

# RESEARCH BUZZ



Page	Article
1	Foreclosure Crisis Update
5	The Value of What's Not There: "Emissions Avoided" and the New Carbon Economy
10	Personal Financial Literacy Levels Decline

## Foreclosure Crisis Update

By Dr. John A. Tatom  
[john.tatom@isunetworks.org](mailto:john.tatom@isunetworks.org)

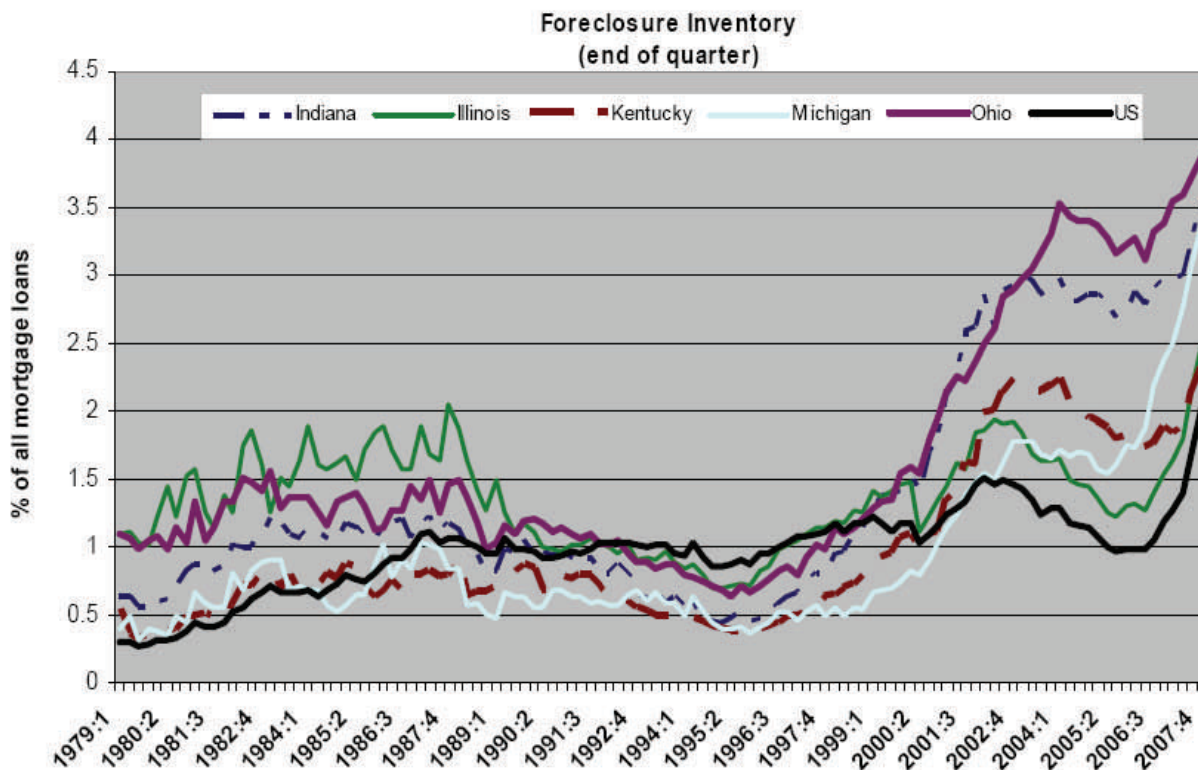
The U.S. foreclosure crisis continues to worsen, as does its impact on global financial markets. Some regional analysts had hoped that worsening conditions in the rest of the country would displace Indiana and its neighbors from the top of the list of states with the highest percentage of mortgage loans in foreclosure. This has not happened, at least so far. The experience in Indiana and neighboring states has worsened, though the deterioration in a few other states, most notably Florida and Nevada, is stunning. The effects on the financial markets have also worsened since August 2007. The Federal Reserve has taken dramatic steps to lessen the impacts by lowering its target federal funds rate and redirecting its credit flows to large financial institution.

