

www.femto-second.com

IN THE NEWS

#### VOLUME 4 ISSUE 3

JANUARY 30, 2011

# The Economy

H ighlighting China's role as a money lender, over the past two years, it loaned more money to developing countries than did the World Bank [1]. China is able to exploit weak trade policies to its advantage. Moreover, U.S. firms in China face an increasing regulatory environment fostering protectionism that results in unfair trade practices [2]. Perhaps a bilateral approach where the U.S. burdens Chinese goods to the same degree would help slow the flow of U.S. jobs to the communist giant. Indeed, the one-sided trade may be why China's economy grew at 10.3% last year [3]. Domestically, ac-

cording to the Commerce Department, the inflation adjusted gross domestic product for the U.S. increased 3.2% for 2010 [4]. However, this estimate is based on how the inflation rate is calculated. With the increases in food and fuel prices, what is the actual inflation rate? One source suggests the 1.5% inflation rate, if measured using 1970's calculations, would be closer to 10% [5]. If this rate was used, we would be discussing a significant contraction.

Meanwhile, with so many jobs leaving the country, states are having difficulty collecting enough taxes to pay their bills. As a consequence, there are ongoing studies to see how states, such as Illinois, could be allowed to declare bankruptcy to erase their huge debts [6]. What's more, the Congressional Budget Office is estimating \$45 billion more will leave the Social Security fund than is taken in from taxes [7]. The U.S. is not the only nation in economic trouble. Case in point, Standard & Poor's downgraded Japan's credit rating one notch to AA- [8].

For the week ending January 15, the number of first time unemployment claims was 404,000 [9]. Then, for the week ending January 22, the first time unemployment claims increased to 454,000 [10]. Meanwhile, regulators continued closing financial institutions. On January 21, four banks were shuttered: 4) Enterprise Banking Company in Georgia; 5) Community South Bank & Trust in South Carolina; 6) The Bank of Asheville in North Carolina; and 7) United Western Bank in Colorado [11]. Then on January 28, four more were closed: 8) Evergreen State Bank (Continued on page 2)

Security

By one estimate, 87% of the 107 trillion emails sent last year were spam [1]. What's more, one bad actor appears to be selling hacked access to a military website [2].

The risk for on-line banking is taking a turn toward the riskier side. Case in point, a piece of malicious software referred to as Car-

### berp was upgraded to use multiple encryption keys making detection more difficult [3]. Furthermore, a hacker conference will include showing how to use

clude showing how to use network printers to compromise security [4].

Apparently, hackers are using keystroke capture programs that cache smart card PINs; then search for times the user has the smart card plugged in; and finally connect to trusted network resources that require smart card authentication [5]. One security control for this exploit is to combine a keypad entry into the smart card reader. In this approach, there is a trusted path to activate the reader.

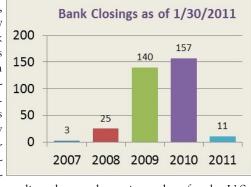
(Continued on page 2)

#### Inside this issue:

| Cyber-War      | 3 |
|----------------|---|
| World News     | 4 |
|                |   |
| Counterfeiting | 4 |
|                |   |

#### Special points of interest:

- GM sold more cars in China than in the U.S.
- Japan's credit rating lowered
- \$45 Billion more going out of Social Security fund than taxes coming in
- 11th financial institution shuttered



#### (Continued from page 1)

However, even in these cases, once authenticated, a compromised computer could still pass bogus information to the reader for select cryptographic function (such as digital signature generation).

- AFP, 107 trillion emails sent last year: Pingdom, January 14, 2011.
- 2. McMillan, Robert, Com-

# Security

puter World, Got \$500? You can buy a hacked U.S. military website, January 21, 2011.

- Kirk, Jeremy, PC World, Carberp Banking Malware Upgrades Itself, January 24, 2011.
- Lemos, Robert, Technology Review, Giving Hackers a Printed Invitation, January 21, 2011.
- McMillian, Robert, PC World, Smart Cards No Match for Online Spies, January 27, 2011.

## The Economy

### (Continued from page 1)

in Wisconsin; 9) The First State Bank in Oklahoma; 10) First Tier Bank in Colorado; and 11) First Community Bank in New Mexico [12]. Elsewhere, the SEC is suggesting more Wall Street broker oversight is needed [13]. However, until autonomous computer trading algo's are addressed, the risk of another flash crash and bank collapse remain.

- Dyer, Geoff, et. al., Financial Times, China's lending hits new heights, January 17, 2011.
- McSheehy, Will, Bloomberg, China Business Environment for U.S. Firms Fails to Improve, Chamber Says, January 19, 2011.
- Johnson, Ian, and Wassener, Bettina, New York Times, China's Economy Grew 10.3 Percent in 2010, January 19, 2011.

