



The Solari Report

JUNE 19, 2014

Megatrends
with Jim Puplava





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C. AUSTIN FITTS: Well, ladies and gentlemen, it's really a thrill for me to welcome to The Solari Report, one of my favorite financial commentators, Jim Puplava. The founder and host for the *Financial Sense News Hour* at financialsense.com, he brings together contributors from all over the world and really one of the greatest groups of experts and highly grounded commentators, who really sort of know what's going on in this world.

Jim is also the president and CEO of Puplava Financial Services and Puplava Securities based in San Diego, California and has a wonderful team, a son working in the business who does, among other things, great commentaries, which you can find at financialsense.com.

Jim has written a new article, which I think is just absolutely terrific, and he joins us today. It's called "Seven Megatrends that Will Reshape the Next Decade," and I think if you want to understand the deeper long-line trends in the investment world there couldn't be a better piece to pick up and read. So, Jim, thank you so much for joining us on The Solari Report.

JIM PUPLAVA: Well, Catherine, it's good to be with you, and thanks for having me.

C. AUSTIN FITTS: "Seven Megatrends that Will Reshape the Next Decade." Let's just dive in. How did you come to write this piece? Afterward, let's walk through the seven trends one by one.

JIM PUPLAVA: Well, we are long-term investors, so we're always looking for themes or some kind of new dynamic that you can get on board. It's my contention, Catherine, that an investor needs to make very few



investment decisions in their lifetime. For example, stocks after World War II, commodities in the 70s, Japan in the 80s, US tech stocks in the 90s and commodities in the last decade. So, we're always looking for catalysts or drivers.

As I have written so many times, we used to discuss oil, and I'm a big believer in peak oil. As I took a look after the crisis of 2008, there were some trends that were forming in the energy patch that were starting to take place, and conventional oil, as we know it, – that's the, you poke a hole in the ground and oil gushes out – convention oil peaked around May of 2005. Many of your listeners will recall what happened with oil prices rising to \$150.00 in the summer of 2008, and a lot of that was driven by the energy industry simply unable to keep up with demand with the world economic growth, which was explosive due to the credit boom.

What happened afterwards was really surprising, because the energy industry, despite all the roadblocks put up by government, discovered horizontal drilling. Fracking was developed, and we now have shale plates. If somebody would have said five year ago that US oil production would be up two or three million barrels, that natural gas would be plentiful in the United States, most people would have said, "You're crazy." Yet that's exactly where we are today, and we're now talking about exporting.

There are a couple consequences of that, which will lead to another megatrend. If you look, Catherine, at what they pay for natural gas in Europe, it's closer to \$10.00, and then on top of that the instability of that supply, especially with Russia being the main supplier, and if you go to Asia, where they have to import a lot of LNG, it could get into \$11.00, \$12.00, \$13.00 per 1,000 cubic feet.

All of this energy is used in manufacturing goods, and it's one thing that the United States now has a distinct advantage. It's helped to cut our trade deficit in half. In fact, the trade deficit in 2008, almost half of it, was imported oil, and so you see, almost on a weekly basis, US companies and foreign companies that are coming here building plants.



One of the main reasons is this renaissance that we have in energy. It's anticipated maybe another million barrels of new oil supply will be coming on, so the US will have increased its energy production by four million barrels. On top of that, our consumption is down by three or four million barrels.

C. AUSTIN FITTS: The percentage of cost in manufacturing, directly or indirectly, comes from energy is quite significant.

JIM PUPLAVA: Oh, absolutely.

C. AUSTIN FITTS: So, it makes an enormous difference.

JIM PUPLAVA: Yes, it's not just the cost of energy in terms of bringing down manufacturing costs, but it's also transportation too as well. A lot of Americans don't like that we're paying over \$4.00 for gasoline or maybe upper threes, depending on where you're at in the country. But, you compare that cost to the taxes and the cost of what it costs, let's say a liter of gasoline in England or Europe or what it's costing in Japan or China.

C. AUSTIN FITTS: Now the fracking technology is moving into Europe as well, so that's going to make a difference in terms of Europe's cost as well, don't you think?

JIM PUPLAVA: Yes, I think the fracking technology – and the US isn't the only country in the world that has shale plates, so this will be duplicated elsewhere, but at least it is tertiary or a different form of energy product, just like the tar sands were that are helping to supplement how we produce oil today.

C. AUSTIN FITTS: I have a couple questions about this because I've always thought of you as my go-to guy for peak oil. If I want to know something on the whole issue of peak oil, just go to Financial Sense.

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Number one, what many people say is that the domestic reserves are significantly exaggerated, which are accessible at a cost-effective basis from this. Do you have any sense as to the liability as to the projections of what's available?