In addition, Congress passed a tax rebate scheme to boost consumer spending and took other actions to stimulate business investment. It is unlikely, however, that actions taken so far can materially shorten or dampen the slowing in economic activity that the nation is experiencing. Meanwhile, estimates of the costs of the credit crisis are continuing to escalate.

### Foreclosure rates are escalating

By the end of 2007, the nation's foreclosure rate, which is the percent of mortgages that are in the foreclosure process, had climbed to 2 percent, double the level in the first three quarters of 2007 (see Figure 1). Before the national level of foreclosure began to rise, Indiana, Ohio and Michigan led the nation in foreclosures. A key question in the region was whether the emerging problem in the rest of the country would bypass the region, leaving area states with a high but nearly unchanged rate of foreclosure, or whether area states' foreclosures would climb as rapidly as other regions and maintain their unenviable status as leaders in foreclosures. A year into the crisis, these three states have maintained their positions as the three worst in the

Figure 1: Midwest foreclosures are high and rising.



Source: Mortgage Bankers Association

nation<sup>1</sup>. In addition, they have been joined by Illinois, which is now sixth place in the nation. Kentucky has dropped into ninth place.

Table 1 on the next page shows that several other states have moved from a better than average foreclosure experience at the end of 2006 to rival the worst within a year. Florida ranked fourth at the end of 2007 and Nevada ranked fifth at the end of 2007. California and Arizona, two other states where media reports suggest rapid deterioration in the foreclosure rates, have not done as poorly, but California has moved from having the best foreclosure rate in the nation as recently as the third quarter of 2005, when its foreclosure rate was 0.18 percent, to eleventh place at the end of 2007. The worst

performance of loans is among adjustable rate subprime loans. At the end of 2007, 10.4 percent of such loans were in foreclosure nationwide. An indication of where this rate is headed is suggested by Indiana, where 15.7 percent of such loans are in foreclosure. A rise to this share for the nation will add about 160,000 foreclosed mortgages to the total of about 925,000 currently in foreclosure. However, the foreclosure problem is likely to get much worse than that over the next 12 months because Indiana's current level is below the expected national peak and because prime rated loans are also expected to deteriorate in quality and many will move in to foreclosure. At the end of 2007, 1.8 percent of prime

State	Foreclosure Rate 2007 Q4	National Rank	Foreclosure Rate 2006 Q4	Rank 2006 Q4
Indiana	3.53	2	2.97	2
Illinois	2.5	6	1.54	11
Kentucky	2.32	9	1.89	5
Michigan	3.38	3	2.39	3
Ohio	3.88	1	3.38	1
California	2.23	11	0.58	40
Arizona	1.78	24	0.42	48
Florida	3.22	4	0.79	35
Nevada	3.02	5	0.84	33
United States	2.04		1.19	

Source: Mortgage Bankers Association

\$550 billion in foreclosed loans. With a loss rate of 50 percent, this would imply overall mortgage loan losses to lenders equal to about \$275 billion. Of course there is a small fraction of additional loss to the home owners who lose their equity, if any, in the homes. To the extent that high levels of foreclosed prop-

**Table 1: Foreclosures are high in the Midwest and rising rapidly elsewhere .**

loans were in foreclosure in Indiana, almost double the 0.96 percent share nationwide. Again, the peak national rate for prime rated mortgages is likely to exceed Indiana’s recent level. Many estimates put the overall mortgage foreclosure rate at its peak, expected late in 2008 or early 2009, to hit about 5 percent. This is the pace forecast in Tatom (2007). Such an extent of foreclosure would only be unusual because of the higher share of subprime loans today compared with the last recession in 2001. A more serious problem in the subprime area would drive the overall national foreclosure rate much higher.

**The cost of the foreclosure crisis is very large**

A five percent foreclosure rate would imply about

erty in real estate markets reduce housing prices, the losses to other home owners will also be significant.

