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U.S. MACHINE TOOLS:

How Does An Industry Survive Without Any Orders?

The U.S. machine tool industry is on the verge of oblivion. What was once considered to be one of America's most important strategic industries — described by President Ronald Reagan in a statement on May 26, 1986, as being a "vital component of the U.S. defense base" — the U.S. machine tool sector is in a freefall. Orders for new machine tools have virtually stopped. U.S. machine tool producers — the few that remain after years of unrelenting unfair trade practices — are doing whatever they can to stay alive.

The situation is "desperate," says Ron Schildge, chairman of the Association for Manufacturing Technology (AMT) and president of Eitel Presses Inc. in Orwigsburg, Penn. "There is some activity in the used machine and rebuilt machinery market, but the new machinery market is virtually dead."

The total U.S. market for machine tools in January 2009 was \$95 million, a decline of 72 percent from the same month in 2008 when sales were at \$338 million, according to AMT. The January 2009 figure was down by 60 percent from December 2007. Schildge says that orders are now off by at least 80 percent, and others in the industry say it might even be worse than that.

"The AMT statistics were horrible, but they don't tell the whole story because a lot of those orders were only from companies that were

forced to replace machines that were broken," says Mike Austin, vice president of Atlas Technologies in Fenton, Mich. "It's just a horrible situation and unfortunately this economic crisis is hitting small manufacturers harder than anyone because they are the ones who

depend on lines of credit to sell receivables."

With the current credit crisis, even machine tool companies with receivables can't borrow money against those orders. "Today, we have banks that say I don't know how I can lend over concern about [companies'] viability," says Austin. "We do business with Caterpillar, but the banks are questioning Caterpillar's creditworthiness. When you have someone like Caterpillar being questioned, what do you do? It's just ridiculous." The evaporation of orders "is the last straw for many

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GE Realizes Finance Is A Failure

GE chairman Jeffrey Immelt has seen the light. "I have learned something about my country," he writes in his 2009 letter to shareholders. "I run a global company, but I am a citizen of the U.S. I believe that a popular, 30-year notion that the U.S. can evolve from being a technology and manufacturing leader to a service leader is just wrong. In the end, this philosophy transformed the financial services industry from one that supported commerce to a complex trading market that operated outside the economy. Real engineering was traded for financial engineering. In the end, our businesses, our government and many local leaders lost sight of what makes a nation great: a passion for innovation."

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Letter To Editor

We must respectfully disagree with some of the content of the February 20, 2009 edition's article, "A Stimulus for Everyone Save Domestic Manufacturers" as it fails to recognize a major breakthrough for manufacturers contained in HR-1, the American Recovery and Reinvestment Act of 2009. The bipartisan leadership of Senators Max Baucus and Charles Grassley, combined with that of Congressmen Charles Rangel and David Camp, resulted in the culmination of work that began in 1998 to reauthorize and reconstruct the Trade Adjustment Assistance program for manufacturing firms (TAA for Firms). With the support of a large contingent of members in all caucuses, Congress made the first substantive changes to the TAA for Firms program since the Trade Act of 1974.

TAA for Firms has helped thousands of American manufacturers compete against imports, and helped save and create hundreds of thousands of jobs since its inception in the early 1960s. A small and modestly funded program, TAA for Firms has reversed job loss and sales loss at manufacturing firms which battle strong competition from imports. Designed as a trade remedy, TAA for Firms has, in fact, become a tool that has generated economic development in many small and rural communities.

TAA client firms have, at a rate of 99 percent, been successful in adjusting to market competition, thus saving jobs. In small communities with limited job opportunities, the stability of such firms can have a huge positive economic impact.

HR-1 is a lengthy and often complicated piece of law. We are delighted that through the perseverance, hard work, and leadership of Messrs. Baucus, Grassley, Rangel, Camp and many others, you can find language in HR-1 that will help boost, in very real terms, the ability of small American manufacturing firms to compete and grow in the global economy. The new TAA for Firms program is very much the type of economic stimulant intended by Congress as a remedy for our nation's current economic woes. American manufacturers will be stronger because of the newly reauthorized TAA for Firms program.

— **Robert S. Taylor, Executive Director
American Business Council, Inc.**

(Editor's Note: The stimulus bill provided \$50 million for the TAA for Firms program. The FY 2009 Omnibus spending bill included \$15.8 million, the highest level the program has received since the mid 1980s.)

White House Auto Team Did Not Like What Car Companies Submitted

"The plans submitted by GM and Chrysler on February 17, 2009, did not establish a credible path to viability," states the first "key finding" in the Obama administration's March 30 analysis of the GM and Chrysler future viability plans. "In their current form, they are not sufficient to justify substantial new investment of taxpayer resources." GM's plan is "not viable" and Chrysler "is not viable as a stand-alone company."

A separate analysis states that GM did not live up to the terms of the federal government loan conditions made on December 31, 2008. It did not negotiate new agreements with labor or bondholders, nor did it modify its employee beneficiary plans. The administration chastises GM's February 17 viability plan, noting that the company has been losing market share for decades. "Yet its plan assumes only a very moderate decline [in market share], despite reducing fleet sales and shuttering brands that represent 1.8 percent of its current market share." It criticizes GM for its pricing strategy, its product mix and its legacy liabilities, which are substantial and growing. "Moreover, even under the company's optimistic assumptions, the company continues to experience negative free cash flow (before financing but after legacy obligations) through the projection period, failing a fundamental test of viability."

The five-page "GM February 17 Plan Viability Determination" (worth reading) is located at http://www.whitehouse.gov/assets/documents/GM_Viability_Assessment.pdf.

The Obama team was just as dismissive of the Chrysler plan. It criticized Chrysler for quality, its product mix, unwillingness to invest in flexible manufacturing capacity and its geographic concentration. "Every single one of Chrysler's brands are in the bottom quartile based on JD Power APEAL [quality] scores," says the Obama analysis. "A recent Consumer Reports article listed Chrysler last in terms of the number of recommended nameplates in its portfolio (zero Chrysler nameplates were recommended)."

