

Is the USA 2005 Technology Environment Headed in the Wrong Direction?

Today's Technology Environment, circa April 2005

by Russ Henke, Henke Associates

Abstract:

After eight years of an improving technology environment, the last five years have moved us in the wrong direction. Below is the first in a series of articles that will explore business, economic and geopolitical indicators that have been causing high-anxiety in the world of high technology in the United States and elsewhere.

The last five years have resulted in at least a dozen enervating factors: (1) relentless profligacy in the face of the unprecedented swing from U.S. federal budget surplus to deficit, (2) the unmistakable long-term trend of a rich-get-richer, poor-get-poorer U.S. income distribution, (3) sluggish net job growth well below the requirements of U.S. population increases, (4) a net U.S. disadvantage in globalization, (6) weakened U.S. environmental stewardship, (6) the ballooning real and psychic costs of war, (7) reduced worldwide admiration for U.S. leadership, (8) the weaker dollar, (9) rising oil & gas prices, (10) a deteriorating domestic stock market, (11) rising corporate fraud, and (12) record deficits in trade and investment - which now require the U.S. to borrow \$2.1 billion a day from abroad.

Finally, some tech-industry success stories in coping with this negative atmosphere will be provided in subsequent editorial comments in this series.

At the beginning of the new millennium things looked good:

After the so-called "Y2K Crisis" passed without major incident, Americans realized that the United States economy had just produced 8 years of robust growth. During that 8-year period, some 24 million new U.S. jobs had been created and annual federal budget surpluses had begun to occur. Hi-tech was booming, especially the CAD automation industry and dot-com e-businesses. The tech-heavy NASDAQ index had closed at **5048** on March 10, 2000, up from 4069 just 70 days earlier.

But soon after crossing the Bridge to the 21st Century, things changed:

Beginning in mid-March **2000**, the steady deterioration of the NASDAQ sent shock waves through the hi-tech community. Aftershocks continued. During the first seven months of **2001**, U.S. companies eliminated nearly 1 million jobs. U.S. GDP performance in Q2 2001 was the worst in 8 years. *Even before the terrible events of September 11, 2001, the NASDAQ sank to 1695.*



The U.S. government finally acknowledged that an **official economic recession** had begun back in March 2001. *Tax cuts and repeated interest rate cuts throughout 2001 proved ineffective in boosting the economy (but soon eliminated the federal budget surpluses!).*

The underlying pressures on U.S. hi-tech businesses remained intense, exacerbated by an illegal electric power scheme engineered by Enron and similar middlemen.

The NASDAQ was down 21% by the end of the year 2001.

Is the USA 2005 Technology Environment Headed in the Wrong Direction?

The year 2002 turned out even worse, as the NASDAQ gave up another 32% and job losses continued unabated.

Improved NASDAQ performance during **2003** did not mean significant U.S. employment increases, especially in manufacturing. By mid-2003, nearly 3 million U.S. jobs had been lost since January 2001. A small burst of job additions during the last few months of 2003 was encouraging, but the rate remained well below the 200,000 to 250,000 job additions per month needed over several years to recover former employment levels, let alone keep up with U.S. population growth.

While **2004** overall saw slightly better U.S. job creation on average, the jobs that were and are being created these days pay well below the levels prior to 2001. And many of the jobs now being created are provisional; U.S. temp firms have added hundreds of thousands of short-term positions, making up a significant part of the new jobs added in the last 12 months.

Despite the weaker dollar, the negative international trade balance reduced U.S. GDP in 2004, resulting in the largest GDP drag in more than six years.

After several quarters of improvement, productivity in the U.S. nonfarm business sector slowed in the fourth quarter of 2004, according to the Labor Department reported in February 2005. In the past three years, companies themselves have garnered the bulk of the benefits of enhanced productivity in the form of profits, while workers' compensation has lagged. (Even engineers are affected. For the first time in more than 30 years, the median income for U.S. IEEE members fell in 2003, according to the findings of the latest IEEE-USA Salary Survey).

Surely 2005 will be better?

"With a slowdown of productivity growth (in Q4 2004), incremental new economic growth will require more hiring," claimed Ken Mayland, president of ClearView Economics. Unfortunately we'll have to wait awhile to see if Mr. Mayland is right, since America's employers added only 146,000 jobs in **January 2005** — a lackluster pace that underscored the slow recovery of the nation's labor market. The 146,000 gain in payrolls in January 2005 fell short of economists' forecasts for a gain of around 200,000 for the month. Manufacturers lost 25,000 more jobs in January, the fifth straight month of decline. U.S. job gains for December 2004 came in at 133,000, adjusted down from an initial estimate of 157,000 just a month earlier. Another weakness in the numbers was the drop in the ratio of jobholders to the total U.S. population, falling to 62.4%. The number of discouraged workers - those who stopped looking for work because they did not think they would find any - reached 515,000 in January 2005, almost 20 percent more than a year prior.