The losses to U.S. banks and other depository institutions will absorb about half the mortgage losses because the rest of these mortgages have been securitized and sold off to other investors, including to banks abroad. This means losses to U.S. banks would be about \$140 billion. The Organization for Economic Cooperation and Development [OECD (2008)] recently estimated much smaller losses to U.S. commercial banks, about \$60 billion, but the overall cost of the crisis is estimated to be about \$350 to \$450 billion. The OECD has pointed out that banks hold about \$9 in deposits per dollar of capital so that a \$60 billion loss of capital would lead to a decline in bank credit by \$548 billion, a decline of about 5.4 percent in total bank assets. Such a shrinkage implies a large decline in bank credit, or the

“credit crunch” that is now widely believed to be in process. The OECD estimates that it could take six months to two years to replace the lost capital out of earnings and that this would imply a completely unacceptable credit crunch and recession that “CANNOT BE ALLOWED TO HAPPEN.” Of course if the loss in bank capital is over twice as large, then so will be the overall decline in credit.

The International Monetary Fund [IMF (2008)] has just published a much larger estimate of losses. In their view, the total loss due to the foreclosure crisis is likely to be \$945 billion. However, this shocking figure includes much more than the estimates above. It factors in other security losses that are associated with the credit crunch. In particular, it includes a \$565 billion loss on mortgages, still much larger than those above because of its inclusion of price-induced increases in mortgage delinquencies.

Viewed in light of the OECD and IMF estimates, those given here of \$140 billion represent a middle ground. The credit market implications of losses of this size and the timing of those implications may also be much different from the IMF or OECD estimates. In particular, these estimates treat the effects as if they will only occur in the near future, almost seeming to exclude the losses that have already been registered and also excluding consideration of the capital already raised by financial institutions. In fact, substantial losses have

already been realized. Recent estimates of the 10 largest bank asset write-downs since January 2007 total about \$190 billion, of which about \$125 billion are for seven of the largest losers in the United States. This is far above the IMF estimate. Moreover, banks have been very aggressive in raising new capital, offsetting the lion’s share of write-downs already. Bank capital overall is relatively high and healthy and expected to stay that way in 2008. Moreover, bank profits are generally sufficient to absorb some capital reduction while offsetting much of the reduction out of other profits within a short period.

This is not to say that more bank failures are unlikely. They are likely, especially in the United States where there have been few so far. However, it does suggest that credit growth is likely to be unimpaired unless the Fed restricts bank asset growth further. From the four weeks ending on August 1, 2007, just before the emergence of the so-called credit crunch and when banks began to take large write-downs for credit losses, to the four weeks ending August 16, 2008, total bank credit has risen at a 12.2 percent annual rate, faster than the 8.9 percent rate over the previous year. Total assets of insured depository institutions rose at a 13.1 percent rate from the second to the fourth quarter of last year, faster than the 6.4 percent rate over the previous year according to data from the Federal Deposit Insurance Corporation, despite large asset write-downs in the sec-

ond half of last year.

The foreclosure problem will continue to worsen over the next 12 months, according to most estimates, as resets on the mortgage rate on adjustable rate loans approaches its peak. The banking system is well along in absorbing the write-downs, but further losses are likely to be written off and more capital will have to be raised. Banks are far ahead of the curve, however, in adjusting to the problem. The recession outlook is worsened and lengthened by foreclosure and credit problems, but those two factors alone do not account for the current dismal outlook.

#### References

International Monetary Fund (IMF), “Global Financial Stability Report: Containing Systemic Risk and Restoring Financial Soundness,” April 2008.

Organization for Economic Cooperation and Development (OECD), “The Subprime Crisis: Size, Deleveraging and Some Policy Options,” April 2008.

Tatom, John A. “Why Is the Foreclosure Rate So High in Indiana?” Networks Financial Institute, NFI Report 2007-NFI-04, August 2007.

#### Endnote

<sup>1</sup>The increases in the national foreclosure rate actually began in the second quarter of 2006; in the previous quarter, 0.98 percent of mortgages were in foreclosure. The national rate hovered at one percent from mid-2005

to mid-2006 and then began to rise; the initial increases were small until the fourth quarter of 2006, when the share hit 1.19 percent.

■ John A. Tatom is the Director of Research at Networks Financial Institute.

