Another great day when we don't expend many electrons with items about the Washington DC creeps that our fellow citizens have decided would be really really good at running the government. MSN - Money has a piece saying the Dow could hit 26,000 by 2016. Seems silly, but some readers will be interested. The argument is the federal government will keep the bubble going.

Market observer Harry Dent claims that the Dow Jones industrials will rally to 17,000 within the next few weeks -- before it disastrously plummets to around 6,000 by 2016. Dent makes his case in a new book, "The Demographic Cliff."

Sounds like fun times for investors -- but it sounds like book shilling to many of the rest of us.

Let's address several important points that explain why Dent is so terribly wrong. The U.S. government, the Fed, Wall Street and the big Banks are "all-in" on the stock market right now. They can't and won't allow a serious collapse in the markets.

Ask yourself this question: All those billions of dollars the Fed printed since 2009 . . . where did that money go? It didn't go to consumers. It funneled to interest-free loans to Wall Street firms, banks and corporations -- so that in the end that money wound up in the stock market.

How else can you explain a market that has risen in value despite billions of dollars in net outflows by retail investors from 2009 to 2013? ...

Popular Mechanics suggests how cruise ships can become safer.

For the past three decades cruising has been the fastest-growing segment of the travel industry. Eleven new ships were christened last year, and almost 21 million people went on a cruise. Statistically, cruising is relatively safe, but recent failures in seamanship, emergency response, and engineering should sound an alarm. Introduce bad weather or remote surroundings into the equation and an incident like the <u>Costa Concordia shipwreck</u>, which made international headlines two years ago, could result in hundreds of deaths.

Compared with other areas where technology and human behavior impact passenger safety—notably, aviation—the cruise industry is poorly regulated. It has no clear equivalent of the Federal Aviation Administration, which has a broad mandate to ensure air safety. The U.S. Coast Guard conducts prescheduled, biannual inspections of ships that embark passengers at U.S. ports, but most cruise ships are registered, or flagged, overseas, and critics charge that regulations are poorly enforced. Cruise lines have started instituting reforms, but more needs to be done.

The January 2012 grounding of the Carnival-owned megaship Costa Concordia left 32 dead, 157 injured, and a hulking, disintegrating eyesore <u>beached like a whale</u> off the coast of Tuscany, Italy. It started with ego: Capt. Francesco Schettino swung the ship and its 4229 passengers and crew close to shore on an unsanctioned "salute" to the island of Giglio. The vessel hit submerged rocks, which ripped a nearly 200-foot gash in the hull.

The crew never contacted rescue authorities, who found out about the accident from relatives of panicked passengers. And the abandon-ship order didn't come until 10:54 pm, more than an hour

after the collision. The captain himself had already escaped the foundering vessel. "You've abandoned ship!? Get the [expletive] on board!" Italian coast guard captain Gregorio De Falco bellowed when he finally reached Schettino by phone.

The crew didn't perform much better: The industry standard for the evacuation of a vessel is 30 minutes, but hours into the incident there were still dozens of passengers on board. ...

... International law calls for passengers to receive a safety briefing within 24 hours of a ship leaving port, but that can be too late. About 700 of the Costa Concordia's 3206 passengers had boarded just a couple of hours before the accident; their safety briefing was scheduled for the next day. When things went bad, passengers had no idea where to go or what to do. But the timing of drills isn't the only issue that needs to be addressed. Mike Inman, the vice president of safety for Holland America, another large cruise line owned by Carnival, says that passenger attendance at muster drills hasn't always been enforced. "Holland America was one of the first lines to make it mandatory, and we have disembarked people who did not attend," he says. (Even before the Concordia wreck, Holland America held drills before its ships left port.) Since February 2012 all CLIA cruise lines have pledged to conduct passenger muster drills before leaving port. Technology can help too. In October 2013 Danish safety-equipment company Viking announced the creation of a self-propelled, inflatable raft that holds 200 people and has a chutelike system to ease boarding for children, the elderly, and the injured. The LifeCraft could be on ships within two years; such advances could save lives. "How you get the person in the life raft is the most important part," Nadolny says. "Lifeboat injuries are probably the biggest killer of crew out there. It's a fairly complicated arrangement for lifting and lowering the boat, and if it's not done just right, well, the boat drops and everybody in the boat gets killed." That's what happened last year in Spain's Canary Islands during a drill on a cruise ship called the Thomson Majesty. Cables snapped, killing five crew members and injuring three more. ...

The blessings of fracking are extolled in an article from the <u>Hoover Institution</u>. And secure property rights are one of the reasons fracking took off in our country. Americans should celebrate fracking. By unleashing production of unconventional hydrocarbons, fracking has catapulted the U.S. from being a has-been producer of oil to the world's largest total supplier in 2013 when we include natural gas liquids, biofuels, and crude oil. The U.S. produced around an average of 12.1 million barrels a day of these liquids, 300,000 barrels a day more than Saudi Arabia and 1.6 million more than Russia, the previous leaders.

This increase in U.S. output has not been matched since 1940 when the country was blessed with flush new primary production from oil fields in Texas, New Mexico, Louisiana, and Oklahoma. Shale-gas production from the Bakken Formation in North Dakota, the Eagle Ford Formation in Texas, and the Marcellus Formation that crosses parts of West Virginia, Ohio, Pennsylvania, and New York now accounts for 44% of total U.S. natural gas output, and eventually could account for nearly 70%. ...

... New fracking and horizontal drilling technologies are dominantly developed and implemented in the U.S. Why is that? The answer is secure private property rights to subsurface minerals. These are the major reason why the American oil and natural gas industry has been so dynamic and innovative. Except for western Canada, throughout the world, subsurface mineral rights are held by governments, and indeed, the U.S. government also holds the rights to hydrocarbon deposits on

federal lands. The incentives for and transaction costs of investing in and using new fracking, pumping, and drilling technologies are dramatically different between private and public ownership.