Chrysler has not finalized its labor agreements to reduce hourly wages and is not worthy of additional federal funds. "There are few tangible signs that Chrysler can reverse its share erosion" of the U.S. market, which has dropped by 5 percentage points since its height of 16.2 percent in 1998, says the Obama automobile task force. In the viability plan it submitted to the federal government, Chrysler said that its market share would stabilize at 10.7 percent. The Obama team doesn't buy it. "Continued share erosion in line with recent history would translate into several billion dollars of increased losses over time," it says. The five-page Chrysler analysis is located at http://www.whitehouse.gov/assets/documents/Chrysler_Viability_Assessment.pdf.

The seven-page "New Path to Viability for GM and Chrysler" is located at http://www.whitehouse.gov/assets/documents/Fact_Sheet_GM_Chrysler.pdf.

The two-page "Obama Administration's New Warranty Commitment Program" for the two companies is located at http://www.whitehouse.gov/assets/documents/Warranty_Commitment_Program.pdf.

President Obama's public statement on the two companies' plans is located at http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-the-American-Automotive-Industry-3/30/09/.

Mass Layoffs Reach Record Levels

The number of mass layoff events continues to skyrocket, reaching record levels. In February, employers enacted 2,769 mass layoff events, an increase of 542 from January and up by 1,100 from the same month in 2008. There were 295,477 workers impacted by these events in February, almost three times the number for the same month in 2008 (112,439).

Manufacturing continues to bear the brunt of the recession. In February, 1,235 mass layoff events were recorded by manufacturing companies, resulting in more than half of all the claims (152,618), despite the fact that manufacturing workers constitute less than 12 percent of the total U.S. workforce.

The February level of manufacturing layoff events was an increase of 497 from January, involving an increase of 50,041 workers. "Layoff events for all industries and for the manufacturing sector rose to their highest levels on record, with data available back to 1995," says the Bureau of Labor Statistics.

For the 15 months from December 2007 through February 2009, the total number of mass layoff events was 28,481, impacting 2,927,813 workers. The February unemployment rate was 8.1 percent, compared to 4.8 percent during the same month in 2008.

"In February, total nonfarm payroll employment decreased by 651,000 over the month and by 4,168,000 from a year earlier," says BLS.

California recorded the highest number of initial claims filed due to mass layoff events in February with 45,557, followed by Illinois (19,469), Pennsylvania (11,683), Wisconsin (9,988), Florida (9,779), Texas (9,769), Ohio (9,065), New York (8,927) and Kentucky (8,794).

The mass layoff report is located at <http://www.bls.gov/news.release/pdf/mmls.pdf>.

More Countries Consider Nuclear

A growing number of countries are expressing interest in building new nuclear power plants, according to the International Atomic Energy Agency (IAEA). More than 40 countries that do not have a nuclear reactor are considering building a plant and more than 20 are "actively considering nuclear power programs to meet their energy needs," says the IAEA. Among the 30 countries that already have reactors, 24 have indicated that they intend to build more. "The drivers for rising expectations for nuclear power include growing energy demand, concern over national energy supply security, the increasing volatile price of fossil fuels and global environment concerns," according to the IAEA. "The drivers appear to be the same for countries expanding existing nuclear programs and those seeking to introduce programs."

The IAEA projects that nuclear capacity will grow globally to between 437 and 542 GW(e) by 2020 and to between 473 and 748 GW(e) by 2030. The agency also believes nuclear plants will be built to desalinate seawater, produce steam for district heating, process heat for industrial applications and coal liquefaction, and for use in the production of hydrogen. They may also be used to generate electricity for the transportation sector — electric powered vehicles and trains.

IAEA's most recent forecast for nuclear power capacity additions is double the previous one it made in 2001, but there are plenty of uncertainties: public opposition; the front-loaded cost structure associated with high regulatory costs and high costs of construction; low availability of capital; an uncertainty as to whether humans are serious about reducing greenhouse gas emissions; the fear of nuclear terrorism; and problems of dealing with radioactive waste.

The actual construction of a new fleet of reactors also will be difficult. "The industrial capacity of nuclear suppliers has generally decreased over the past 20 years," says the Geneva-based agency. "Not only are there fewer reactor designers and less reactor choice, but there are also fewer architect engineers and project management organizations with experience in implementing large nuclear power projects. The difficulty of recruiting, educating and training personnel and gaining the experience needed to support growth and expansion of the nuclear industry may constrain growth plans even in some countries with established nuclear programs."

The analysis is contained in IAEA's "International Status and Prospects of Nuclear Power," located at <http://www.iaea.org/Publications/Booklets/NuclearPower/np08.pdf>.

Estimates of Nuclear Generating Capacity (GWe)

Region	2007	2010		2020		2030	
		Low	High	Low	High	Low	High
North America	113.2	113.5	114.5	121.4	127.8	131.3	174.6
Latin America	4.1	4.1	4.1	6.9	7.9	9.6	20.4
Western Europe	122.6	119.7	121.3	92.1	129.5	73.9	150.1
Eastern Europe	47.8	48.2	48.3	72.1	94.7	81.2	119.4
Africa	1.8	1.8	1.8	3.1	4.5	4.5	14.3
Middle East and South Asia	4.2	7.6	10.1	12.5	24.3	15.9	41.5
South East Asia and the Pacific	0	0	0	0	1.2	1.2	7.4
Far East	78.5	81.3	83.1	129.2	151.8	155.7	219.9
World total	372.2	376.3	383.1	437.4	541.6	473.2	747.5

(Source: International Atomic Energy Agency)

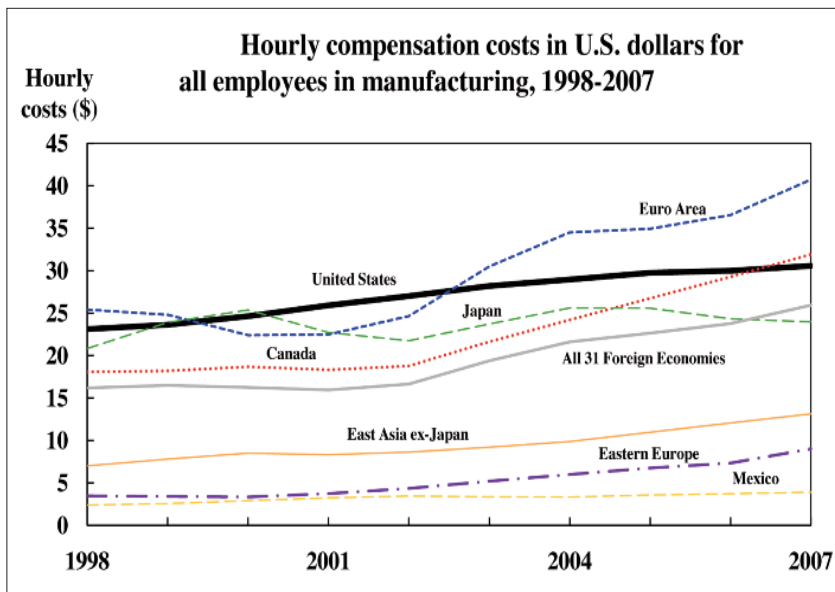
Global Mfg. Wage Comparison

American manufacturing workers do not make much more money than their overseas competitors, save for those in Mexico and China. American manufacturing workers are paid less than many of those in Europe, and slightly more than those in Japan, according to the Bureau of Labor Statistics.