JIM PUPLAVA: Yes. I don't buy the fact that – there's this calculation that's done. Let me give you an example. It's estimated that Canada's oil reserves, like in the tar sands are 160 billion barrels, as big as, let's say, Saudi Arabia. But that does not imply flow rates or production rates, and one of the things, even with shale in terms of the amount of reserves, that does not mean that will translate, "Well, gosh, if you have this much in reserves, you can produce whatever we need in terms of annual output."

A lot of times those reserves, not all of those reserves are going to go into production because not everything that you have in the ground can be pumped out. I think that exaggerates the potential of total oil, and I'm still a believer, Catherine, in peak oil. I just think that shale has given us a new lease, or extension, on life.

C. AUSTIN FITTS: It's given us an extension. That's the way I look at it. It's an extension, and do you know, because you've watched the trading in the US dollars and US securities, if you look at what the financial community is concerned about, if this hadn't happened I think you have a sense of what it could mean in terms of US securities or the US currency, and clearly it's making an enormous difference.

To me, it's an extension, but it's an extension that it may not last forever, and to me it's very important we take advantage of this extension if we can.

JIM PUPLAVA: There was a study done in 2005 by Robert Hirsh for the Bush administration on peak oil, and he came to the conclusion that peak oil is a reality. It will arrive someday. Whether it's ten years from now or not, it's going to arrive. I'm not an expert in that. But he said that the best way to prepare for it would be 20 years before its arrival.



You could put in the infrastructure, develop alternative sources of energy, transportation, and make the transition to a newer economy powered by a different source of energy. The next best approach would be to basically prepare for it ten years before its arrival, but there would be some hardship and disruption. The worst way to prepare for it is to do nothing, and it arrives.

We have a new lease on life here, and what we should be doing is working on the transportation fleet, working on electric cars, rebuilding our grid. If we're going to go to something other than gasoline or oil for a transportation system, which drives about 95 percent of it coming from carbon fuels, then we better start doing that now.

Instead, like in my own state of California, we're shutting down a nuclear power plant, and the local utility had to build its power plant from natural gas in Mexico. There's all this euphoria, all these projections about, we're going to be totally energy independent, and we're going to be the largest exporter in the world, I don't buy that. I do believe that we've made a significant contribution.

Think of it this way, if the United States was still consuming 22 million barrels a day and we were only producing five, think of where oil prices would be today and the impact it would have on world economies.

C. AUSTIN FITTS: I have to bring this up because it's something that homeowners are consistently very concerned about, and that is the impact of fracking on the water supply and the water table. I have tried to get to the bottom of it, and it's hard to do, but that is one issue that I think would make this still an uncomfortable phenomena for some neighborhoods in some places.

JIM PUPLAVA: Anytime you produce energy, whether it's fracking, whether it's a coal-fired plant, there's always going to be some environmental concerns, and one thing that we can always count on in the government and the environmentalists, they are going to be involved no matter what when it comes to the production of energy.



I don't care if it's putting up a solar array in the desert or putting up a wind turbine or fracking and drilling for a well. There are some concerns there, I think those concerns could be mitigated, and a lot of that is going to depend on these oil companies working in a responsible way with regulators.

C. AUSTIN FITTS: It's clear to me that there's a commitment, from a policy standpoint, to really have a robust energy model and try lots of different things. As we do, we're going to get lots of feedback about what the various impacts are, so I think we're going to go through a period here where we're going to learn all of that. If we can just all calm down and keep learning.

Let's turn to this manufacturing renaissance, because certainly that is an area that's been quite interesting, and I'd love to have your take on what you think is going on.

JIM PUPLAVA: The interesting thing that struck me about manufacturing is the conversation and the headlines on manufacturing over the last three decades was outsourcing. You heard about companies closing down plants, building them in Mexico, then it was China, Asia, no matter where you were putting these plants, and the thing about it is that it made a lot of sense for companies because we live in a very competitive world. Obviously, if you can bring down your labor costs and build a manufacturing plant in Mexico or China and bring down those costs, it made you competitive.

But there's something that really started to happen, and it's a combination of knowing energy costs, and also technology. That's robotics, and what robotics is doing. The cost of robotics is coming down, and it's getting rid of the labor arbitrage. Even Foxconn, which manufactures a lot of Apple's products, is building a new factory where they're going to displace a lot of their workers with robots.

Who would have thought a car manufacturer by the name of Tesla could build a factory in California and actually make money and do it efficiently, but they're doing so with robotics. Apple's building a new



factory in Phoenix, Arizona. What's changing in manufacturing, Catherine, is that instead of John Smith, who's putting a bumper on an assembly line in terms of what we think of manufacturing, is the new kind of manufacturing plant. If you look at Volkswagen or even Tesla, it's some guy in a white lab coat who's operating a \$20 million robot.