When private parties own the mineral rights (often surface land owners), they capture any expected benefits from new discoveries and associated production. In North Dakota, land owners above the Bakken Formation are part of a new generation of oil millionaires in a relatively remote and semi-arid region that previously had seen population declines and economic stagnation. These owners also bear many of the costs, including any environmental ones, such as potential ground water contamination or depletion, because these costs generally are localized in the vicinity of fracking wells. Where they are not, rights holders or the companies they contract with may be held accountable for damages inflicted on others.

Bonding requirements to cover environmental damages also can be used both for mitigation and for indentifying the opportunity costs to rights holders and drilling companies of any harm they inflict on others. Bonding requirements and potential litigation instill incentives for careful production practices. ...

WSJ's Walt Mossberg replacement, <u>Geoffrey Fowler</u>, writes on the ubiquitous computer mouse.

I said goodbye to my mouse last month. It was time to advance, I thought, to a higher plane of input, a trackpad that works like a tablet's screen. Instead of point and click, I'd swipe and flick.

A few weeks in, I was missing my mouse. Moving a folder across a 27-inch iMac screen with the trackpad was like lugging a grand piano across the Sahara—I had to keep taking breaks along the way, as I ran out of pad.

This can't be progress. Determined, I rustled up a dozen of the latest input devices, regular mice and trackpads, but also vertical mice, pen- and knob-shaped mice, a touch-screen stylus, even a controller that lets you wave your hands around without touching anything, a la "Minority Report."

What I discovered: Thirty years after the Macintosh took the mouse mainstream, I couldn't find anything more precise or comfortable for operating a computer. More important, I found the mouse has managed to reinvent itself over the years—it's like the Madonna of PC peripherals.

One reinvention stood out during my testing, a mouse whose unconventional look belied its natural grip: the Sculpt Ergonomic Mouse by <u>Microsoft</u>. Other standouts I tested were <u>Apple</u>'s Magic Mouse, the Penclic Mouse and <u>Logitech</u>'s Ultrathin Touch Mouse. ...

This cold and snow-filled winter we've had lots of fun with globalony alarmists. However, there are parts of the northern hemisphere with mild winters. Parts as close as Alaska where warmth and lack of snow have created havoc for the iconic Iditarod. **The Wire** has the story. Check out the picture of a dog sled team mushing through a forest on bare ground.

Along the Farewell Burn, returning racer Scott Janssen, known as the Mushin' Mortician because of his day job, had to <u>drop out of the race after numerous catastrophes</u>. Janssen slammed into rocks and crashed his sled. He hit his head and was knocked unconscious for at least an hour.

He then continued on until one of his dogs got loose. As Janssen walked across a frozen creek to retrieve the dog, <u>he slipped and fell</u>, breaking his ankle. He laid there for another 45 minuted until another competitor, Newton Marshall, caught up to him and offered assistance (Marshall is from Jamaica, by the way).

As of Thursday morning, 12 of the 69 Iditarod competitors have scratched. Jeff King <u>currently</u> <u>holds a 39-minute lead</u>, although none of the top five competitors have taken their mandatory eight-hour or 24-hour rests. Buser, however, is in sixth and has already gotten his 24-hour layover out of the way. ...

This is what Pickings could look like if we didn't have a predatory government.

MSN - Money

Why the Dow could hit 26,000 by 2016

New claims of a looming crash make no sense. Here's why the market will soar in the next 2 years.

by Jamie Dlugosch



Market observer Harry Dent claims that the **Dow Jones industrials** will rally to 17,000 within the next few weeks -- before it disastrously plummets to around 6,000 by 2016. Dent makes his case in a new book, "The Demographic Cliff."

Sounds like fun times for investors -- but it sounds like book shilling to many of the rest of us.

Let's address several important points that explain why Dent is so terribly wrong. The U.S. government, the Fed, Wall Street and the big Banks are "all-in" on the stock market right now. They can't and won't allow a serious collapse in the markets.

Ask yourself this question: All those billions of dollars the Fed printed since 2009 . . . where did that money go? It didn't go to consumers. It funneled to interest-free loans to Wall Street firms, banks and corporations -- so that in the end that money wound up in the stock market.

How else can you explain a market that has risen in value despite billions of dollars in net outflows by retail investors from 2009 to 2013?

Investors who bailed on the stock market over the last few years will eventually realize that the stock market is the ONLY realistic place for them to grow their money at a pace fast enough to have a secure retirement and to outpace inflation. Investors will come to realize that CDs, savings accounts, annuities and even bonds are all the new "mattresses" thanks to the Federal Reserve's zero-interest rate policy.

Dent's prediction sets the stage for what he is calling a "dangerous period" for investors. Talk about an understatement. I think it is rather his very claims that are dangerous for investors, not the current market environment.

What basis does Dent have for making such a sensational prediction? It's not much. He argues that aging demographics in the U.S. mean we cannot sustain current market and economic activity. That is, we cannot rely on younger folks' spending to fill the gap of the older generation.

Oh, I see. Another in a long line of doom-and-gloom predictions based on the baby boomers retiring.

Do people really take this stuff seriously? I suppose they do or these sorts of predictions would not be made.

Here's my crazy, but not-really-so-crazy prediction: The Dow will hit 26,000 by the end of 2016.

No evidence for a crash ahead

Let's go back to Dent. One of his arguments for a crash seems to be a cursory review of the current economic state and its anemic response to massive amounts of stimulus.

While the recovery has been slow to materialize, it has indeed arrived. What did Dent expect? These things take time. The lack of fireworks-style growth in the aftermath of those messes should be no real surprise.

And things really are not so bad out there. Current economic data, absent this horrendous winter, has been very positive in the early months of 2014. The Federal Reserve has started to remove stimulus. It wouldn't do that if there was one scintilla of evidence suggesting a Dow-6,000-style crash was on the horizon.

Skeptics will rightly note the Federal Reserve would be the last to identify an environment fertile for a crash, but nonetheless the conditions that would precipitate a crash are simply not present.

If this is a bubble, as Dent claims, in the same vein of the roaring 20s, then I missed something. It's just not going to play out the way Dent sees it.