## The Value of What’s Not There: “Emissions Avoided” and the New Carbon Economy

By Martha McCormick  
[martha.mccormick@isunetworks.org](mailto:martha.mccormick@isunetworks.org)

Carbon dioxide (CO<sub>2</sub>) emissions, greenhouse gases<sup>1</sup> (GHG), the greenhouse effect<sup>2</sup>, climate change, global warming, carbon trading: in recent years, these concepts have captured increasing national and global awareness and dialogue, especially in the media. As a strategy for pollution control and abatement, emissions trading has been employed as a solution to challenges as far-ranging as acid rain, ozone layer depletion, toxic agricultural runoff, groundwater contamination, automobile emissions, energy production and consumption, and industrial waste. The most widely recognized form of emissions trading is “cap and trade,” in which an aggregate cap on all emission sources is established and rights to be an emitter are then traded amongst the potential emitters to determine which sources actually emit the

total pollution load<sup>3</sup>. In the U.S., given the certainty of an eventual system of carbon regulation but the current lack of clarity about when such a system will be in place and what it will look like, financial institutions have taken steps to impose voluntary guidelines that take account of risks and economic implications of carbon emissions. In just the last few years, we have heard much about carbon footprints, the carbon (or low-carbon) economy and carbon trading, a specific form of emissions trading.

- Carbon footprint refers to a measure of the exclusive global amount of CO<sub>2</sub> and other GHG “emitted by a human activity or accumulated over the full life cycle of a product or service” (see Wiedmann and Minx, 2008). The carbon footprint concept is intended as a way for individuals and organizations to assess their environmental impact toward increased global warming. Individuals and organizations discuss the idea of carbon offsets as means to mitigate their carbon emissions through more carbon-neutral or environmentally beneficial activities.
- A low-carbon economy (LCE) is a popular term that refers to an economy which has a minimal output of GHG emissions into the biosphere, but specifically refers to CO<sub>2</sub>. . . . Globally implemented LCEs . . . are proposed as a means to avoid catastrophic climate change. (Wikipedia, [http://](http://en.wikipedia.org/wiki/Low-carbon_economy)

[en.wikipedia.org/wiki/Low-carbon\\_economy](http://en.wikipedia.org/wiki/Low-carbon_economy))

The remainder of this article examines carbon trading and one of its proposed alternatives, carbon taxation. In the United States and elsewhere, some advocate for the imposition of a carbon tax on users, either in lieu of or in addition to a carbon trading system. A carbon tax is a set tax rate that is “placed on the consumption of carbon in any form . . . with the idea that raising the price will encourage industries and individuals to consume less” (Walsh 2007). The Carbon Tax Center, a tax advocacy group, maintains that a 10% taxation approach might yield a 5% reduction in carbon demand. Tax advocates further argue that cap-and-trade solutions are too administratively cumbersome (requiring plant-by-plant emission measures) and vulnerable to industry gaming, especially on a global scale. At this time, cap-and-trade has the upper hand as a potential carbon reduction solution since it is firmly in place in the Kyoto Protocol<sup>4</sup>. Cap-and-trade advocates point out the cost to low-income families of a carbon tax is relatively higher, since they use disproportionately higher amounts of energy and carbon relative to income (Walsh 2007). Politicians in this country generally resist any taxation model but a coalition of academics and polluters has continued to argue the benefits of a tax as greater administrative and cost efficiency, more equitable and predictable in its costs and distribution, and less subject to industry gaming. William A. Pizer of the Bush Admini-

stration's Council of Economic Advisers "estimates that the benefit-to-cost ratio of a tax-based system would be five times that of a cap-and-trade system," but environmental activists are split on the issue. Some (Environmental Defense, for example) support the cap-and-trade model while others such as the Sierra Club advocate for a tax (Eilperin and Mufson 2007).

