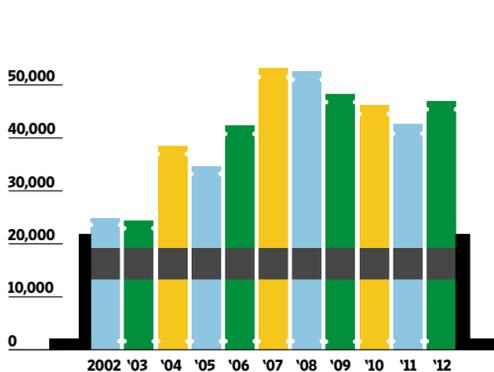
Adjusted for inflation, weekly wages for male workers in the U.S. haven't risen significantly since the turn of the century. Compensation for women is rising, but still far behind.



Source: Economic Policy Institute

### Fiction Facts

The number of novels published in the U.S. peaked just before the economic downturn in 2008, but fiction is slowly making a comeback.

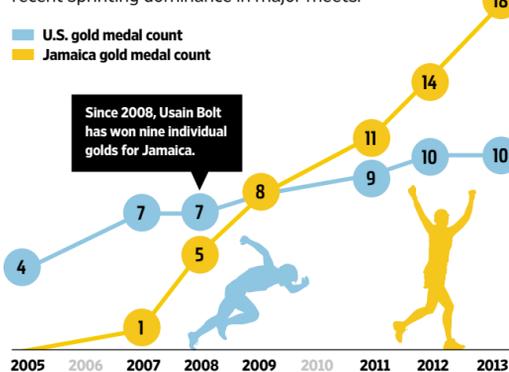


Source: Bowker

## GRAPHICS BY CARL DE TORRES

### Sprint Wars

Jamaican athletes won the men's and women's 100-meter and 200-meter races in last weekend's World Championships, extending the country's recent sprinting dominance in major meets.



Source: IAAF