Total hourly compensation for an average American manufacturing worker was \$30.56 in 2007. In Denmark, the hourly rate was 56 percent higher than in the United States (at \$47.54); in Germany, it was 66 percent higher (\$50.73), and in Norway it was 80 percent higher (\$55.03). For 19 European countries, the average, which includes \$7.69 per hour in Poland, was \$9 per hour higher than in the United States.

In Japan, the average hourly compensation for a manufacturing employee in 2007 was \$23.95, or 80 percent of the average American.

Not so in Mexico. The hourly compensation there was \$3.91, or 12 percent of the average American hourly rate. But that's not even close to China, where it was \$0.81 per hour, or 2.7 percent of the rate in the United States. Compensation includes all pay, employer social insurance expenditures and labor taxes. The BLS report is located at <http://www.bls.gov/news.release/pdf/ichcc.pdf>.



New Trade Association Opens In D.C.

Washington, D.C., has a new trade association. The Biomass Thermal Energy Council (BTEC) has been created by nine companies to promote the use of biomass for heat and thermal energy applications. "There is enormous potential for wood pellets, wood chips, energy crops, agricultural residues and other forms of biomass to help meet American's thermal energy needs," says Charlie Niebling, chairman of the new group. Thermal energy is widely used in food processing, industrial processes and as a heat source for universities, commercial facilities and cities. "Thermal energy from biomass has enormous growth potential," adds Jeffrey Serfass, executive director of BTEC. "We see tremendous opportunity in regions that depend heavily on fossil fuels for heating and combined heat and power." The group is located on the Web at www.biomassthermal.org. Founding members are: Bear Mountain Forest Products; BioHeatUSA; Energex Corp.; Forest Energy Corp.; International WoodFuels; Marth; New England Wood Pellet; PelletSales; and Woodstone.

DOD Assesses China's Military Intentions

China has done a commendable job of "taking on a greater share of responsibility for the stability, resilience and growth of the global system," according to the latest assessment of China from the Department of Defense. "However, much uncertainty surrounds China's future course, in particular in the area of its expanding military power and how that power might be used."

China is modernizing every aspect of its defense enterprise so that it is able to win "protracted wars of attrition on its territory," says DOD. It is also increasingly capable "of fighting and winning short-duration, high intensity conflicts along its periphery against high-tech adversaries" such as the United States, says DOD. "The international community has limited knowledge of the motivations, decision making and key capabilities supporting China's military modernization."

DOD then describes those capabilities in the following 50 pages, including this line from page two: "China has the most active ballistic missile program in the world. It is developing and testing offensive missiles, forming additional missile units, qualitatively upgrading certain missile systems and developing methods to counter ballistic missile defenses."

The report, "Military Power of the People's Republic of China 2008," is located at http://www.defenselink.mil/pubs/pdfs/China_Military_Report_08.pdf.

EDA Has \$ To Spend

The Economic Development Administration is looking to spend \$150 million it received under the American Recovery & Reinvestment Act on projects "that will advance economic growth in communities and regions experiencing chronic high unemployment and low per capita income," say the federal agency. "EDA's goal is to create an environment that fosters innovation, promotes entrepreneurship and attracts increased private capital investment." The deadline for applications is June 30. Information is located at www.eda.gov/InvestmentsGrants/FFON.xml.

Interview: The Man In Charge Of The House Trade Working Group, Rep. Michael Michaud

The House Trade Working Group is gearing up to confront the “free-trade” agenda that has been the dominant policy of the United States for the past 60 years. The organization sent a letter signed by 54 members to President Obama in March, outlining a new trade agenda for the country. They note that President Obama as a candidate proposed a sweeping trade reform agenda, stating that current trade policies “are not sustainable if they favor the few rather than the

many,” and now they want to hold him to it.

The House Trade Working Group is headed by Rep. Michael Michaud (D-Maine), who has become a hero among those in the “fair trade” community. *Manufacturing & Technology News* editor Richard McCormack spoke with Michaud about how the House Trade Working Group will proceed in the coming year and the obstacles to achieving a new trade policy. Here is what he had to say:

Q: Will trade policy be discussed in this session of Congress?

Michaud: Absolutely. There definitely will be a lot of discussion in the upcoming year. Hopefully we'll be able to have an honest and open discussion. There are those who will vote for any trade deal that comes along, good or bad. One of our colleagues, Congressman Henry Cuellar [D-Texas], has decided to establish a pro-trade caucus. Well, we are all in favor of trade. It's just what are the rules of trade going to be? That is one of the reasons I established the House Trade Working Group, which is to make sure that we have a say on what is a good trade model.

Q: Is there growing interest in the Trade Working Group?

Michaud: Yes, it has grown. We have other caucuses that have been established since then to deal with trade issues. **Bruce Braley** [D-Iowa] has created the Populist Caucus. Their philosophy and thinking are about the same as the House Trade Working Group. We will be working very closely with them. If you look at the letter that we sent to President Obama with 54 members of the House signing the letter, it is a very diverse group that includes six [committee] chairs, 17 subcommittee chairs, Blue Dog members, New Democrats, members of the Hispanic Caucus, the Black Caucus, the Populist Caucus and the Progressive Caucus. It sends a strong message that we have a diverse group of the Democratic Caucus that wants to look at trade and globalization issues in a different light.

Q: Doesn't this require a Herculean effort because of the long-term financial and lobbying strength of the opposing forces that favor outsourcing and the protection of investments that have made overseas?