While no compulsory carbon regulation system has yet been imposed in the U.S., the European Union (EU) has settled on a cap-and-trade system. In place since 2005, the EU's Emission Trading Scheme (ETS) entered its third phase in early 2008. Phase III extends the ETS to 2020, makes more stringent the targets for CO<sub>2</sub> reduction for both the manufacturing and energy sectors (aiming for a 20% reduction from 1990 levels by 2020), and creates a more realistic price for carbon credits, rectifying a previous overallowance of free credits given to companies. The third phase shifts to an auctioning of carbon allowances, starting in 2013 and gradually increasing in volume and industry coverage until many industries, by 2020, will be required to purchase 100% of their carbon allowances, generating a potential income of \$80 billion, to be split among EU member states. Through the ETS, a multibillion dollar industry now exists in Europe where none existed only three years ago. The U.K.'s Carbon Trust, a research and advisory group (see <http://www.carbontrust.co.uk/>), places the current value of carbon trading at \$59 billion,

with a potential to reach \$115 billion by 2020 (Scott 2008).

In the U.S., most serious considerations of carbon reduction schemes focus on trading, the approach supported by Senators Clinton, McCain and Obama. In consideration currently in the U.S. Senate is the Lieberman-Warner Climate Security Act, a cap-and-trade proposition creating a regulatory body, the Climate Change Credit Corp., to distribute and/or auction emissions permits. The legislation is finding support among leading environmentalists (such as the National Wildlife Federation and the National Resources Defense Council), industrialists, and labor unions because it contains a provision a pollution tariff on imports that would force foreign countries exporting to the U.S. to buy American carbon credits if they are not already governed by a carbon control system in their homelands. While EU member states have the ETS, this legislation would spread costs to big polluters such as India, China and Brazil. The theory is that this approach prevents 'dirty' manufacturers abroad from an advantage over 'clean' ones at home and serves to protect jobs (Randall 2008).

Major lenders have already voluntarily established guidelines for lending to power companies for electric power projects (the power industry produces 40% of current U.S. CO<sub>2</sub> emissions). In February 2008, Citi, JP Morgan Chase and Morgan Stanley announced themselves as signatories to the Carbon Principles; they were

joined in April 2008 by Bank of America (see [www.carbonprinciples.org](http://www.carbonprinciples.org) for the full text of the principles, a statement of intent, a Carbon Principles Q&A, and more). The principles were developed in a nine-month effort and in consultation with leading environmental non-governmental organizations (NGOs) and groups such as Environmental Defense and the National Resources Defense Council and investor-owned power companies, including American Electric Power, CMS Energy, DTE Energy, NRG Energy, Public Service Enterprise Group, Sempra Energy, and Southern Company. While the principles do not change lending criteria per se, they create an “Enhanced Diligence” process which forces both lenders and power producers to take a closer look at potential carbon risks, taking into account future economic growth, consumer needs for affordable energy, and environmental protections. The Enhanced Environmental Diligence Process applies to any proposed development project that is based on a high CO<sub>2</sub> emitting technology, such as coal-fired electricity production. The adopter banks are committing to encouraging clients toward cost-effective energy efficiency, controlling for financial and operational risks associated with ongoing dependence on fossil fuel technologies, and educating clients and regulators alike about the diminishing returns in conventional power generation strategies in light of impending carbon reduction mandates.

The first principle, energy efficiency, argues that an “effective way to limit CO<sub>2</sub> emissions is not to produce them” and introduces the concept of the value of avoided emissions that the title of this article mentions. The second principle, renewable and low carbon distributed energy technologies, promote the promise of these technologies for meeting energy demand, leveraging American technological advancement, and job creation. The third principle, conventional and advanced generation, looks at the realistic balance that must be achieved between conventional power generation in the nearer term and the gradual shift toward more renewable, advanced power generation strategies (Carbon Principles 2008). In the two months since the principles were announced, its signatory bankers have started discussions to extend the principles to municipal utilities, since, between them, investor-owned and municipal utilities are responsible for \$427 billion in borrowing during 2007 alone (Smith 2007).