So, from a manufacturing point of view, you no longer have to arbitrage labor costs, and it's bringing labor costs down. You can produce more goods, and that robot doesn't need health care benefits, doesn't need the things that a typical worker would have, and it's bringing down the cost of manufacturing.

C. AUSTIN FITTS: If you're using the product or marketing here, long supply lines have risks associated with them, and I can't tell you how many business situations I've been over in the last year where people said, don't make it in China. I need it just in time, or I need to know that I've got it. I need it closer. I don't want to deal with the uncertainty of what could go wrong. I also think if you look at the nature of the tensions globally, there's a growing preference to have it close to home.

JIM PUPLAVA: Well, sure. We saw this happen where a lot of companies, from Dell computer to HP outsourced to call centers, to manufacturing and the quality went down. The other thing too is with the cost of transportation, and even with oil prices today, on the day we're speaking they're at almost \$107.00 a barrel. If you have 40 percent of your sales in the US, you better have a factory there because customers want their goods, they want their product and they don't want to wait and say, "Well, it's going to take two weeks. It's going to take three weeks, or we don't have the parts."

It's about having call centers, having distribution centers here in the United States. Here's another thing that's making us more competitive, for the first time in almost a century, railroads are investing billions of dollars.

“If you look at the nature of the tensions globally, there's a growing preference to have it close to home.”



C. AUSTIN FITTS: I love railroads, so the idea that we rebuild our infrastructure in railroads to me is quite exciting.

JIM PUPLAVA: Yes. Warren Buffett has written about this. Of course he owns Burlington Northern, but it's much more efficient. One gallon of diesel fuel can transport one ton of goods 500 miles. You just can't do that with a truck.

C. AUSTIN FITTS: Railroads have always been a low cost producer, but remember the government subsidized the roads. It was very hard for the industry to compete, but on the long line stuff it was clearly very competitive. It's funny, I was driving back from California last year through just a terrible blizzard in New Mexico, and there were seven trucks sidelined, and the Union Pacific Railroad was just clicking along, no problem despite the weather. I thought, "Oh, okay. I see where this is going."

JIM PUPLAVA: The thing that we're seeing with manufacturing, cheaper energy costs here, our transportation infrastructure and railroads for the first time in a century are investing billions of dollars to modernize their transportation fleet, their tracks. They're even hollowing out certain parts of mountains that they have to go through, so they can get double-decker cars.

All of this, together, whether it's robotics, whether it's energy, whether it's our transportation...

C. AUSTIN FITTS: ...It's all tied together.

JIM PUPLAVA: Yes. Tied together it's given us a competitive edge.

C. AUSTIN FITTS: Let's move to the third one because this is to me one of the most sort of unpredictable and interesting and that's the revolution in education. Why don't you introduce it?

JIM PUPLAVA: If you take a look at, let's say for you and myself, Catherine, the paradigm for our life was our parents wanted us to have a better life.



In order to do that we were expected to go to college, and if we went to college they had all these statistics. We would earn more in terms of income in our lifetime.

If we take a look at what's happened to education costs over the last three decades, they've been going up at almost eight percent a year. The average college student leaves college with an average of almost \$30,000.00 in debt, and it's not just the debt. That's assuming they didn't go to college out of state or didn't go to a private institution because then the figures are much larger.

If you take a look at what that does, let's say John meets Sally, and they get married, they bring \$60,000.00, \$70,000.00, \$80,000.00, sometimes \$100,000.00 of debt into that marriage starting out in life. It's already having an impact on this economic recovery with the real estate market.

They're saying that new household formations or new first time homebuyers are almost half of what they should be. Part of it is all these college students that are coming out of college with this huge amount of debt, and it's not just the huge amount of debt, I mean, think of the impact that that has on you going forward.

How are you going to qualify for a new home when you go to the banker and say, "Gee, I don't have the money for a down payment, because I have car loans. I have \$70,000.00, \$80,000.00 worth of student loan debt." You can't qualify.

C. AUSTIN FITTS: I think that what I see from an economic standpoint, the biggest challenge is you spent that money investing in a curriculum that turns out to be not relevant to where the economy's going.

JIM PUPLAVA: That's a second point about it because a lot of people go out and get a degree, but that degree doesn't have any practical application to getting a job. There are four million job openings in manufacturing today. Manufacturers are complaining, "We don't have the applicants or the skill sets for what we need to run these robotics that we have that are



making the goods that we're making."

I think this whole paradigm is going to change, and what I see happening here is instead of coming out of high school, going directly to college and having negative cash flow and mounting debt, is that you're going to see maybe Junior stays at home. Maybe he or she gets a job out of high school, gets some good working experience, and over the course of time will develop some skillsets, some experience and also through that experience will come to the conclusion, "Hey, this is something I want to do."