Michaud: It is definitely an uphill battle because no one wants to be portrayed as being anti business. But there are a lot of businesses that are very supportive of what we are doing in the House Trade Working Group: the United States Business and Industry Council, the American Manufacturing Trade Action Coalition, and individual companies such as steel companies. But you have the large multinational corporations that are in favor of any trade deal that comes along because they have operations overseas in India and China. To be quite frank, they contribute a lot of money not only to

the Republican Party but to the Democratic Party. All you have to do is look at the campaign reports for a lot of Democrats and you can see the money they get from a lot of these large multinational corporations. It is not necessarily in the best interest of the United States.

Q: Given the political appointments made so far by President Obama, there are not many people in his administration who agree with you.

Michaud: I have a concern with individuals that he has appointed around him such as Ron Kirk, the U.S. Trade Representative and others.

Q: Would you have voted to confirm Kirk as USTR?
Michaud: No, I would not have.

Q: Why?

Michaud: I had a brief conversation with Kirk and he definitely is a free trader. He talked about how trade has helped his city [when he was mayor of Dallas] and I think it's very important that we have someone in that position who is for trade but is willing to look at it openly. Unfortunately, I don't think he will look at it in an open and fair manner. I could be wrong. If you look at his comments during the Senate Finance Committee [confirmation hearing], he delivered them in such a way that you could read anything into them.

Q: That was a strange hearing. The only thing committee chairman Max Baucus [D-Mont.] wanted to do was to end the hearing. Trade is one of the most important economic issues facing the United States, yet Baucus from Montana and [ranking Republican member] Chuck Grassley from Iowa only asked about cattle and agriculture and the need to get out of hearing room for a vote. It was obvious that the Senate does not want to have a discussion about trade.

Michaud: Kirk talked about his first order of business, which is to have strong enforcement, but at the same time we hear that the President wants to move on the Panama trade deal. I would be very hesitant to move on any trade deal that was negotiated by the Bush administration.

Q: Obama has repeatedly used the word “protectionist” and backed away on the Buy American

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Rep. Michaud... (From page five)

language in the stimulus bill, despite his campaign rhetoric. One member of the “fair trade” community said that the country would have been better off had McCain been elected because that would have galvanized the fair trade community in Congress against the free-trade policies that Obama is now embracing. What do you think about that?

Michaud: President Obama said all the right things on the campaign trail about renegotiating NAFTA, Buy America, being against the Columbia trade deal, enforcement and doing away with the tax haven. Now is the time for him to deliver on the campaign promises that he made. The American people voted for the president because of his message of change. If he goes back on that message of change he could very well be a one-term president.

Q: If you are “pro American” when it comes to economic and trade policy, you are considered to be a “protectionist” and are treated as if you are a Dixie Chick. Which pejorative do you like better to describe yourself, a “protectionist” or “pessimistic populist”?

Michaud: I definitely am pro American, but I am also pragmatic. When you look at these trade deals, they are not fair not only to the United States, but to the countries involved. Janet Reno under President Clinton campaigned for NAFTA. Her whole focus was that Congress had to pass NAFTA because it would solve — solve — two-thirds of our illegal immigration problem by raising the standard of living for everyone involved. She said that illegal immigrants coming over to the United States from Mexico would no longer have to come over here illegally because they would have good-paying jobs in Mexico. But because of the large subsidies in the agricultural area, NAFTA was detrimental to Mexico. More than 1.3-million workers were no longer working on farms. It made our illegal immigration problem worse, not better.

If you look at America's huge trade deficit on top of its budgetary deficit, if we're going to get out of this downward economic spiral, we can't tax our way out of it. One of the few ways we can get out of it is to make sure we have a vibrant manufacturing base here in the United States, which means we have to look at trade.

Q: Is there a legislative vehicle to do this?

Michaud: I will reintroduce in this session — with some changes — the Trade Act, which lays out what a good trade model will look like. We will also have the comptroller general conduct a review of all the existing trade deals and analyze the economic impact they have had on workers here in the United States and determine if they are consistent with our new trade policy. If they're not, then we will require the president to renegotiate them: NAFTA, CAFTA and the WTO.

Q: For well more than a century, duties funded virtually all of the operations of the federal government. Now that the United States is facing massive budget shortfalls, is there any chance the

United States could raise duties in order to raise revenue? Or would there be too much opposition from people who will say that duties are a tax increase on the poor people who shop at Wal-Mart and who would be hit the hardest?

Michaud: The bottom line is the people are losing jobs left and right and they're not going to be shopping. Wherever they will be shopping, they will be shopping with food stamps.

You also have to consider the national security issues. There is a good book out there by Pat Choate, *Dangerous Business*, that talks about our national security issues and the risks of globalization for America. The book describes how China bought a GM subsidiary that made components we need for our military. Once they bought the company, they closed it down and moved it to China. Then they bought four or five other companies that made the same type of components, closed them down and now everything is in China. These are components we need for our military that we have to buy from China.

We have to get our head out of the sand and focus on these issues and stop taking for granted that whatever the free traders want is best for this country. Quite frankly, if you look at the makeup of the companies that are in support of any trade deal that comes along, you have to look at the makeup of those companies and whether or not China owns a big portion of the corporations that we're dealing with. I can't reiterate enough that I'm for trade, that we have to have trade, but it has to be fair trade. I feel confident that we can move forward on fair trade deals if the president follows what he said during the campaign.

Q: Do you feel that because of the need to borrow money for the massive \$800-billion stimulus bill and the trillions needed to cover the failure of the U.S. financial sector that the geo-political equation has changed — that China is our primary banker and holds America's fate in its hands?

Michaud: Oh, yeah. China has a huge influence on what the United States does. The fact that Secretary [of State Hillary] Clinton went over there encouraging them to buy more of our debt said something — that China is actually really concerned. They need us because they are selling everything over here. We have to be cognizant of the fact that we will be making decisions based on whatever China wants the United States to do. They are pretty much going to control how we operate as a nation.

Q: So will a currency manipulation bill be considered in this session of Congress?

Michaud: A lot of members of Congress are talking about it. Candidate Obama talked about it when he was running for president. But if China doesn't want the United States to do anything, then it's going to be very difficult for the United States to say we are going to get tough with China since they own so much of our debt. We can talk a little tough to them, but it doesn't mean much because they are financing pretty much everything we do nowadays.