Economic growth and pent-up demand

Instead it is far more likely that the Dow hits 26,000 by the end of 2016. It will happen more easily than you might think.

All it takes is greater-than-expected economic growth. The experts have us growing at a 3 percent clip in 2014. What happens if growth comes in closer to 4 percent this year?

I'll tell you what happens -- the Dow jumps 20 percent and closes the year within a hair of 20,000. We'll get stuck on that psychological barrier, but it won't take long to bust through.

In 2015, that 4 percent growth inches higher to 5 percent. That will be enough to push the Dow up another 15percent to close at 22,600 by the end of 2015. Then, if growth continues at a 5percent clip, a bull market rally will send stocks up another 15percent to 26,000.

There you go, and I wouldn't bet against us.

The housing crash and financial crisis has created immeasurable pent-up demand. It won't take much for us to hit a 5 percent growth rate. That is far, far more plausible than the garbage Dent is pushing.

We base this assessment on the exact opposite scenario to the one that Dent predicts.

Baby boomers will keep working

Here is a more rational assessment of the Baby Boomer population. It's been called the "me" generation, which rings true: it's defined by early adopters of technology, exploration, restlessness, desire. This is not a rocking-chair generation.

Who says this generation wants to retire? More and more of those who are able are working right up till the grave. That's a good thing for future economic growth. In addition, there is plenty of population available to replace those workers supposedly about to become dependent on the state.

When baby boomers do finally kick the bucket, the U.S. will see one of the largest generational transfers of wealth. Ever.

Gen X and Gen Y become the new wealthy generation in America.

Harry Dent, Dow 6,000 is so 1990s.

Popular Mechanics

This is How to Prevent Cruise Ship Disasters

Crew incompetence, breakdowns, and blackouts have led to several embarrassing and downright dangerous mishaps aboard cruise ships in the last few years—think of the Costa Concordia disaster and the Carnival ship stuck off the coast of Alabama. These are the four things that must happen to prevent more chaos at sea.

by Kalee Thompson



The Costa Concordia shipwreck killed 32.

For the past three decades cruising has been the fastest-growing segment of the travel industry. Eleven new ships were christened last year, and almost 21 million people went on a cruise. Statistically, cruising is relatively safe, but recent failures in seamanship, emergency response, and engineering should sound an alarm. Introduce bad weather or remote surroundings into the equation and an incident like the Costa Concordia shipwreck, which made international headlines two years ago, could result in hundreds of deaths.

Compared with other areas where technology and human behavior impact passenger safety—notably, aviation—the cruise industry is poorly regulated. It has no clear equivalent of the Federal Aviation Administration, which has a broad mandate to ensure air safety. The U.S. Coast Guard conducts prescheduled, biannual inspections of ships that embark passengers at U.S. ports, but most cruise ships are registered, or flagged, overseas, and critics charge that regulations are poorly enforced. Cruise lines have started instituting reforms, but more needs to be done.

THE PROBLEM: Crew Incompetence

The January 2012 grounding of the Carnival-owned megaship *Costa Concordia* left 32 dead, 157 injured, and a hulking, disintegrating eyesore <u>beached like a whale</u> off the coast of Tuscany, Italy. It started with ego: Capt. Francesco Schettino swung the ship and its 4229 passengers and crew

close to shore on an unsanctioned "salute" to the island of Giglio. The vessel hit submerged rocks, which ripped a nearly 200-foot gash in the hull.

The crew never contacted rescue authorities, who found out about the accident from relatives of panicked passengers. And the abandon-ship order didn't come until 10:54 pm, more than an hour after the collision. The captain himself had already escaped the foundering vessel. "You've abandoned ship!? Get the [expletive] on board!" Italian coast guard captain Gregorio De Falco bellowed when he finally reached Schettino by phone.

The crew didn't perform much better: The industry standard for the evacuation of a vessel is 30 minutes, but hours into the incident there were still dozens of passengers on board.

Given the astounding incompetence displayed during the tragedy, it was largely luck that casualties weren't higher. "The *Concordia* basically tipped over within swimming distance of shore," says Walt Nadolny, chair of the department of marine transportation at New York's SUNY Maritime College. In fact, some passengers did swim to safety. "It would have played out totally differently" in tougher conditions, he says. If the 3780-passenger *Costa Pacifica*, a sister ship to the *Concordia*, had struck a rock on the remote northern coast of Norway, where it travels each summer, passengers would have faced 48 F seas and a lengthy wait for help.

THE SOLUTION In response to the *Concordia* debacle, the Cruise Lines International Association (CLIA)—an industry group whose 26 members represent all of the major cruise companies—ordered a broad safety review led by outside experts, including former heads of the U.S. National Transportation Safety Board and the European Maritime Safety Agency. The effort resulted in 10 new rules to improve crew communication and training. For instance, all bridge officers are to be thoroughly briefed on the passage plan, which includes every detail of a vessel's route; visitors are prohibited from the bridge during critical times; and a lifeboat is to be filled to capacity with crew members during a training drill at least every six months.

It remains to be seen how closely the new rules will be followed; compliance is essentially voluntary. Meanwhile, government oversight is weak. Carnival, which owns 10 lines and controls half of the world cruise market with more than 100 ships, is headquartered in Florida. But the majority of the company's ships—including all of the Carnival-branded vessels—are flagged either in the Bahamas, Panama, or Bermuda. Bill Doherty, a retired safety manager for Norwegian Cruise Line, one of the few big lines not owned by Carnival, is among a number of experts who call these flags of convenience, where labor laws and other regulations are relatively lax.

THE PROBLEM: Breakdowns and Blackouts

In February 2013 the *Carnival Triumph* was 150 miles off the coast of the Yucatán Peninsula in the Gulf of Mexico when a fuel line leak led to a fire in the aft engine room. It quickly knocked out power to the ship's six diesel—electric engines, which provide electrical power as well as propulsion. The backup diesel generator could run emergency lights but not the ship's hotel load, which includes lighting and plumbing in the cabins. While the company worked to secure a tow back to port in Mobile, Ala., more than 4000 passengers spent five days in discomfort and squalor as toilets overflowed and hot buffets were replaced with canned food.