Taken in their entirety, then, the issues of greenhouse gas emissions (and the specific sub-focus on carbon emissions), carbon footprints, carbon offsets, carbon trading and the like have, in a few scant years, developed into an economic force to be reckoned with. While the EU outstrips the U.S. in having a strategic regulatory response in place, there is evidence that the U.S. has been more successful in voluntary reductions in carbon outputs. Meanwhile, serious consideration in this coun-

try of approaches to carbon regulation is underway. The pressure will spread to developing nations and emerging manufacturing economies as ever-greater controls fall into place across the globe.

## References

Eilperin, Juliet and Steven Mufson (2007). "Tax on Carbon Emissions Gains Support: Industry and Experts Promote It as Alternative to Help Curb Greenhouse Gases." *Washington Post* (April 1): A5.

Environment News Service (2006). "Kyoto Protocol Marks First Anniversary with Hope." February 16. <http://www.ens-newswire.com/ens/feb2006/2006-02-16-03.asp>

Carbon Principles (2008). "Leading Wall Street Banks Establish the Carbon Principles: Guidelines to strengthen environmental and economic risk management in the financing and construction of electricity generation." Press Release, February 4. <http://www.carbonprinciples.org/documents/Carbon%20Principles%20Press%20Release%20Final.pdf>.

Randall, David K. (2008). "Smoke Screen." *Forbes* Vol. 181, Issue 7 (April 7): 31.

Scott, Mark (2008). "Giant Steps for Carbon Trading in Europe." *Business Week Online* January 24: 17.

Smith, Rebecca (2008). "Banks Hope to Expand Carbon Rules to Public Utilities." *Wall Street Journal* (March 20): B6.

Walsh, Bryan (2007). "Pay the Carbon Tax." *Time*. [http://www.time.com/time/specials/2007/environment/arti-cle/0,28804,1602354\\_1602354\\_1603121,00.html](http://www.time.com/time/specials/2007/environment/arti-cle/0,28804,1602354_1602354_1603121,00.html)

Wiedmann, T. and J. Minx (2008). A Definition of 'Carbon Footprint'. *Ecological Economics Research Trends*. C. C. Pertsova: Chapter 1, pp. 1-11. Nova Science Publishers, Inc, Hauppauge NY, USA.

## Endnotes

1. Greenhouse gases are the gases present in the atmosphere which reduce the loss of heat into space and therefore contribute to global temperatures through the greenhouse effect. Greenhouse gases are essential to maintaining the temperature of the earth . . . . However, an excess of greenhouse gases can raise the temperature of a planet . . . . On earth, the term greenhouse gas is applied to, in order of relative abundance: water vapor, carbon dioxide, methane, nitrous oxide, ozone and chlorofluorocarbons. Greenhouse gases are produced by many natural and industrial processes, which currently result in CO<sub>2</sub> levels of 380 in the atmosphere. Based on ice-core samples and records (see graphs) current levels of CO<sub>2</sub> are approximately 100 ppmv higher than during immediately pre-industrial times. (Wikipedia, [http://en.wikipedia.org/wiki/Greenhouse\\_gas](http://en.wikipedia.org/wiki/Greenhouse_gas)).
2. Because the earth's surface is much cooler than the sun, it radiates energy at much longer wavelengths than the sun does, peaking in the infrared at about 10µm. The atmosphere absorbs these longer wave-

lengths more effectively than it does the shorter wavelengths from the sun. The absorption of this longwave radiant energy warms the atmosphere; the atmosphere is also warmed by transfer of sensible and latent heat from the surface. Greenhouse gases also *emit* longwave radiation both upward to space and downward to the surface. The downward part of this longwave radiation emitted by the atmosphere is the "greenhouse effect" and cause[s] the earth's temperature to be higher than it would have been without the greenhouse gases. (Wikipedia, [http://en.wikipedia.org/wiki/Greenhouse\\_gas](http://en.wikipedia.org/wiki/Greenhouse_gas)).