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Rep. Michaud...*(From page five)*

Q: I have been writing for years about currency manipulation and in looking back at my coverage I see that one of the reasons given a few years ago for the "let's talk about it" approach with China was there was fear that China's banking system was fragile and could fail if the United States forced China to float its currency. Little did any of our government economic policymakers realize that China's manipulation of its currency was going to be one of the reasons the American banking system would fail. The whole thing blew up in everybody's face.

Michaud: China does very well manipulating the United States and everybody else. That is how they got into the WTO. They are continually doing that today.

Q: What is motivating you?

Michaud: I have seen way too many families and communities destroyed because of trade deals. When I hear my colleagues on both side of the aisle who are in favor of trade argue that we will pass Trade Adjustment Assistance so workers can get retooled and do better for themselves the problem is this: what jobs are going to be available for them? At one point in time there was a lot of talk about technology being the wave of the future, but those jobs are also going overseas to India and China. I also have a very big concern about national security issues. Having a strong manufacturing base here in the United States is what made this country strong. We are losing that manufacturing base because elected officials are so short-sighted or unwilling to get into the details of what is happening. Quite frankly, I doubt if very many members sit down and read these trade deals. They take only what is told to them. Then you have reporters editorializing about trade deals who claim to be experts on trade issues and they admit they haven't even read any of these agreements. That's the problem.

Q: Why haven't the Democrats put trade on the legislative agenda? Is it because the Ways and Means Committee members have been bought off by big money from big companies?

Michaud: All of these bills are tied up in the Ways and Means Committee and it's very unfortunate. When Speaker [Nancy] Pelosi [D-Calif.] and [House Majority Leader] Steny Hoyer [D-Md.] were lobbying me on the automobile bailout package, I told them my concern about addressing the fundamental problem of why the automobile industry is in the situation it is today, which is value added taxes [that are being levied by foreign nations on U.S. automobiles]. They both agreed that it would be addressed. I haven't seen any further discussion of that issue since the automobile bailout. The value added tax impacts about \$400 billion a year in U.S. exports. How is that fair? It is not fair.

Q: You can make these arguments. They all sound logical, but they don't go anywhere.

Michaud: The good news is if you look at the 2006 election cycle, we had a freshman class here in Congress that ran on fair trade and changing the rules of how

trade is negotiated. When it came to vote on the Peru trade deal 73 percent of the freshman class voted against the Peru trade deal. The majority of the new freshman class [of 2008] campaigned on fair trade during the last election cycle. Hopefully, we'll be able to start moving forward to make sure we get fair trade deals.

Q: How is trade impacting your district?

Michaud: It has devastated my district. Ever since NAFTA came along we have lost over 23 percent of our manufacturing base alone in Maine that is all trade related. They have all been able to get Trade Adjustment Assistance, but the bottom line is the jobs just aren't there. When Great Northern Paper Co., the mill where I worked, filed bankruptcy, we were able to get Trade Adjustment Assistance. But we had a lot of other businesses in the region that were hurt dramatically because they had to close. On the community side, the senior class at Schenck High School [in East Millinocket, Maine] did not know whether they would be able to graduate because the mill paid 80 percent of the tax base in that municipality. When you lose that tax base, it affects everything.

Grant \$ Available At DOE, NIST

The Department of Energy is seeking proposals for an \$84-million grant program for research into geothermal energy to heat buildings and generate electricity. The agency's "Enhanced Geothermal Systems" program will fund component R&D and support new demonstration projects. It expects to make between 29 and 30 awards for a total of \$35 million for engineering management and utilization of geothermal energy. Another aspect of the program will spend \$49 million on five to 10 demonstration projects that produce at least five MWe of electricity per year per project. Information on the program is located at <http://www.grants.gov>, and typing "geothermal" into the search box.

The Technology Innovation Program at the National Institute of Standards and Technology has opened competitions for research into advanced materials in manufacturing, and civil infrastructure. The agency has \$15 million for 25 new R&D projects in technologies for nanomaterials, composites, superalloys, alloys and smart materials. The program is seeking proposals for "new technologies for predictive modeling to enable improved material properties and better process design tools; and for improved methods to scale up advanced materials production from laboratory processes and to integrate advanced materials into products."

Another \$10 million is allocated for projects involving civil infrastructure, sensor and sensor-network technologies for non-destructive testing and monitoring of major infrastructure components. The agency will award funds to develop technologies that "do a better job repairing and upgrading existing structures." Information is located at http://www.nist.gov/public_affairs/releases/20090326_tip_2009_comp_announce.htm.

WTO Chronicles 'Collapse' Of Global Trade

Global trade is experiencing a "collapse" and will decline by 9 percent this year, the greatest contraction since World War II, according to the World Trade Organization in its annual assessment of global trade. "For the past 30 years, trade has been an ever increasing part of economic activity, with trade growth often outpacing gains in output," says WTO director-general Pascal Lamy. "Production for many products is sourced around the world, so there is a multiplier effect: as demand falls sharply overall, trade will fall even farther. The depleted pool of funds available for trade finance has contributed to the significant decline in trade flows, in particular in developing countries."

Lamy says there are "many thousands" of trade related jobs being lost, and the risk of many more disappearing is magnified by an increasing number of countries adopting protectionist practices. "The risk is increasing of such measures choking off trade as an engine for recovery," he claims.

The trade situation might get worse. "As an example, consider China's exports," says Lamy. "In February, these were down 26 percent compared with the same month in the previous year, and 28 percent compared with January. If one were to extrapolate this downturn, China's exports would be approaching zero within 10 months to a year. This is obviously a highly implausible scenario..."

Germany remained the world's largest exporter of merchandise last year, shipping \$1.47 trillion worth of products. In second place was China at \$1.43 trillion followed by the United States at \$1.3 trillion, Japan at \$782 billion and the Netherlands at \$634 billion.

The United States is by far the world's leading importer of merchandise, at \$2.17 trillion, followed by Germany at \$1.21 trillion, China at \$1.13 trillion, Japan at \$762 billion and France at \$708 billion, according to the WTO.

China's position as the world's second largest export nation began to falter by the end of the year. Its exports of office and telecommunications equipment were worth \$381 billion for the year, but fell by 7 percent in the fourth quarter, after having grown at an average rate of 17 percent during the first three quarters of the year. Chinese exports of office and telecommunications equipment to the United States dropped by 13 percent in the fourth quarter. For the year, China's exports of manufactured goods to the United States increased by 1 percent, after growing 14 percent in the third quarter.