Such incidents are surprisingly common. A similar fire in 2010 left passengers on board the

Carnival Splendor without power off the Pacific coast of Mexico. In March 2013 the Carnival Elation experienced a steering problem on the Mississippi River and required a tug escort. Just days later the Carnival Dream suffered power and plumbing problems as the result of a generator malfunction while at port in St. Maarten.

None of these incidents resulted in loss of life, but the outcome could have been far different. What if a tropical storm had developed while the *Triumph* floated in the Gulf without steering or propulsion? What if a cruise ship lost power during bad weather in Alaska's remote Inside Passage? Either scenario could turn misfortune into catastrophe.

THE SOLUTION Television commercials for Royal Caribbean's huge Oasis-class ships—which can carry close to 8500 passengers and crew—make Walt Nadolny cringe. "I think, oh, my God, that's not a ship, that's a city. What happens when the power goes out? Is there enough backup to run the galleys and the refrigeration and the sewage treatment plant?" An international maritime standard called Safe Return to Port, which went into effect in 2010, requires that new ships include backup systems that would allow a vessel to limp back to shore in the event of a fire or other emergency. But given the 30-year life span of the typical cruise ship, an aggressive plan to retrofit existing ships is needed. Carnival is making progress in this area. In April 2013 the company hired a new vice president of technical operations, a former Coast Guard commander named Mark Jackson, and launched a comprehensive upgrade of its 24 Carnival-brand ships—the line that has experienced the most mishaps in recent years. Jackson ordered engineers to reroute miles of cable on each ship to reduce the risk that a fire in one engine room could take out power to the entire ship. Fire suppression is being improved by adding a 24-hour patrol dedicated to scanning for oil and fuel leaks—standard procedure on military ships. The number of nozzles in engine-room sprinkler systems that could be operated at one time is being increased from 30 to 250, and the company is adding another line of backup generators, capable of carrying a portion of the hotel load. "If the Triumph incident had happened today," Jackson says, "the detection system would have identified the leak sooner, automatically released the high fog [sprinkler system], and no fire would have occurred." The upgrade project will cost an estimated \$300 million.

THE PROBLEM: Poor Passenger Training



Innovation in life-raft design can help save lives in future emergencies. The Viking LifeCraft has a chute system to make it easier for passengers to board.

International law calls for passengers to receive a safety briefing within 24 hours of a ship leaving port, but that can be too late. About 700 of the *Costa Concordia*'s 3206 passengers had boarded just a couple of hours before the accident; their safety briefing was scheduled for the next day. When things went bad, passengers had no idea where to go or what to do. But the timing of drills isn't the only issue that needs to be addressed. Mike Inman, the vice president of safety for Holland America, another large cruise line owned by Carnival, says that passenger attendance at muster drills hasn't always been enforced. "Holland America was one of the first lines to make it mandatory, and we have disembarked people who did not attend," he says. (Even before the *Concordia* wreck, Holland America held drills before its ships left port.)

THE SOLUTION Since February 2012 all CLIA cruise lines have pledged to conduct passenger muster drills before leaving port. Technology can help too. In October 2013 Danish safety-equipment company Viking announced the creation of a self-propelled, inflatable raft that holds 200 people and has a chute-like system to ease boarding for children, the elderly, and the injured. The LifeCraft could be on ships within two years; such advances could save lives. "How you get the person in the life raft is the most important part," Nadolny says. "Lifeboat injuries are probably the biggest killer of crew out there. It's a fairly complicated arrangement for lifting and lowering the boat, and if it's not done just right, well, the boat drops and everybody in the boat gets killed." That's what happened last year in Spain's Canary Islands during a drill on a cruise ship called the *Thomson Majesty*. Cables snapped, killing five crew members and injuring three more.

THE PROBLEM: Security Holes

Every few weeks someone goes overboard on a cruise ship. Most of those are likely suicides. Other incidents are accidents, often fueled by free-flowing alcohol. An unknown number are murders that will never be solved. Onboard crime is often slow to be reported and is poorly investigated. The reason is that while many ships are the size of a small town, they don't operate like any well-governed municipality on land. "Look at a cruise ship as a city. The captain acts as mayor. What you don't have is a police force," says Kendall Carver, founder of the nonprofit International Cruise Victims Association.

In 2004 his daughter Merrian vanished from a Royal Caribbean cruise in Alaska. Though a steward informed the captain that she hadn't been in her room for five days, no attempt was made to look for her, and the cruise line never reported her missing. Since then Carver has lobbied ship owners to raise railing heights, install cameras and sensing devices that would detect man- overboard accidents, and ensure that alleged crimes are promptly and thoroughly investigated.

In 2010 Carver's group won a seeming victory: Congress passed the Cruise Vessel Security and Safety Act, a law aimed at protecting passengers' rights on any ship that docks in the United States. But the law has proved to be a disappointment.

"We look at it as a feel-good piece of legislation," says Doherty, the retired safety manager. "There are no real penalties for shipowners for violations." Carver cites several major problems. First, the original language of the bill would have required the Coast Guard to maintain online listings of all crimes reported on each ship. But at the last minute it was changed to include only crimes that had been investigated and closed by the FBI. "Instead of reporting hundreds of crimes, 15 or 16 crimes

are all that's being reported," Carver says. In addition, he says, cruise lines are failing to follow the law's mandate to inform victims that they can report crimes directly to the FBI.

THE SOLUTION The 2010 Safety Act requires cruise ships to install systems that recognize when someone has jumped, fallen, or been pushed off a ship, if that technology is available. Several companies, including Virginia's Seafaring Security Services and Radio Zeeland, based in Florida, make sensing systems designed to distinguish a body-size mass from anything else—beer cans, beach balls, deck chairs—that drops overboard. The systems can sound an alarm on the bridge, rewind video footage to several seconds before the fall, and record the coordinates so that the crew can launch an immediate rescue. The companies say their own testing shows their systems are reliable, but Carnival director of maritime security Barry Marushi disagrees. "We're looking for a 95 percent detection rate," says Marushi. He says that seabirds can cause false alarms and that the sensors cannot stand up to prolonged exposure to sun, salt, and wave action. "As it stands right now, it has not met those standards that we set."