When that discovery is made in terms of what you want to do, it may be that you continue to work, and you go to some online school to get your education. We're seeing companies work with junior colleges to develop two-year curriculums, so that when you come out of that curriculum in two years, you're able to go on the factory floor, and you have the skillsets. Whether it's engineering, computer programming, mathematics, you'll be able to do the jobs that are needed.

In fact, to give you an idea, there's a company that the *The Wall Street Journal* talked about. They're going to the military, veterans that are coming out of the military, who are highly skilled in some kind of technical field, and they're developing a workforce that goes into big companies from Caterpillar to John Deere. They go in, they fix the robots, they do the repairs, and they have the needed skillset to take care of the things that companies need.

I think this paradigm where you come out of high school and you take this enormous debt on and then you have a degree that doesn't get you anything, is going to change. I also think you're going to see private education compete with the public monopoly in terms of output and a product.

I think the next billionaire is going to be some guy like Jeff Bezos or somebody like Amazon that can figure out how to make education more relevant, number one, and more competitive.



C. AUSTIN FITTS: Very interesting. I had a client, they had a child coming out of high school, and she was at their parent's dinner table pricing everything out. It's a very entrepreneurial family, and they literally sat down, and made a learning plan for what they wanted to do in life.

They wanted to be a movie producer. They made a learning plan of everything they needed to learn, and then they priced out the different curriculum in terms of the value of their time, and how they could get that with the least amount of their time. They weren't so much worried about investing a dollar.

What I discovered was that the whole sort of universe and infrastructure that they were dealing with wasn't prepared to deal with it at that kind of granular level. I said, "Ooh, you're going to have to get this intermediated." Because these kids don't have time, they can't just go four years and not worry about what it costs.

If you look at technology's that are working in audio/video, it's speeding up. So I realized, there's an enormous change coming. It's going to be the kids who drive it because they just can't afford to sit around and not be relevant. I think they have a very strong sense of what it's going to take.

JIM PUPLAVA: This is a whole paradigm of getting out of high school, being forced to go to college with not knowing what it is you really want to do. I think of my own sons. In one case, one son wanted to be a vet. He was working at a veterinarian's establishment during the summer. Finally, he decided he didn't want to do that. Then he went and received an internship at Pfizer in their drug research department and went to Cal Poly. He came out with biochemistry.

“This is a whole paradigm of getting out of high school, being forced to go to college with not knowing what it is you really want to do.”

But the thing that he discovered is he couldn't make enough money, so he took an aptitude test, and it said law or finance. As a result of his financial scores, he's now in the business with me.



C. AUSTIN FITTS: Is that Chris?

JIM PUPLAVA: That's Chris.

C. AUSTIN FITTS: Great commentator. Chris does some of my favorite work at your website.

JIM PUPLAVA: This is the thing that comes with work experience. Take a look at this model of getting out of high school, running up a debt balance, as many college students do. In fact, I saw a figure from the Federal Reserve that student loans are now over a trillion dollars. It's the second highest debt level next to mortgages in this country.

Getting work experience, staying at home, instead of running up debt balances, is actually creating positive cash flow, work experience, and then allows you to really find what it is you are good at or what passions that you have. I don't know about you, Catherine, I remember when I went to school, I was going to be a history teacher.

No, I think I started out to be a doctor until I took my first chemistry class and biology class. That nixed that. Then I was going to become a lawyer and then a teacher, and finally I graduated and went on to business school. Thank goodness for that, and I had a job waiting for me.

C. AUSTIN FITTS: You know what? I was studying history and working as a bartender, and all the Wharton students from Wharton Business School were my customers, and they kept talking. I said, "Wait a minute. I can do this." The dean of admission was my best customer, and I said, "Charlie, I'm going to cut you off unless you get me in."

That's how I got there, but I was trying to work out an inventory system for the bar, and I would grill the customers on different inventory systems. I said, "Wait a minute. I can go to school and get this really fast." That was the idea, but I found a great deal of what we studied to be just not relevant to the skills that I needed in the world. It was a mismatch between the curriculum and what the world wanted us to



know how to do.

Well, let's turn to development of the central corridor because this is an area that's pretty exciting for me. I drive around the country a lot, and I see a lot about what's going on in the economy through that. It's unbelievably divergent, Jim. You can be in some areas of the country, and you're in a severe depression, and then other areas of the country, it's a huge boom time.

When you talk to people in these different areas, they immediately assume that the pattern in their area describes the global economy, so this divergence is very interesting. Tell us about number five, development of the central corridor and atrophy of other parts of the country.