- Di Leo, Luca, and Sparshott, Jeffrey, Wall Street Journal, U.S. GDP Growth Accelerates, January 28, 2011.
- Arends, Brett, Wall Street Journal, Why You Can't Trust the Inflation Numbers, January 26, 2011.
- Walsh, Mary Williams, New York Times, Path Is Sought for States to Escape Debt Burdens, January 20, 2011.
- Ohlemacher, Stephen, AP, Social Security fund will be drained by 2037, January 27, 2011.
- Wassener. Bettina, New York Times, S.&P. Downgrades Japan as Global Debt Concerns Spread, January 27, 2011.
- 9. Murray, Sara, Wall Street Journal, Jobless Claims Slide As Recovery Picks Up, January 20, 2011.

- Kowalski, Alex, Bloomberg, U.S. Jobless Claims Rose Last Week More than Forecast, January 27, 2011.
- Solsman, Joan E., Wall Street Journal, Regulators Close Four Banks, January 21, 2011.
- 12. Wyatt, Edward, New York Times, S.E.C. Study Recommends More Oversight of Brokers, January 23, 2011.
- van Doorn, Philip, The Street, Four Banks Fail; 2011 Tally at 11, January 28, 2011.

I think computer science, by and large, is still stuck in the Modern age–Larry Wall

# Cyber-War

t seems the extensive dam-Lage to Iran's nuclear weapons program caused by malicious software (malware) is a good reminder of asymmetric warfare [1]. But Iran is not the only country vulnerable to weaknesses in supervisory control and data acquisition (SCADA) applications. Case in point, the SCADA used throughout China, KingView 6.53, is reported to have security vulnerabilities [2].

The Stuxnet worm's success against Iran has shifted the focus to offensive attacks at conferences such as Black Hat [3]. However, there are still those that consider cyber war a low risk [4].

To show where cyber-war will likely go in the future, we should look at Egypt. Unexpectedly, Egypt was able to shut down the Internet causing a news black-out [5].

- 1. Dilanian, Ken, Los Angeles Times, Iran's nuclear program and a new era of cyber war, January 17, 2011.
- 2. Schwartz, Mathew J., Information Week, China Industrial Control Software Vulnerable To Trojan Attack, January 13, 2011.
- 3. Thibodeau, Patrick, Computer World, Black Hat puts 'offense' on its cyber agenda, January 18, 2011.
- 4. Schwartz, Mathew J.,

Information week, Cyber Warfare Risks Overblown, January 18, 2011.

5. Robertson, Jordan, AP, The day part of the Internet died: Egypt goes dark, January 28, 2011.

> A computer shall not harm your work or, through inaction, allow your work to come to harm–Jef Raskin



In the News

### World News

Following the painful lesson of China's embargo, Japan is developing new car technologies that reduce the need for rare earth elements [1]. Meanwhile, New York senator Charles Schumer requested the Administration press Chinese President Hu Jintao on China's rare earth element embargo [2].

Companies that moved to China are starting to experience additional business problems. For example, Apple and other manufacturers are accused of failing to address pollution [3]. Even though China is the world's largest polluter, it's foreign owned companies that face challenges. Meanwhile, China's farmers are tainting the food supply by using the poisonous drug clenbuterol to increase animal growth and thereby profit [4].

The number of Internet users in China has increased to 457 million [5]. What's more, the importance of the Chinese market is not lost on U.S. businesses. Case in point, GM now sells more cars in China than domestically [6].

In past newsletters, we have discussed the pirates operating off the Somali coast. We finally have a good news story; South Korean Special Forces freed 21 seamen while killing 8 pirates in the process [7].

- 1. AFP, Toyota working on motors that cut rare earth use, January 18, 2011.
- Crittenden, Michael R., Dow Jones, US Sen Schumer: US Needs To Press Hu On Rare Earth Elements, January 18, 2011.
- 3. Hille, Kathrin, and Anderlini, Jamil, Financial Times, *Apple faces pollution storm in China*, Janu-

ary 19, 2011.

- Olesen, Alexa, Washington Post, Skinny pigs, poison pork: China battles farm drugs, January 24, 2011
- AP, China's Internet population rises to 457 million, January 19, 2011.
- 6. AP, GM's China Sales Pass US for First Time in History, January 24, 2011
- Glionna, ohn M., Los Angeles Times, South Korean forces storm hijacked ship, free hostages, January 21, 2011.

An inefficient virus kills its host. A clever virus stays with it–James Lovelock

## Counterfeiting

In this newsletter, we once again look at the risk of counterfeit paper. If paper currency is vulnerable, how safe is any document?

In Alabama, a college student that used his personal computer to make fake \$100 bills, was arrested [1]. In Pennsylvania, two men were arrested after purchasing a TV from Wal-Mart using bogus \$50 bills and trying to return it at another store for real cash [2].

1. Peterson, Pat, WKRG, College Student Busted For Counterfeiting, January 28, 2011.

 Sheppard, Howard L., WPMT, Two Brooklyn Men Charged with Passing Counterfeit \$50 Bills in York County, January 20, 2011.