To resolve this impasse, the industry should fund testing to determine whether the systems are ready now—and push the technology ahead if not. Meanwhile, many ships do not even have video coverage that would reveal a man-overboard accident, leaving agonized families never knowing exactly what happened to a vanished loved one.

None of the problems the cruise industry faces are intractable. Rigorous crew training, better life-raft technology, man-overboard detectors, improved fire-suppression systems—these are all manageable goals. It's up to the cruise ship industry to push harder to fix its problems. And it may be time for passengers to take more responsibility for their own safety, regarding ships as more like airplanes and less like resorts, despite the buffets and swimming pools. Because there's one big difference: Hotels can't sink.

Know Before You Go

The appeal of a cruise vacation is that once you're booked, you don't have to think about a hinge. It's wise to make an exception when it comes to your family's personal safety.

1. Select a safe ship.

Vessels that have come into service since 2010 meet stringent international Safe Return to Port requirements to ensure that an engine-room fire doesn't knock out power to the entire vessel. For information on sanitation you can check the Centers for Disease Control's report card on cruise ships at cdc.gov/nceh/vsp/.

2. Take drills seriously.

In an emergency you want to know where to muster, or gather; where to find spare life jackets; how to interpret alarms; and how to enter a lifeboat. Always know where you are on the ship—and pay attention to fire alarms. Most serious shipboard incidents are the result of fires.

3. Supervise children.

Cruise ships generally do not employ lifeguards: In October 2013 a 6-year-old Florida boy drowned in a swimming pool during a Caribbean cruise on the *Carnival Victory*. A few months earlier a 4-

year-old had suffered severe brain damage after a near-drowning accident on a Disney ship.

4. And teenagers.

According to the International Cruise Victims Association, sexual assault is the most common crime reported on cruise ships, and many of the victims are teenagers. For more information visit the organization's website, <u>international cruise victims.org</u>.

5. Don't drink alone.

Alcohol flows free and heavy on a lot of ships—that's part of the appeal for many passengers. But being alone and intoxicated are both risk factors for man-overboard incidents. You can consultcruisejunkie.com to learn more about man-overboard accidents.

6. Know your rights.

When you step on board a cruise ship, you are effectively entering a foreign country; U.S. laws do not apply. But, thanks to the 2010 Cruise Vessel Security and Safety Act, crime victims can go directly to the FBI for help. Call (202) 324-3000 to report a crime.

Hoover Instutution

Three Cheers for Fracking

Thanks to secure property rights, this technology has the power to resuscitate our lagging economy.

by Gary D. Libecap

Americans should celebrate fracking. By unleashing production of unconventional hydrocarbons, fracking has catapulted the U.S. from being a has-been producer of oil to the world's largest total supplier in 2013 when we include natural gas liquids, biofuels, and crude oil. The U.S. produced around an average of 12.1 million barrels a day of these liquids, 300,000 barrels a day more than Saudi Arabia and 1.6 million more than Russia, the previous leaders.

This increase in U.S. output has not been matched since 1940 when the country was blessed with flush new primary production from oil fields in Texas, New Mexico, Louisiana, and Oklahoma. Shale-gas production from the Bakken Formation in North Dakota, the Eagle Ford Formation in Texas, and the Marcellus Formation that crosses parts of West Virginia, Ohio, Pennsylvania, and New York now accounts for 44% of total U.S. natural gas output, and eventually could account for nearly 70%.



The hydrocarbon boom in the U.S. is driven by fracking. Hydraulic fracking is a technique whereby water mixed typically with sand and chemicals is injected with high pressure into non-permeable hydrocarbon-bearing geologic formations to create small fractures that are held open with small grains of sand. These fissures allow otherwise-locked hydrocarbons to flow to the well. Horizontal drilling is used to access oil and gas deposits away from the main vertical well.

This combination of fracking and horizontal drilling accounts for vast new production of shale (tight) gas, shale (tight) oil, and coal-seam gas. It has been a game changer by releasing hydrocarbons from rock formations 5,000 to 20,000 below the earth's surface where there is little permeability or reservoir pressure to allow hydrocarbons to flow to conventional wells. Absent fracking, these oil and gas deposits would not be economic, but with it, they have become sources of a new bonanza for the country and the world.

In the 1970s, there were predictions that the U.S. would run out of natural gas, and indeed, federal price controls were implemented in an attempt to shield consumers from higher gas prices. These policies, of course, did little to promote new exploration and discovery. Beginning in 1978, price controls were phased out, but there were still concerns about the future supply of natural gas. Moreover, U.S. oil production was declining, especially after output from the Prudhoe Bay field in Alaska tapered off.

Between the early 1990s and 2008, U.S. oil output fell gradually, fueling notions of "Peak Oil" and related doomsday predictions that natural resources were finite in supply and that the country would soon pay the price of consuming "unsustainably." World oil prices rose; U.S. imports increased especially from politically-unstable countries, often led by unfriendly leaders in the Middle East, Africa, and South America; and there was a corresponding preoccupation among American political leaders in "energy independence." The sharp economic downturn that began in 2007 was intensified by high energy prices and large trade imbalances. At the same time, the environmental community lobbied for subsidies for renewable fuels to move the U.S. away from dependence on fossil fuels and foreign sources of supply and to reduce greenhouse gas (GHG) emissions.

Fracking has upended all of this. It has provided the U.S. with energy independence, an elusive goal thus far with renewables; lowered overall energy prices and modulated natural gas price swings, even in the face of one-of the severest winters in recent memory; raised U.S. natural gas exports (oil exports are banned by federal law); drove U.S. imports of liquid natural gas (LNG) to

zero, saving \$100 billion annual in imports; tempered any rise in worldwide oil and gas prices to the benefit of most of the world's populations and economies; shown the way for new natural gas and oil production in Europe, lessoning dependence on Russian sources and its monopoly Gazprom; lowered U.S. demand for Venezuelan oil upon which the country's increasingly-autocratic rulers depend; directly boosted U.S. employment in oil and gas extraction by 28,000 jobs between 2007 and 2011 alone and indirectly by 45,000 in new employment in support industries; and stimulated broader job growth and GDP expansion.