JIM PUPLAVA: I'm trying to think of the gentleman that said in the 19th century, "Go west, young man." Well, this is interesting because if you look at the development of the United States, that's really what happened after World War II. The highway system was built under Eisenhower, and there was this migration from the east coast to the west coast.

We saw the development of the southwest states like Arizona, Nevada, Colorado, and California. California, my own state, I think we have 11 or 12 percent of the country's population here. If you take a look at what's happened to these states, California is running budget deficits, and has the highest tax rates in the country. It's one of the most difficult states to set up a business.

Every single year we have more businesses fleeing this state. Well, there was an analyst by the name of Meredith Whitney, and she wrote a book, and this is her thesis really. I want to give her credit for it. It was called, *Fate of the States*, and what she did is she started looking at the country and said, "Wait a minute. There's something happening here. From Texas all the way to North Dakota."

North Dakota is producing more oil than Alaska, and if you look at



these states that are blessed with natural resources, they have great transportation systems. They have low tax rates or no tax rates, and this is where a lot of our natural resources are being developed. Think of Texas for Shale, think of North Dakota, I mentioned this manufacturing renaissance and well, where are these factories locating?

They're not locating to, let's say, California or the east coast where you have a lot of high tax states. They're locating to the central corridor states where the cost of living is cheaper. They have a transportation system, whether it's through a canal system or railroads, and this is where you're seeing states that are balancing their budget. They're keeping their cost under control, they're making the regulatory environment favorable for businesses to come there, and not only that, they're giving them all kinds of inducements.

You take a look at some of the centers that are opening up in Austin, Texas. Google, Apple, all these high tech companies in Silicon Valley, they're not building new factories in Silicon Valley. They're building them in Austin, Texas.

C. AUSTIN FITTS: Well, you certainly see it when you drive. The development in the central corridor is absolutely happening, and that's why it's interesting because there's a variety of different conditions that lend themselves to manufacturing. How much of the return of manufacturing will repopulate some of the rest of those areas?

JIM PUPLAVA: Not only repopulate some of these areas, but also an internal migration, instead of the east coast to the west coast, what you might see is the east coast and the west coast to the middle of the country. If that's where the factories are, then that's where the jobs are and that's where people are going to go.

C. AUSTIN FITTS: Now, number six, dominance of the US financial markets. I'm very interested to hear your take on this because certainly if you look at the dominance of the Anglo-American alliance in terms of market share for equity markets, bond market, currency, it's always been high. It's been falling, particularly since the bailout period. I'd love to know



what your take is in this area and what you think about it.

JIM PUPLAVA: I have this saying, the U.S. has the best looking house in a global neighborhood. It's like, "pick your poison." The one thing that makes this country great despite some of our whacky politics is it's still an economy that's dominated by the private sector despite all the hindrances, roadblocks put up by the government in energy. Look what the energy industry did with horizontal drilling, fracking.

One of the things that makes financial markets successful is they've got to be broad and deep and liquid. So if you look at other, let's say currency blocks such as Japan with the Japanese yen and their economy and then also Europe. We just have the ECB, the first central bank to implement negative interest rates with the idea that they want to debase their currency.

"One of the things that makes financial markets successful is they've got to be broad and deep and liquid."

You have ObiNomics with the same goal, so if you're going to deploy capital, where are you going to deploy it? One of the conundrums for the financial markets this year is that interest rates have gone down. I think part of it is due to several factors, number one was that the fed has bought a tremendous amount of securities out there. There's only about \$650 billion dollars of long-term debt, so let's reduce the supply.

You've got institutions like insurance companies and pension plans that have to match their liability, so they're in the bond market. Then if you have money on deposit or you're a bank in Europe right now and Draghi just said, "Oh by the way, you keep your money with me." Catherine, wouldn't you love to have a business where people give you money and you charge them for it?

C. AUSTIN FITTS: We were supposed to be doing that for decades, Jim.

JIM PUPLAVA: I'd like to open a bank. I would love to have a business like that, and maybe you and I can start one, and we can become the next



billionaires. When you take a look at this, where are you going to deploy capital? Here's something that I think will surprise a lot of people.

The United States accounts for about 22 percent of the world's GDP. So we make about 20 percent of the world's stuff. That is really, Catherine, an understatement. If you take US companies, take not only what they make here, but also what those companies are making overseas, then we almost account for between 30 and 40 percent of the world's goods.

You look at China as a great manufacturer, but back out US companies or foreign companies making stuff there; US dominates. There's 1,400 companies around the globe that account for over 50 percent of GDP. These companies dominate. They're almost monopolies. Think of Boeing, think of Airbus, think of Coca-Cola, think of Pepsi. These companies dominate the globe in terms of economic output.