Japan's auto industry has been particularly hard hit. Its exports fell by 18 percent, and exports to the United States during the fourth quarter were off by 30 percent. Germany's auto industry saw a decline of exports of 51 percent in February 2009 compared to the previous year.

The global air cargo industry experienced a 23 percent decline in traffic in December 2008 compared to the same month in 2007. "To give some perspective on the magnitude of this drop, the decline recorded in September 2001, when most of the world's aircraft were temporarily grounded was only 14 percent," says the WTO. The report is located at http://www.wto.org/english/news_e/pr09_e/pr554_e.htm.

Market Watch: Steel, Airlines, Paper, Mail

The U.S. **steel industry** is hurting. Shipments dropped by 50.5 percent from 9,246,000 net tons in January 2008 to 4,576,000 net tons shipped in January 2009, according to the American Iron and Steel Institute. Shipments to auto companies fell by 58.3 percent; to construction contractors by 59.6 percent; to service centers and distributors by 55.9 percent; and to the oil and gas industry by 20.2 percent.

The economic downturn is taking the lift out of the **airline industry**. Revenue for the major airlines from passenger travel dropped by 19 percent in February, as compared to the same month in 2008, according to the Air Transport Association of America. It is the fourth consecutive month that revenue has fallen from the prior year. The number of air travelers declined by 12 percent, and they paid 8 percent less to fly one mile on U.S. airlines.

"Compounding the softening demand for travel, U.S. airlines saw cargo traffic — as measured by revenue ton miles — decline 21 percent year over year in January 2009, after back-to-back 17 percent declines in November and December 2008," says the Air Transport Association. "Notably, trans-Pacific cargo traffic fell 32 percent." All this is happening despite a significant decline in fuel prices.

The paperless office is almost here. The shipment of **paper** sank by 24.5 percent in February, as compared to the same month in 2008, according to the American Forest & Paper Association. Imports of paper are dropping even faster: down 44.2 percent in January as compared to the same month last year. Imports have now "slowed to below the level of exports for the first time since at least 1995, which is as far back as the AF&PA electronic records of trade data are available," says the trade association.

The **United States Postal Service** says that it expects to deliver 180 billion pieces of mail in its fiscal year 2009, down from 212 billion pieces in 2007. With plunging volume and revenue, plus huge pensions and operating costs, the United States may not be able to "preserve an effective, affordable Postal Service capable of serving every American in every community," says Postmaster General John Potter. USPS is facing a budget gap that Potter described as being "a chasm widening each day." His assessment is located at http://www.usps.com/communications/newsroom/testimony/2009/pr09_pmg0325.htm.

Rep. Tim Ryan Defends Earmarks & Manufacturing

There might be a debate raging in the country about the legitimacy of congressional earmarks, but one member of Congress doesn't really care. Rep. Tim Ryan (D-Ohio), head of the House Manufacturing Caucus, says earmarks can help save his corner of northeast Ohio from economic oblivion. He has a link on his home page for constituents to fill out an "Earmark Application Form" with four pages of instructions and a timeline for submissions.

Prior to Republicans losing control of Congress in 2006, Ryan said that Democrats had "learned a hard lesson" about their previous spending behavior that helped cost them their House majority in 1994. "Just writing a bigger check doesn't solve the problem," he said in 2005. If Democrats were to win control of

Congress in 2006 (as they did) "the old Democratic Party of big government is just not going to happen."

Since being elected to Congress in 2002, Ryan, 35, has quickly risen into the Democratic leadership ranks. He is a member of the powerful House Appropriations Committee, which controls spending, and is a member of the Democratic Steering and Policy Committee, which nominates Democratic members to serve on House committees.

In a March 10 speech he made on the House floor about the importance of manufacturing, Ryan defended earmarks for his Ohio district (a list of which appears on page 10). Here is a slightly edited version of his five-minute speech:

"I have the honor of representing an area of northeast Ohio from Akron over to Youngstown. This is an area that was built on steel, rubber, auto and manufacturing. As I rise to talk about the auto industry I want to make a comment about the gentleman from Arizona who was commenting about earmarks and investments that members of Congress are constitutionally required to make and to spend money on behalf of the people of this country.

For 30 or 40 years, areas of the country like mine were booming. When the steel mills were running, we had the highest per capita income in the country. We were taking our tax dollars and we were sending that money to Washington, D.C. Washington, D.C., was sending that money to help build the West — to help build up states like Arizona — by implementing water and dam projects to take the Colorado River into the desert. These congressional districts in Arizona and New Mexico didn't just pop up. There was a significant federal investment to say that we want to develop the West.

And now members of Congress are looking for the opportunity to rebuild their community, to take specific projects and specific money and invest it in the Youngstown State University for a defense center of excellence, and

metrology, polymer and materials science development at the Akron State University. These are investments we need to make to rehabilitate some old industrial areas in order to get them on the cutting edge. Our obligation is to do that.

In our area of the country, what has transpired over the last few months has been significant, and I'll give you one example. Last summer, General Motors said they were going to add a third shift at the local Lordstown plant. We had the Governor [of Ohio] in. There was \$350 million provided in state tax incentives. But because of the credit crisis and globalization and 30 years of bad trade agreements the third shift was pulled; then the second shift was pulled; and now we have a fraction of the workers we used to have there.

But a couple of days after GM announced they were going to lay off 900 workers, the seat manufacturer laid off a few hundred. A couple of days later, the logistics company laid off a hundred workers. Delphi laid off, and on and on and on the ripple effect goes throughout the community to the point to where Trumbull County's unemployment rate rose from 7 percent last year to 14 percent today. It doubled in a year.

The point of me rising here today is to say to anyone who will listen and the powers that be in Washington, D.C., that we need a

manufacturing policy in the United States of America. When 20 to 25 percent of [our] GDP became finance, when people are just shuffling money around, when it is a Ponzi scheme and Wall Street is making a lot of money and wages don't ever go up, then eventually you get to where we are today, and that is a collapse of the financial system.

We have a system now that is set up where [if] an average family makes a mistake, they're on their own: we cut them loose. But if the financial markets make a major mistake and do illegal and unethical acts, then they have the system rigged so that the whole thing collapses, so that everyone has to jump in and save it.