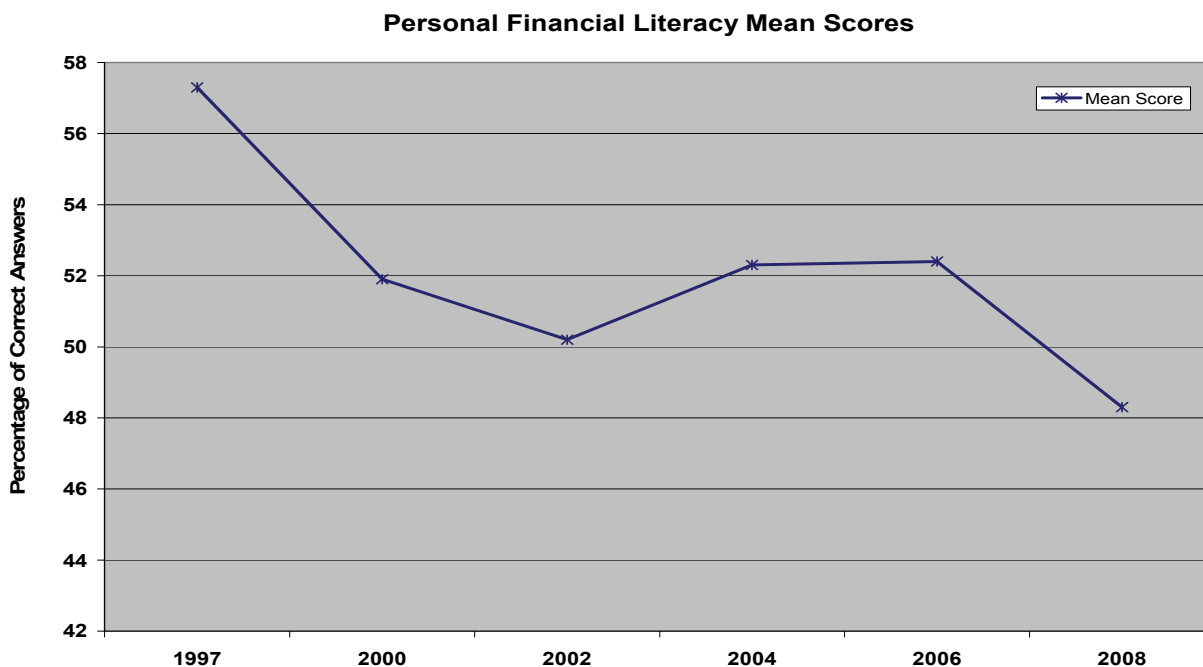
3. [http://en.wikipedia.org/wiki/Emissions\\_trading](http://en.wikipedia.org/wiki/Emissions_trading)
  4. "The Kyoto Protocol took effect on February 16, 2005, 90 days after it was ratified by the Russian Parliament. . . . Richard Kinley, acting head of the UN Climate Change Secretariat in Bonn, said that the 34 industrialized countries and the European Union governed by the protocol can reach the targeted cut in greenhouse gas emissions by at least five percent below 1990 levels. This target must be met between 2008 and 2012, the protocol's first commitment period. (Environment News Service 2006)
- Martha McCormick is the Research Coordinator at Networks Financial Institute.

## Personal Financial Literacy Levels Decline

By Nick M. Ochieng  
[nick.ochieng@isunetworks.org](mailto:nick.ochieng@isunetworks.org)

Jump\$tart Coalition® for Personal Financial Literacy began measuring financial literacy levels in 1997. A biennial personal financial literacy survey has been administered since then to high school seniors, with the results showing a general decline in financial literacy levels. Of the questions asked in the survey in 1997 and reported in 1998, only 57.3 percent were answered correctly. The scores declined sharply to 51.9 percent in 2000 and 50.2 percent in 2002. There was a slight improvement to 52.3 percent in 2004 and 52.4 in 2006. The latest survey results released in April 2008 show the lowest mean score of 48.3 percent. Regular grading scales would mean a failing grade in all of these years. April is Financial Literacy Month, hence the timing of the release of these results. In his speech during the release of the survey results, Federal Reserve chairman Ben Bernanke stressed the need for financial literacy at an early age to cope with an increasingly complex financial marketplace.