Of those 1,400 companies, 80 percent are western companies dominated in the US and Europe, and of those 1,400 companies, 50 percent of them are US. All of this means that we have a large economy and we have deep financial markets. If you're in Europe or you're in Japan it was just announced, that the Japanese pension system is going to start deploying a significant amount of its capital outside of Japan in foreign bonds and foreign equities. Where are you going to go?

C. AUSTIN FITTS: This to me, Jim, is one of the biggest question marks in the financial markets over the next ten years. That is, the US, both retail and institutions, has always been equity owners. Outside of the US, people buy real estate, they have bank deposits, they have gold, but they're not buying equities. It's tiny percentages.

As the middle class grows and these things change, as you describe for example, Japan, if that shifts, let's just say they increase their equity ownership by five percent, then that is trillions of dollars of money. That's a huge fundamental shift in the equity market if that happens.

JIM PUPLAVA: Let me throw another one because I call it the relentless bid. If



you look at the money that the feds created in the financial system, imagine if banks could do a couple things with it. They could create credit. They're not doing that much of credit creation because of people deleveraging, and the second thing they can do is they can trade it. They can invest it.

If you add quantitative easing to the fact that corporations have bought over \$400 billion of stock, there's one-third less companies out there today than there was in the year 2000. That's enormous.

C. AUSTIN FITTS: It's shrinking a lot, and the IPOs are being cut into by the big guys using their cash to buy up the companies. So that's not helping.

JIM PUPLAVA: Take a look at companies, what are they going to do if you have anemic global economic growth? The IMF just reduced global economic growth rates for 2014. If you have slower growth, which is a product of deleveraging and financial repression, what's a company going to do?

They can do a couple things. Well, they can buy back their stock, especially when it was cheap. They can raise dividends or they can do now what they're going to do to buy topline growth, which is M and A. We've got M and A activity in this country at levels we haven't seen since 2007.

We have this wonderful system, Catherine, but I think it's ours to lose if we don't manage it. Just as I mentioned that I think peak oil has gotten a new lease on life. If we don't do anything with our infrastructure then it's ours to lose. It'll be the private sector, it won't be the government that does it, whether it's railroads, building new tracks, or updating their fleet. The great thing about this country is our entrepreneurialship.

Think of all the stuff that's been invented here, and there's something magic about this country. You can take a foreign born PhD out of India, where they were in this confined consensus environment, transplant them to the United States, and within six months they can become entrepreneurs.



I didn't know this, but Joel Kurtzman and his new book, *The Next American Century*, talks about 25 percent of all Nobel laureates here in the United States were foreign born.

C. AUSTIN FITTS: If there were one thing I would do to improve the economy here it would be to really loosen up the residency access for foreigners who go to college or university here. We're taking the best and the brightest from another country, educating them and then forcing them to go home, when in fact they could stay and provide enormous investment into the economy.

JIM PUPLAVA: Absolutely. What's interesting is Joel Kurtzman, who used to be a writer for the *New York Times* and then *Harvard Business Review*, who's now at the Milken Institute, wrote a lot of books about terrible things that were going on in the country. He wrote about the credit crisis, and he set out to write a book about how America was in decline. Instead he came out and said, "Oh my goodness, this could be another American century." It is nothing to do with the government. It has a lot more to do with our private sector.

C. AUSTIN FITTS: Here's my one question in this area of dominance in U.S. financial markets, what impact do you think the Snowden revelation's are going to have? I say revelations are "going to have" because part of people's willingness to dance on our platform is trusting the integrity of it.

JIM PUPLAVA: I think it's damaged, but I think you're seeing a lot of companies push back, including Cisco, which just said, "Hey," to the NSA. "You're taking our routers, and you're trying to mess with them." So, I think the tech industry has gotten the message especially since technology depends on over 50 percent for their sales overseas. I think a lot of the titans of technology are now pushing back, and I think that's going to be important that they stay with it because if they don't, and we allow government to intrude into our lives, as the NSA has attempted, then that could damage a lot of the potential for US companies in this country.



C. AUSTIN FITTS: Number seven, accelerating advancements in technology. This is an explosive area, so I'm turning this over to you, Jim, to communicate it.

JIM PUPLAVA: It's just amazing. One of the things that make this country unique is the symbiotic relationship between our universities and research centers and companies. We have so many centers around the country. There's a five-mile radius around universities in Boston where you see technology companies, biotechnology companies that are associated with MIT.

I was reading a statistic that graduates of MIT have gone off and created companies that have accounted for \$2 trillion in sales and three to four million jobs. It's not just places like Boston, it's Austin, Texas, it's Silicon Valley, it's Houston, and we're creating this.

There was a gentleman that is developing some kind of enzyme that has to do with strokes, and he was experimenting in terms of this delivery, and it's the life that's created with algae. He wanted to come up with a delivery system to make this work, and they were experimenting with rats. In his research team the guy that he hired was the guy that figured out how to automate putting skis on carracks.