In the fourth quarter 2013, GDP grew at a 3.2% annual rate, which would have been 1.3 percentage points lower were it not for an inflation-adjusted narrowing of the trade deficit by nearly 12%, driven by the fall in oil imports and increased exports. Manufacturing has expanded in the U.S. in light of lower and more certain energy costs relative to other countries and cheaper natural gas feed stocks in chemicals. Lower energy costs alone could raise annual GDP growth by between .09 and .19 percentage points through 2020. Between 2008 and 2035 shale gas and oil production could add an average of \$475 billion a year to the American economy, about 3% of current GDP. In an otherwise anemic economy, fracking is truly a major bright spot.

Finally, the shift to low-cost natural gas from coal in energy generation has contributed to the decline in U.S. GHG emissions. Natural gas-fired power plants emit about half as much CO₂ as comparable coal-fired ones. As a result, the U.S. is lowering GHG emissions more rapidly and at lower cost than the European Union which has relied far more on subsidizing costly renewable sources—solar and wind power, while as described below, blocking or discouraging use of fracking even in the face of very favorable geologic formations in some countries, such as France, Germany, and Bulgaria. Indeed, in Germany overall coal demand for energy production has grown over the past decade.

The Importance of Private Property Rights

New fracking and horizontal drilling technologies are dominantly developed and implemented in the U.S. Why is that? The answer is secure private property rights to subsurface minerals. These are the major reason why the American oil and natural gas industry has been so dynamic and innovative. Except for western Canada, throughout the world, subsurface mineral rights are held by governments, and indeed, the U.S. government also holds the rights to hydrocarbon deposits on federal lands. The incentives for and transaction costs of investing in and using new fracking, pumping, and drilling technologies are dramatically different between private and public ownership.

When private parties own the mineral rights (often surface land owners), they capture any expected benefits from new discoveries and associated production. In North Dakota, land owners above the Bakken Formation are part of a new generation of oil millionaires in a relatively remote and semi-arid region that previously had seen population declines and economic stagnation. These owners also bear many of the costs, including any environmental ones, such as potential ground water contamination or depletion, because these costs generally are localized in the vicinity of fracking wells. Where they are not, rights holders or the companies they contract with may be held accountable for damages inflicted on others.

Bonding requirements to cover environmental damages also can be used both for mitigation and for indentifying the opportunity costs to rights holders and drilling companies of any harm they inflict on others. Bonding requirements and potential litigation instill incentives for careful production practices. With this information, current mineral rights owners can weigh the benefits and costs of exploration, drilling, and production, and decide whether or not to contract with

hydrocarbon-producing firms. If others are more optimistic than are current owners, they can purchase lands and/or mineral rights and engage in exploration and production contracts with oil and gas firms. The transaction costs of these decisions are low.

Stable property rights to mineral lands also provide motivation for hydrocarbon-producing firms to engage in long-term risky investments in new production technologies, such as fracking and horizontal drilling. When mineral rights are not secure or are held by the state and hence less predictable for reasons described below, entrepreneurs have reduced incentives to explore durable, long-range, but risky technologies. This is the major reason why fracking and horizontal drilling have been pioneered in the U.S. and not in other countries.

In contrast, consider the far-more-common case where the state owns the mineral rights. Under these conditions, there are fewer benefits for entrepreneurial investigation into new technologies and potentially, far more costs. Surface land owners do not directly benefit. They may only see costs and hence, have little motive to support new exploratory drilling. Even if surface landowners receive a payment from the state, these payments are unlikely to be closely tied to the benefits and costs of production on or near a particular property as they are with private property rights. Instead, the payments are likely to be on a per-capita basis or provided as a lump sum to local governments, where the distribution will be subject to political pressures and uncertain.

Because the incentives of landowners and other constituents are mixed at best, exploration and production firms are more apt to face local opposition, which in turn could lead to new regulation or abrogation of the rights to explore and develop. This setting creates long-term uncertainty for entrepreneurs.

Moreover, and perhaps most important, the transaction costs of exploration and production of hydrocarbons are much greater when the state owns the mineral rights. No politician or agency official is a direct residual claimant to the added net value of exploring, finding, and producing new natural gas and oil. They are, however, residual claimants to the actions of interest groups. In the political arena there are many different parties with varying views of fracking and greater fossil fuel production. Accordingly, long-term commitments for production leases and royalty payments are difficult to secure. Regulations can be adjusted whenever a sufficient number of politically-influential interest groups mobilize. This political risk lowers the returns to entrepreneurship in technology development, exploration, and production.

The evidence is clear on these points. Fracking and horizontal drilling are old concepts that have been refined and applied, primarily on private lands in the U.S. and western Canada. Hydraulic fracking was used experimentally in the late 1940s in the U.S. by George Mitchell of Mitchell Energy and Development. Mitchell Energy successfully applied the technologies on a large scale to the Barnett Shale of Texas in the 1990s and more recently many other entrepreneurial firms have used shale fracking and other improved drilling techniques in other areas. Although there were Department of Energy research grants and subsidies in the 1970s to spur production of natural gas, these alone would not have resulted in the widespread adoption of fracking and horizontal-drilling technologies. Implementation required secure property rights.

These techniques are now being considered elsewhere, but where governments own the mineral rights. In these settings, groups that do not directly benefit from fracking or bear few costs from opposing it, can mobilize to slow or block use of the technology. France and Bulgaria, countries with large shale-gas reserves have banned the practice following intense lobbying from a variety of sectors. Farmers in Australia oppose fracking that they see only as leading to messy new wells

with little in return for them. In Germany fracking has been banned *de facto* at the urging of many green groups among others. Germany is phasing out nuclear energy, has subsidized costly renewables, but nevertheless relies increasingly on coal and has among Europe's highest energy prices. Fracking and new production from the country's promising hydrocarbon formations could certainty benefit consumers and producers, but well-organized opposition means this opportunity is not likely to materialize.