In **February 2005**, the preliminary tabulation indicated that 262,000 new jobs were added to the economy, the U.S. Labor Department reported on March 4. Were this figure to hold up, it'll be better than any recent month since October 2004. (Alas, it did not hold up; the Labor Department revised it down to 243,000 on April 1, 2005. Moreover, the separate household labor survey was weak, with the unemployment rate rising to 5.4% in February). This increase in the jobless rate "surprised" economists, who were expecting the jobless rate to remain steady at 5.2%. U.S. unemployment rose by 251,000 in February to 7.99 million and the employment ranks declined by 97,000, the department said.

Payroll growth across the country was even more sluggish in **March 2005** as employers added a feeble 110,000 jobs, the fewest since July 2004, according to the Labor Department's announcement on April 1, 2005. March's payroll gain was just half of the roughly 220,000 jobs that (yes, those same) economists had forecast just before the report was released.

Is the USA 2005 Technology Environment Headed in the Wrong Direction?

The longer-term trend is even more disturbing than the monthly snapshots:

In 6 of the last 12 months, job creation has not been strong enough to absorb the natural growth of the work force. In such a weak U.S. labor market, wages are either stagnant or falling. Factory employment, where many of the recent job losses have occurred, remains stagnant. Manufacturers have restored only a small fraction of the jobs they shed from 2001 through 2003, and manufacturing employment edged down by another 8,000 jobs in March. Meanwhile, consider this ironic story from the April 3, 2005 NY Times: "The world's most populous nation, which has powered its stunning economic rise with a cheap and supposedly bottomless pool of migrant labor, is experiencing shortages of about two million workers in the two provinces at the heart of China's export-driven economy."

Recent mergers negatively impact U.S. job growth:

The recently-announced SBC purchase of AT&T is not good news for the 2005 U.S. employment picture. SBC predicted the companies could save \$15 billion and offset almost the entire purchase price, largely by eliminating duplicate staff and operations. SBC would be expected to eliminate thousands (perhaps 13,000) of jobs. Indeed, corporate takeovers have returned with a vengeance in the last 15 months. December 2004 alone saw deals totaling \$128 billion, some 3X December 2003's total. December 2004 was the largest M&A month since October 2000. Nationally, the hi-tech computer software & services sector did 1600 M&A deals in 2004, more than any other sector. Total 2004 M&A activity was \$770 billion; the pace in 2005 is even stronger.

In addition to the SBC/AT&T deal mentioned above, other recent "biggies" included MetLife/Travelers Life, P&G/Gillette, Symantec/Veritas, and Kmart/Sears&Roebuck, which totaled some \$109.5 billion in just 2_ months. *As with SBC/AT&T, virtually every one of these deals contains "synergies" (usually defined as thousands of layoffs).* M&A activity will also be aided & abetted by the government's new one-year "tax holiday" – allowing multinationals to repatriate previous foreign profits back to the U.S. at a puny tax rate of 5.25% rather than the normal corporate tax rate of 35%. Instead of insisting on using such funds to create new U.S. jobs, the law says corporations can use the money for buying other companies, paying legal liabilities, and so forth.

Only five years after the dot-com collapse, web site companies are back -- this time also becoming part of the merger mania. According to the March 27, 2005 San Francisco Chronicle, in just the last six months, IAC is buying Ask Jeeves, HP is buying Snapfish, Yahoo is buying Flickr, the New York Times bought About.com, Ask Jeeves bought Bloglines, WebSideStory is buying Atomz, Six Apart bought Danga Interactive, the Washington Post bought Slate, Ebay bought Rent.com, Dow Jones bought Marketwatch, Google bought Keyhole, United Online bought Classmates Online, Knight Ridder invested in Topix.net, and EBAY invested in Craigslist.

According to outplacement firm Challenger, Gray & Christmas, announced job cuts exceeded 1 million for a fourth straight year in 2004. Some 3.6 American workers ran out of unemployment insurance benefits in 2004. The average length of unemployment increased 54%.

The San Francisco Bay Area, which boomed so mightily during the dot-com era, crashed all the harder and has been recovering slowly. The Association of Bay Area Governments reckoned on January 28, 2005 that the SF Bay Area had 436,600 high-tech jobs in March 2001. As of November 2004, the total had shrunk by 34%, to 289,600. The Bay Area lost 19,800 jobs in 2004 alone.

Three plus years after the last recession officially ended in November 2001, the rebound in jobs remains slower than in any previous economic recovery since World War II.

Is the USA 2005 Technology Environment Headed in the Wrong Direction?