This year's survey was, for the first time, administered to all classes of college students, with performance improving with class level. College seniors performed best, correctly answering 65 percent of the questions



asked. In total, 6,856 high school seniors from 40 states and 1,030 full-time college students countrywide participated. Using regular grading scales, high school students would have received a failing grade while college students would have just avoided it.

Demographically, the results are consistent with previous surveys. Males did marginally better than females, scoring 49 percent and 48 percent, respectively. Caucasians continued to fare better, scoring 52.5 percent, followed by Asian Americans (47.2 percent), Hispanic Americans (45.1 percent), African Americans (41.3 percent) and Native Americans (37.7 percent).

The survey covers a series of questions that include general aspirations (educational, occupational and remuneration expectations), perceptions, and experience with money management among others. Some of the answers

given indicate that there is still a long way to go before students understand basic financial concepts. For example, only 32.5 percent correctly answered that the finance charge rate on a school loan of \$12,000 would not change if one went to a state college rather than a private college. Only 40.4 percent believe that their health insurance coverage may stop should their parents become unemployed.

Based on background, those students whose parents graduated college or higher, performed better than those whose parents did not complete or only had a high school education. This observation has been consistent through all the survey results. The survey also found that students from higher income families (those earning over \$80,000) did better than students from families not earning as much, a result that has been consistent since

the third survey in 2002. Students whose parents earn at least \$80,000 scored 52.3 while those whose parents earn less than \$20,000.00 scored a paltry 43.4. It is, however, not clear whether these low levels of financial literacy mostly arise from their parents, or from school. A separate 2007 survey by the Hartford Financial Group, Inc. revealed that 70 percent of college students rely on their parents as their primary source of personal finance information. Students that intend to have professional careers, as in the other surveys, scored better than their other counterparts. However, only 47.6 of respondents believe that a person with a four-year degree could earn considerably more than one with a high school diploma.

According to Jump\$tart, only three states, Utah, Missouri and Tennessee currently have a requirement that schools teach at least a one semester course devoted to personal finance. Fifteen states require personal finance instruction be incorporated into other subject matter. The rest, including Indiana, have no requirements, although personal finance may be taught electively. Only eight states make it mandatory to have personal finance before high school graduation. In a national K – 12 financial literacy qualitative and quantitative survey done by Networks Financial Institute between March and April 2007, teachers cite the top three challenges to teaching financial literacy topics as lack of time, lack of state curriculum requirements and lack of demand.

There has been a renewed national effort to raise the level of financial literacy. With the decline in performance shown in the survey, the recommendations of the President’s Advisory Council on Financial Literacy will be even more important. The President’s Executive Order 13455 of January 22, 2008 created the Council and gives it a mandate of two years to come up with recommendations that broadly “help keep America competitive and assist the American people in understanding and addressing financial matters and.....encourage financial literacy among the American people.” Specifically, the Council shall offer advice to the President and the Secretary of Treasury on means to:

- i. improve financial education efforts for youth in school and for adults in the workplace;
- ii. promote effective access to financial services, especially for those without access to such services;
- iii. establish effective measures of national financial literacy;
- iv. conduct research on financial knowledge, including the collection of data on the extent of financial knowledge of individuals; and
- v. strengthen and coordinate public and private sector financial education programs

Together with the Council, the Financial Literacy Education Commission (which is composed of over 20 federal agencies and departments) has the mandate to pull together their resources and come up with comprehensive solutions in the financial literacy effort.

**References**

*Federal Register*, Vol. 73, No. 16, January 24, 2008 -

Presidential Documents

<http://edocket.access.gpo.gov/2008/pdf/08-325.pdf>

Jump\$tart Coalition for Personal Financial Literacy

[www.jumpstart.org](http://www.jumpstart.org)

Networks Financial Institute at Indiana State University,

*National K-12 Financial Literacy Qualitative &*

*Quantitative Research*, March/April, 2007,

<http://www.networksfinancialinstitute.org/>

[SiteCollectionDocuments/](#)

[NationalK12FinancialLiteracyStudy.pdf](#)

- Nick Ochieng is a Research Associate at Networks Financial Institute.