In the U.S. about 25-30% of fracked wells are on federal, mostly BLM, land. Because of potential environmental damages each state regulates fracking, but the BLM is proposing new federal oversights that could displace state regulations with far tighter controls. Federal lands and regulation are more subject to broad political interest group demands than are state regulations, weakening any contractual rights gained through federal mineral leases. Political constituencies within states capture more of the benefits (and bear more of the costs) of fracking than do external groups and hence lobby for policies that reflect those benefits and costs. In the broader federal political arena, however, other interests with little at stake can lobby federal agencies such as the BLM for policies they desire. In particular many environmental groups strongly oppose fracking because it promotes fossil fuel production and use, when they have long sought to replace fossil fuels with solar, wind, and biofuels.

Why Are Mineral Rights Private in the U.S.?

Until the late nineteenth century, mineral rights were viewed as any other right to productive natural resources in America—they were to be private. When European settlement moved across the North American continent beginning in the late seventeenth century, there was never the sense that the government would own the land. Indeed, access to land was a major impetus for migrants to come to North America. Much of American history is one of movement of the frontier across the continent as individuals claimed land, created farms, and speculated in land holdings. Federal land laws were designed to facilitate the rapid transfer of title to land from the federal government to private claimants. Land ownership and market exchange was the primary means by which wealth was acquired through the nineteenth century. The Jeffersonian notion of a nation of small farmers as the basis for social and economic stability and progress was not a myth.

Until 1848, minerals were of little consequence. There were few significant ore discoveries so that the focus of land laws was on providing private title to agricultural land. The California Gold Rush and subsequent hard-rock mineral discoveries in the Far West, however, changed all of this. Mineral rights became of value. Although there was English precedent for reserving subsurface rights by the government, the 49ers had something quite different in mind. They wanted secure private mineral rights to support their search and discovery of potentially-fabulously-rich ore deposits. The federal government was far removed across the continent and could do little to stop private claiming of western mineral lands.

Throughout the West, over 600 local mining camp rules were created by prospectors to assign private mineral rights. Mining became a dominant industry in most states, and the wealthiest citizens were successful miners and investors. Local mining property rules were incorporated into territorial and state laws, and eventually into the federal Mining Law of 1872 that still allows private individuals to establish mineral rights for hard-rock minerals on federal lands. With this precedent, private mineral rights remained with surface land owners. Only with the establishment of the National Forests, National Parks, federal grazing lands, (BLM) lands, and Naval Oil Reserves in the late nineteenth and early to mid twentieth centuries were mineral rights to coal and hydrocarbons retained by the federal government on federal lands.

In the case of hard-rock mining, secure mineral rights led to the rapid development of the U.S. mining industry. Moreover, American mining and engineering schools and technologies became world leaders. With this institutional framework in place, the U.S. economy became more mineral intensive in production than the country's physical resource endowments alone would have dictated.

In the case of oil and natural gas, early expansion was in Pennsylvania, Texas, Oklahoma, Illinois, Kansas, and parts of California, primarily all on private lands where private mineral rights were in place. Major world-class schools of petroleum engineering were established to study new techniques and to train petroleum engineers for exploration and development, much as innovative software techniques are researched in other engineering schools. Oil and gas law became the focus of many law schools to lower the costs of writing contracts between landowners and exploration and production firms and between producers and oil and gas supply firms.

Today, much of the new development of fracking and horizontal drilling occurs on private lands. Federal lands could play an increasingly important role given their location near existing productive formations. Whether this happens depends upon the enactment of supportive federal policies. But there are many who oppose such actions. If these groups are successful, federal lands will not produce to their potential in support of fracking and natural gas production that has been good for the economy, good for democracies worldwide, and good for the environment.

Gary D. Libecap is a research fellow at the Hoover Institution as well as the Bren Professor of Corporate Environmental Policy, Donald R. Bren School of Environmental Science and Management and an economics professor at the University of California, Santa Barbara.

WSJ

The Computer Mouse Still Roars

Like the Madonna of Peripherals, the Mouse keeps Reinventing Itself: The Picks, Pros and Cons

by Geoffrey A. Fowler

Personal Tech Columnist Geoffrey Fowler thought he could ditch his mouse and go with a touchier interface. Boy, was he wrong.

I said goodbye to my mouse last month. It was time to advance, I thought, to a higher plane of input, a trackpad that works like a tablet's screen. Instead of point and click, I'd swipe and flick.

A few weeks in, I was missing my mouse. Moving a folder across a 27-inch iMac screen with the trackpad was like lugging a grand piano across the Sahara—I had to keep taking breaks along the way, as I ran out of pad.

This can't be progress. Determined, I rustled up a dozen of the latest input devices, regular mice and trackpads, but also vertical mice, pen- and knob-shaped mice, a touch-screen stylus, even a controller that lets you wave your hands around without touching anything, a la "Minority Report."

What I discovered: Thirty years after the Macintosh took the mouse mainstream, I couldn't find anything more precise or comfortable for operating a computer. More important, I found the mouse has managed to reinvent itself over the years—it's like the Madonna of PC peripherals.

One reinvention stood out during my testing, a mouse whose unconventional look belied its natural grip: the Sculpt Ergonomic Mouse by <u>Microsoft</u>. Other standouts I tested were <u>Apple</u>'s Magic Mouse, the Penclic Mouse and <u>Logitech's Ultrathin Touch Mouse</u>.

Picking a control device is kind of like choosing shoes—some go for Air Jordans, others for Christian Louboutin heels. Everyone has their own size and physical fit—sometimes even a medical need. (My right-handed editor swears by a trackball mouse in his left hand.)

Though PC sales have declined in recent years, mouse unit sales slipped only 3% in the past 12 months, according to industry research firm NPD. In other words, a good chunk of laptop buyers are adding mice to their productivity ensembles.