Now, if that was in Europe, he would not be part of the research team, he would have to come from some PhD at Cambridge University, and this is one of the things that we do well here, is because of this entrepreneurial spirit, because of the relationship with things like DARPA, which is just light years ahead of trying to figure out things that you thought were next to impossible.

If you look back over the last five or six years, and we can think about the financial crisis, the problems it created, but then take a look at what we have, Catherine. We didn't have iPads, we didn't have smartphones, we didn't have social media, we didn't have curved 4K TVs. The technological pace is accelerating. Almost every five years we're having a

“One of the things that make this country unique is the symbiotic relationship between our universities and research centers and companies.”



technological revolution.

I think a lot of that has to do with not only the increased capacity of computerization, but the skills and also the Internet. Think what you can do in research with the Internet today that you couldn't have done or even think of 10 or 15 years ago. I just look at it from my own industry, if I want to research a stock or find out information about economics of a country, I have this vast array of resources that I can use on the Internet, and all of that is being plugged.

C. AUSTIN FITTS: I think one of the reasons for the enormous frustration in the population is that if you look at the government, it's a very expensive government and the return on investment on government money is very negative. It's not a government that sits well with where these different advancements are going. It's going to be very interesting to see how that reconciles its way through the different elections over the next couple of years.

JIM PUPLAVA: Here's something interesting, Jeffrey Saut, who I often have on my program, is very optimistic in terms of what's going to happen politically. It's his contention, he's very plugged into Washington, that we're going to see the electorate basically put or elect better politicians and put them in office instead of the group that we have there now that are self-interested, tied to crony capitalist and more interested in furthering their own political careers than doing what's right for the American public.

C. AUSTIN FITTS: I hope he's right, Jim.

JIM PUPLAVA: I do too.

C. AUSTIN FITTS: Sorry, back to technology. Anything else you wanted to mention?

JIM PUPLAVA: No. I just think that the pace is picking up. You're going to see more of these technological centers erupt around universities with research centers and companies tied around them, and it's happening all



over the country, whether it's Boston, whether it's Austin, Silicon Valley, or Houston. I think you're going to see more of this even developing in that central corridor where you'll have some places where the universities will be built, companies will move in, they'll work with the colleges, and they'll have this relationship with research. Then some college professor who has an idea might decide to go out and start his own company.

That's the thing that makes the United States so unique. At this point, Catherine, as I look at these megatrends, I'm very optimistic in terms of what's going to happen in longer term. Yes, we're going to have problems, but I think it was Winston Churchill or somebody that said that the U.S. would try everything wrong before it finally figures out the right thing to do, and that seems to be our pattern.

C. AUSTIN FITTS: One of my personal struggles with what I do every day, I get invited to do radio shows, and I end up having the same conversation over and over again. That is, they tell me that the US dollar or the United States economy is going to collapse.

It's either tomorrow, one month or before the end of the year, and I say, "No. It's not." There is a remarkable amount of just tremendous fear and fear mongering on the state of the economy, and I always marvel when I watch you and Financial Sense. You've managed to pull some remarkable people together and stay very grounded. How do you manage that? I could use some assistance from you on this topic.

JIM PUPLAVA: Part of it is the amount of research that we do as a firm, and we do independent research and we get independent research. I do a lot of reading. Basically, that's my job. I spend six to eight hours a day reading. When you start looking at the facts, one of the things that we try to do is say, "Okay, this is a perception."

You can turn on the headlines, and I don't care if it's a crisis from the fiscal cliff to the debt ceiling debate, Syria, or whatever it is, you can look at those headlines, and I call it, "the doomsday prepper group." There's a whole industry that has emerged on gloom and doom. They sell it to you every single day. Trouble is, they've been wrong for five or six years.



When you look at the facts versus the perceptions that are out there, then you have to draw different conclusions, and that's the thing that we keep looking at. We keep looking at the facts. When I'm reading in the *Wall Street Journal*, that company after company after company that is locating here, whether it's Caterpillar, Yamaha, Ford, Emerson, Samsung, Exxon, Otis Elevator, Smith Electric, BASF, and I see this evidence emerge, and then I see all this new technology.

Think about it folks, think about your tablet computer, think about how that changed. Think about your smartphone and the things that you can do. Think about social media, how that changed media itself. All of these things are taking place, and that's what I do. When you start looking at the facts that's what gives you the confidence to go forward and look at these things. The great thing about it is so many people are caught up in this gloom and doom paradigm, it allows us, as investors, to take advantage of things that are priced cheaply.