So as we move over the course of the next few months, we need to recognize that the auto industry has a multiplier effect of five jobs for every one job in the plant, and finance has two jobs for every job in the finance industry. We can talk about companies like Wheatland Tube that have closed factories down in northeast Ohio and western Pennsylvania because of the tubing coming in from China. We can talk about Severstal Steel, which laid off 1,000 people, and on and on and on.

So let me suggest that as we talk about financial reform and universal health care, that we also add a manufacturing policy to the United States plan for the future."

Rep. Tim Ryan's 2009 Earmarks Are Intended To Save His District

In the federal 2009 "Omnibus" budget bill passed by the House and Senate and approved by President Obama, Rep. Ryan secured \$30 million in earmarks for 29 projects including sewers, roads, urban renewal, teen parent programs, domestic violence centers, crime reduction, workforce development, education, medical equipment, youth sports leagues, bike trails, prison funding and a National Guard barracks. He issued a press release describing all of them. Here are the technology and manufacturing projects that Rep. Ryan describes in his list of 2009 earmarks:

Alpha Micron Adaptive Liquid Crystal Display (\$951,500). The project will create a film that can be used for commercial and residential windows. Funding will be used to develop a manufacturing system that will create a liquid crystal-based film where its visible light transmission can be altered from 70 percent to 30 percent by application of a voltage from a solar cell.

University of Akron Fuel Cell for Clean Coal Power Plants (\$1,427,250). Researchers at the university want to demonstrate the technical feasibility of building a five-kilowatt scale coal fuel cell that can economically convert high sulfur coal into electricity with near zero negative environmental impact. The fuel cell will be capable of heating and providing electricity to an entire house. As the performance of the fuel cell components is fine-tuned and optimized, funding must be allocated for the design and construction of a 250-kW pilot plant; a critical step to scale up the coal fuel cell technology to the megawatt scale for the nation's electric power supply.

Youngstown State University Center for Efficiency in Sustainable Energy Systems (\$1,903,000). This new interdisciplinary industry-university center will integrate engineering design with energy systems analysis to improve energy utilization in the manufacturing and alternative energy industries.

Youngstown-Warren Chamber Salute to Success (\$246,643). Salute to Success is an entrepreneurship development initiative to help develop business startups.

High Altitude Airship (\$3,200,000) will fly at 65,000 feet and be a low-cost, maneuverable airborne platform that supports intelligence, surveillance, reconnaissance and communication operations.

Alternative Energy Fuel Cell Power (\$1,600,000). Remote military base deployments require electrical power for personnel support and command and control applications, and current diesel generators are not fuel efficient. The market for this product is estimated at more than \$200 million per year, and will result in the creation of hundreds of new, high-paying manufacturing jobs for Ohio.

Liquid Crystal Laser Eye Protection (\$1,600,000). The goal of this project is to implement digital liquid crystal technology on curved plastic shields, visors and goggles to provide protection against laser weapons.

Stryker Second Source/Next Generation Tire Development (\$800,000). This project will provide funding to the Army for research, development and testing qualification of second source tires for Stryker vehicles as well as near-term next generation tires for heavier load Stryker vehicles under development.

Corrosion Engineering Education Initiative (\$800,000). Responding to industry and Department of Defense demands, the University of Akron is establishing the first comprehensive undergraduate education program in the field of corrosion engineering and science.

Helmets to Hardhats (\$3,000,000). This project's intent is to facilitate access by veterans, National Guardsmen and reservists to opportunities for skilled employment in the construction industry.

TacFab (\$2,000,000). The Army uses its Rapid Manufacturing System (RMS) to provide deployed forces with critical spare parts to keep its weapons systems operating under the extreme wear and conditions of battle. The Tactical Metal Fabrication System will provide mobile metal casting capability that will complement the rapid manufacturing system to cut parts production time by up to 90 percent.

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Goldman's IT Spending Forecast

Global corporate spending on information technology this year will decline by 9 percent, according to Goldman Sachs. Virtually every area of the IT sector will get hit, including hardware, software, IT services, communications and semiconductors. The U.S. IT sector is expected to decline even more, however. U.S. business investment in IT is expected to drop by 12 percent this year.

"Our IT spending indices, which measure indications of spending growth versus spending contraction, dipped further to new lows in our latest survey, deep in contraction territory," writes Goldman Sachs in its March "IT Spending Survey." The company's total IT spending index dropped from 31 in December 2008 to 29.5 in March. "The index seemed to be searching for a bottom, as the rate of decline came in at the slowest pace since last summer," says the analysis. "That being said, our tech capital spending index (representing spending only a new equipment and software) took another steep drop to 24 versus 31.5 in our prior survey, another all-time low for the series."

The top priority among corporate chief information officers is "cost reduction," with almost 80 percent of the CIOs and senior IT managers participating in the Goldman Sachs survey citing it as their highest priority "compared with just over 40 percent in our prior reading on top IT spending priorities in mid 2008," it notes.

When asked which companies were gaining share of shrinking IT budgets, in the area of personal computers, HP took the top spot followed by Apple. Losing share were Lenovo, Dell and Gateway. In the area of enterprise servers, HP and IBM were gaining share at the expense of Sun and Dell. In storage, EMC, HP, Network Appliance and IBM were gaining share over Sun Microsystems.

The software providers that were gaining share were VMware, Citrix Systems, Cisco Software, Oracle and Symantec. Losing share were CA, Check Point Software, SAP, TIBCO, McAfee, BMC Software and CommVault Systems. In the area of communications equipment, Juniper, Cisco and Riverbed were gaining share. Nortel, 3Com, F5 Networks and HP were losing share.

The appetite for offshore outsourcing is also declining. When asked if CIOs expect to move more than 10 percent of their IT work to an offshore location over the next one to three years, only 10 percent said they were, down from 32 percent in December 2007. "Together with recently reported results and reduced growth expectations from offshore companies, we believe that this survey's data suggest near-term demand risk remains high for offshore spending trends due to project deferrals, delayed decision making and reduced pricing leverage," says Goldman. There is also a "reduced appetite for new offshore services" such as infrastructure management, software R&D, business process outsourcing and consulting.

R&D Credit Could Get Mfg. Makeover

Two members of the House of Representatives from heavy manufacturing districts want to remake the R&D tax credit. Reps. **John Boccieri** (D-Ohio) and **Chris Lee** (R-N.Y.) have introduced legislation (HR-1545) that would make the R&D tax credit permanent but would also provide a "bonus tax credit" for companies that manufacture their products in the United States. "This is important bipartisan legislation that will help keep good-paying jobs and crucial R&D investment dollars here in the United States," says Lee. Adds Boccieri: "This legislation rewards and creates American jobs, keeps research and development in the U.S., and takes critical steps to make the research and development tax credit comparable to those credits offered in other countries."