To test my efficiency using a mouse and other input devices, I used a program scientists developed to study the speed-accuracy trade-offs in human muscle movements, called Fitts's Law. My scores, based on clicking scattered dots on a screen, were at times nearly twice as fast with a mouse as with a trackpad. Most hands are more relaxed on a mouse, so starting and stopping are easier, say the ergonomists.

(You can try it for yourself with different kinds of devices—and wade through <u>a tutorial about Fitts' Law</u>. Skip to Step 20 for the test itself.)

Of course, for flipping pages or pinching to zoom, finger gestures on a touch screen or trackpad are the more efficient way.

Both Apple and Microsoft have integrated finger gestures into their latest computer operating systems. Apple sells iMacs with a trackpad option. Microsoft built the latest Windows version in the hope that users touch the screen itself.

A touch-screen monitor on a desktop or laptop sounds good, but it invites what some call "gorilla-arm" fatigue. After forcing myself to use only the touch screen on a Windows 8.1 laptop, I found myself propping it up at an angle in my lap so my hands could rest on the side. (Microsoft says the touch screen is meant to supplement, not replace, other inputs.)

Then there is a problem of universality: Designers haven't yet come up with a common language for touch on computers. In Windows 8.1, a swipe from the left lets you switch between apps, while on a Mac trackpad, three fingers, moving in the same direction, open a widget dashboard. And neither movement is particularly intuitive.

The emerging world of touchless computing confuses things more. The Leap Motion, which tracks the movement of hands, lets you do cool tricks. But every compatible program comes with its own set of new moves you have to learn. And the accuracy of floating fingers is low. Leap Motion says its device isn't a replacement for the mouse, just an accessory for software that benefits from 3-D controls.



Leap Motion tracks your hand movements a la 'Minority Report,' but it is no real replacement for a mouse. Leap Motion, Inc.

Mouse designers have made leaps in ergonomics. Many are now more vertical, better mimicking the posture of a hand in its natural resting state. "Your fingers are curled into your palm, but not all evenly," says Edie Adams, an ergonomist at Microsoft.

My favorite mouse was one she worked on, Microsoft's wireless Sculpt Ergonomic Mouse (\$60 or less). It looks like a plum, with an overly ripe area where you rest your thumb. It is comfortable enough to use for hours, the mouse equivalent of orthopedic shoes. And props to Microsoft for apparently getting it to run on one pair of AA batteries for a whole year. I'll even use it on my Mac.

The runner-up was the even more vertical \$90 Penclic. That familiar pen shape gave me a sense of control I wasn't expecting.

Today's mice also do a better job at adding features through gestures, so they don't get overloaded with extra buttons. Apple's \$70 Magic Mouse may be less comfortable to hold over extended periods than the ergonomic options, but it does the best job of integrating touch commands on its smooth, flat surface—such as swiping with two fingers to advance through pages or browse photos. Logitech's \$70 Ultrathin Touch Mouse puts similar gesture functionality into a body small enough to travel with a laptop.





A downside to products like the Apple Magic Trackpad: Designers haven't created a common language for touch. Apple

The idea shouldn't be to try to "out-mouse the mouse" with new kinds of inputs, says Josh Clark, a computer interface designer and founder of the firm Global Moxie. Rather, we're moving to a world of technology and input devices designed to fit specific times and places: touch screens on the go, voice activation for TVs, hand gestures to browse a store display with products.

I spend a growing part of my day with smartphones and tablets, but like many professionals, when I need to get work done, I'm still sitting in a chair facing a big computer screen. And there, the mouse remains king.

The Wire

<u>Snowless Conditions Are Making The Iditarod Even More Difficult</u> by Brian Feldman

This week, way off in the northwest corner of the continent, the Iditarod—the sled dog race through the wilderness of Alaska—is testing the fortitude of dozens of mushers and their sled dogs. But this year, compared to recent races, seems more hazardous than usual.



On Tuesday, competitors had to traverse the <u>Farewell Burn</u>, a 75-mile stretch between Rohn and Nikolai. The only problem was that there was <u>almost no snow on the ground</u>, making conditions especially bumpy. As four-time Iditarod champion Martin Buser put it:

"Normally snow filters down into those extreme low spots, kind of fills it in a little bit and makes it somewhat passable. There was nothing on it this time."

Here's what it looks like.



Along the Farewell Burn, returning racer Scott Janssen, known as the Mushin' Mortician because of his day job, had to <u>drop out of the race after numerous catastrophes</u>. Janssen slammed into rocks and crashed his sled. He hit his head and was knocked unconscious for at least an hour.

He then continued on until one of his dogs got loose. As Janssen walked across a frozen creek to retrieve the dog, <u>he slipped and fell</u>, breaking his ankle. He laid there for another 45 minuted until another competitor, Newton Marshall, caught up to him and offered assistance (Marshall is from Jamaica, by the way).

As of Thursday morning, 12 of the 69 Iditarod competitors have scratched. Jeff King <u>currently</u> <u>holds a 39-minute lead</u>, although none of the top five competitors have taken their mandatory eight-hour or 24-hour rests. Buser, however, is in sixth and has already gotten his 24-hour layover out of the way.





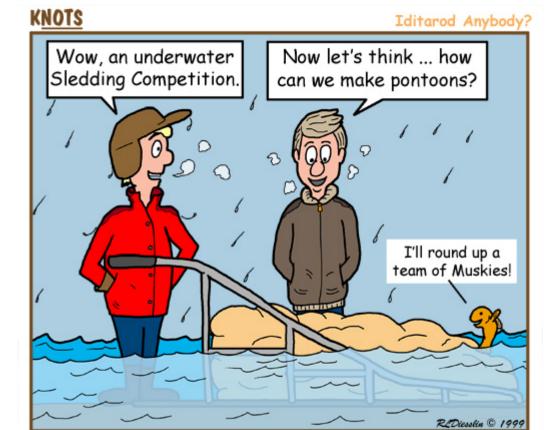












BE READY FOR THE WEATHER!





1,000 MILE IDITAROD DOG SLED RACE BEGINS TODAY