Back to the Stock Market:

Regrettably, U.S. stock markets are not off to a good start in 2005. The tech-rich **NASDAQ** Composite Index closed on January 31 at 2,062, losing 5.2% in the month. That performance came as telecom and technology stocks posted some of the steepest declines in January compared with other sectors. The Dow Jones Industrial Average dropped about 2.7% in January 2005. The S&P 500 slid 2.5% in the month. The Phlx Semiconductor Index lost 6.8%. Crude-oil prices staged a complete turnaround to close 11% higher for the month after OPEC left open the option of a production cut open ahead of its meeting in March 2005. Traders said on January 31 that the successful January 30 elections in IRAQ failed to dispel persistent concern about the threat of future insurgent attacks in the country that could disrupt the country's oil exports.



Based on January's stock market performances, historical data suggests the market will struggle to post year-over-year gains in 2005. Excluding 2001, the last 13 post-election years have followed January's direction, according to the Stock Trader's Almanac.

More recent headlines serve to amplify these points. Try these, all from late February 2005: (1) "Blue-chip stocks tumbled Tuesday, with the Dow Jones Industrial Average posting its worst close in 21 months...", (2) "Crude futures closed above \$51 a barrel Tuesday for the first time in three months...", (3) "The dollar endured its largest losses in more than four months Tuesday, after the South Korean central bank announced a plan to sell some of its U.S. currency reserves...", (4) "U.S. consumer confidence fell in February as consumers continued to be concerned about the longer term outlook, the Conference Board said Tuesday...", (5) "Corporate executives and companies that admit participating in a shelter to avoid taxes on options will be eligible for reduced penalties under an IRS plan announced Tuesday...", (6) "Nominal incomes fell 2.3% in January, marking the largest decline in 11 years...", (7) "Real disposable incomes fell 2.8% in January 2005, also the largest decline in 11 years. Nominal per capita income fell 2.9% in January...", (8) "Spending on durable goods, including autos, fell 4.7 % in January. With inflation heating up and spending faltering, a hint of stagflation is in the air."

By the way, the **NASDAQ** dipped to 2030 on February 22, down some 6.4% in those 53 days. By March 18, 2005, the price of a barrel of oil had increased \$15 to \$57, just since the start of 2005! By March 22, 2005, the NASDAQ index had dipped below 2000 for the first time in five months, to 1989.



Is the USA 2005 Technology Environment Headed in the Wrong Direction?

On Thursday April 14, the Dow Jones Industrial Average (DJIA) posted its second straight triple-digit decline to end at 10278, a five-month low, and **the NASDAQ put in its worst performance since October 2004, closing at 1946, down 10.5% so far in 2005.**

####

Future articles in this series will focus on other aspects of the "Dirty Dozen" Factors mentioned in the Abstract above.

####

Russell F. Henke, PhD, FSME, PE, FASME, is president of *Henke Associates*, business/management consultants to over 30 hi-technology client companies worldwide for nine years. During the previous 25 years -- while serving as corporate officer, board member or entrepreneur -- he was active in developing, marketing, selling and supporting commercially-successful applications software & global professional services in electronic design automation (EDA); finite element analysis and Mechanical CAD/CAM, including the most modern Internet e-commerce; as well as industrial and electronics manufacturing. He held consecutive corporate executive positions at Mentor Graphics Corporation, Automation Technology Products, Gould Electronics, Schlumberger Appicon, and SDRC. He started his career in the machine tool training program at the Cincinnati Milling Machine Company and simultaneously earned ME, MS and PhD degrees at the University of Cincinnati. Henke also "moonlighted" as an adjunct assistant professor, teaching mathematics and engineering for 13 years. In 1989, Henke received a Distinguished Alumnus Award from UC. A member of ASME, IEEE and the SME, Henke was elected an SME Fellow in Class of 2000, one of only 225 Fellows in SME's entire history. Henke was also elected in 2001 by the SME Membership as an International SME Director. Henke received an award for Professional Leadership from the IEEE in 2002. He was elected an ASME International Fellow in 2003. <http://www.henkeassociates.net>

CAD-Portal.com, founded in April 2000, provides a website community that unites the best CAD resources on the internet. The website focuses on MCAD, ECAD, AEC, GIS and more, as well as hosting TechniCom's eWeekly newsletter. eWeekly focuses on the mechanical CAD/CAM/CAE/PLM marketplace. Each issue provides the latest industry news, events, and is often added to by industry analysts who provide reviews of the latest software and tools. CAD-Portal.com's internet engineering portal allows users to contribute and get feedback in an interactive environment. The various forums are used by customers and industry experts, which enables CAD-Portal.com to be a non-partisan judge of the best CAD resources on the internet. CAD-Portal.com's technology partner, TechniCom, Inc., a leading market research and consulting firm, focuses on the dynamics surrounding the mechanical engineering design and manufacturing marketplace. <http://www.cad-portal.com>.