Companies that produce between 50 and 60 percent of their products in the United States would receive an additional 2 percent on their R&D tax credit. Those that produce between 60 percent and 70 percent in the United States would receive an additional 4 percent; those that produce between 70 percent and 80 percent would receive an additional 6 percent; between 80 percent and 90 percent would receive 8 percent; and those that produce more than 90 percent in the United States would receive an additional 10 percent.

China Supports Its Exports

China has recently been criticizing the United States for its "protectionists" policies, but it is doing whatever it can to continue to have exports fuel economic growth. **China has increased export rebates on 3,800 items "to maintain growth," according to the China Daily newspaper on March 28.** "It was the sixth increase since last August when the government decided to raise refunds in an attempt to tackle slumping exports amid the global financial crisis."

Export rebates are increasing to 16 percent on textiles and apparel and to 17 percent on CRT televisions. Rebates will also be increased on iron and steel, pharmaceuticals and non-ferrous metals and go into effect on April 1, according to *China Daily*. Export tax rebates have increased by 21 percent so far this year amounting to \$10 billion that is available for Chinese companies to invest in modernizing plant and equipment, according to China's Ministry of Finance and State Administration of Taxation.

Immelt Sees Light... (From page one)

Immelt says that the educational system must be transformed to inspire "hard work, discipline and creative thinking." The ability to innovate "must be valued again," he adds. "We must discover new technologies and develop a productive manufacturing base. Our trade deficit is a sign of real weakness and we must reduce our debt to the world. GE will always invest to win globally, but this should include a preeminent position in a strong U.S."

Machine Tools...*(From page one)*

people in this industry," Austin adds.

Exports proved to be a bright spot until mid 2008, but they have dried up.

In a survey of its members, AMT received an earful about the current economic situation and credit crisis. Members said that time was not on their side. Many are seeking financing and buyers for their businesses. "The phones aren't ringing and no one is returning calls," said one executive in Wisconsin. "We are concerned!" Another noted that orders are being placed on hold and that there is a cash crunch coming in the next few months. "A year ago at this time we had five employees. Now we have one," said one AMT member. Added another: "Work in many industries — automotive, trucking, aerospace and solar panels — has come to a halt with no real evidence it will change any time soon. Since the week before Christmas we have reduced our workforce by 54 percent." Another executive in Michigan said that capital investment in machine tools and equipment, "especially for automated high technology, high efficiency equipment has completely stopped. Not slowed down, but stopped. Zero orders. Delays. Cancellations."

The U.S. machine tool industry is already a shadow of its former self. It was ranked seventh in the world in output at \$3.8 billion last year, behind Taiwan, which has a GDP of \$600 billion, far lower than U.S. GDP of \$14.2 trillion. The United States accounted for less than 5 percent of all the machine tools produced in the world last year. China, whose GDP (\$3.3 trillion) is one-third the size of the United States, produced \$14 billion worth of machine tools last year, more than three times the U.S. output. Japan's output (\$15.8 billion), and Germany's output (\$15.6 billion) are both four times larger than the U.S. industry's, according to Gardner Publications.

American companies are doing whatever they can to survive. They are rotating layoffs, furloughing workers, deferring payments to suppliers, cutting expenses, reducing management salaries and quoting every job that is available. Schildge says his firm has put half of its employees on rotating four-week layoffs and the office staff is furloughed one day every two weeks.

AMT is losing two to three members per month, due to their going out of business. If business does not turn around soon, Schildge says the trade group could lose 30 percent of its membership this year.

Others in the industry say what's needed most is the return of credit and consumer confidence. At some point Americans will have to start replacing their aging automobiles. The automobile scrap rate is about 11 million per year, but sales are now projected to be well below 10 million for 2009. "If the government can provide a lending environment that will encourage automobile sales and home sales the market will take care of itself," says Schildge. "With the right environment, we can come back quickly."

But presently, there is no sign that the market is turning around. Schildge looks for increasing part sales, which means customers are using their existing

machines. But there has not been any uptick in the parts business. Austin has not seen any increase in customer inquiries, and the strengthening of the dollar has put the brakes on overseas sales, not that they were particularly robust given the difficulty of selling systems into Japan, Germany and China. "We're competing on an unlevel playing field with countries manipulating their currencies and supporting their industries in a way that doesn't take place" in the United States, says Austin.

In order to have survived the previous industry downturns, the remaining U.S. machine tool companies have had to embrace technology and innovation. But that might not be enough this time around. "There are only a few people able to hang on at this point in time," says Austin. "Some of them have been helped because they are absolutely essential to certain [national security] parts of our economy, but a large part of the business has been taken over by foreign competitors."

Don't write the industry off quite yet, says Schildge. The downturn in 1982 was similar to the current situation and many people in America were talking about the death of manufacturing, but the industry survived. "I think we will come back this time, too," he says.

In Hard Times, Cell Phones Become An Expensive Luxury

As many as 60 million Americans are considering either dropping their cell phone contracts or their cell phones altogether, due to the deepening recession, according to research conducted by the New Millennium Research Council. "Millions of Americans are on the verge of disconnecting expensive cell phone plans," says the group, based on polling done by the Opinion Research Corp. "A potentially major shift in consumer habits at the expense of contract-based cell phone service is underway as consumers seek to save money."

About 40 million Americans say they are considering switching to a prepaid system. Cell phone extras such as Internet connectivity, e-mail and texting are "likely to take a hit in the economic downturn," says the Millennium Research Council.

Fifteen percent of cell phone users with such services have already cut back on those features. Forty-one percent of users with those features say they will likely cut back on their extras if the economy gets worse. Only two in five said it is "not likely at all" that they will make such cuts in the face of a deepening recession.

"The ranks of all Americans without a cell phone who have discontinued cell phone service in the last six months because of actual job loss, fear of job loss, the recession or any other financial concerns includes 29 percent of 18-34 year olds, and 28 percent of those living in households earning \$35,000 a year or less," according to the survey, located at http://newmillenniumresearch.org/news/031909_NMRC_ORC_cell_phone_survey_news_release.pdf.