C. AUSTIN FITTS: Here's the thing though, if you do look at the economy, and I'm in Tennessee most of the year, you can see it there but we have over 25 percent of the population, Jim, on food stamps and government subsidies. So you have one part of the economy that's very strong and doing well, and it's the high-end electoral capital part of the economy and the things we've been describing.

You have another part of the economy that's really being left behind, and is becoming ever more dependent on more and more government subsidies. I think the challenge here is how can the growing part of the economy reach out and bring back into a much more exclusive marketplace. How can everybody participate in the growth? That to me is going to be part of the issue to get sorted out in the next couple of cycles of election.

That needs to happen. The divergence in economy is translating into a divergent experience, and I think a lot of the gloom-and-doomers are people who are living in the middle of a depression. Their economy is collapsing, and that to me is one of the reasons I love articles like what you've done here with Megatrends. It helps people say, wait a minute,



wait a minute. There's something going over here. Maybe you need to look at that shift. Maybe you need to start seeing where the opportunities are and sort of whether it's time to move or change or learn something new. There's a lot going on.

I'm very hopeful that we can encourage the people who think the end is near to sort of begin anywhere and take advantage of some of the things that are going that are really, really exciting.

JIM PUPLAVA: I think it's just changing your mindset to a more positive outlook. If you're in a dead end job that's not going anywhere, start doing some research, start reading and taking a look at, where are there jobs? Gosh there's four million unfilled manufacturing jobs out there, there's growing need in the medical field.

Catherine, I interviewed a well-known doctor the other day, and he said, "You know, folks, if you have heart disease just take care of yourself because the advances that are coming in the next five years are going to be remarkable."

C. AUSTIN FITTS: You don't need to go to the hospital.

JIM PUPLAVA: Yes, you don't need to go to the hospital, just take care of yourself because of what we're doing. Look at what we're learning with nutrition, with distressing. Dr. Dean Ornish, look what he's done for former president, Bill Clinton and changing his diet. There are so many great things to look forward to. It's just a matter of mindset.

Stop listening to the doomsday preppers because they're going to keep you in a forever depression. The world's going to end, the dollar's going to collapse, the economy's going to come down, we're going to have Armageddon, go get your beans, your shotgun shells, and barricade yourself in some cave out in the wilderness.

C. AUSTIN FITTS: How's that working for you? I don't think that's working.

JIM PUPLAVA: Yes, how's that worked for the last six years? It hasn't.



C. AUSTIN FITTS: It hasn't.

JIM PUPLAVA: I would just conclude here and just say that there are a lot of things to look forward to, and I would highly recommend a book. It's called *The Next American Century* by Joel Kurtzman. This guy was a gloom and doomer. He set out to say, "I'm going to prove that America's in decline." He did the research and came away with just the opposite. There are a lot of great things.

The other thing that we always try to do too, Catherine, and I think it helps, is we always get the opposing point of views. I'm more on the inflationary side. I'm not for hyper-inflation, but I read the *Deflationist*. I also get newsletters from people that are bears on the stock market because I always want to question my own assumptions. Is there something there I'm not looking at? Something I'm not seeing? Then I look at those assumptions and what other people are saying, and then I also look at the facts. I think if we do that we can develop a more positive outlook.

C. AUSTIN FITTS: I have a partner who once a week says, "Whatever we're doing, whatever we decide," he says, "What if we're wrong?" It always helps to always look at the people who are taking the opposing view. It think you learn a lot and you understand what your risks are.

Jim, before we close, please just give us a minute and describe the *Financial Sense News Hour* and your website. I think it's a great resource.

JIM PUPLAVA: The *Financial Sense News Hour*: we produce six programs weekly. For the weekend program, the first hour we try to get experts on the market, technicians, somebody from my own staff, and we cover the markets from stocks to the economy to commodities. The second hour I try to put together big picture items that are bigger macro themes driving the investment markets. That's the weekend show.

On Monday, we do a program called *Lifetime Income* that is on financial planning and getting ready for retirement. This week we're going to cover education expenses, how to plan for them, and this is going to



relate to my transformation of education theme. Then Tuesday through Friday, I interview experts from around the world. That's our premium channel. That does cost \$10.00 a month, but I interview people from Asia to London and all around the globe.

Thinkers that really try to put together some very insightful thoughts about what's driving the market, and where it's going. Guests who say if it's going up, if it's going down, and we have bulls and we have bears. You can find all of that at our website, Financial Sense, and sense is S-E-N-S-E, financialsense.com.

C. AUSTIN FITTS: Well, Jim, it's been a pleasure to talk with you. We're going to make sure there's a link to the Seven Megatrends article, the podcast, and to your website. We can't thank you enough for joining us on The Solari Report. You have a wonderful day.

JIM PUPLAVA: Thank you, Catherine, for having me on the show.

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Nothing on The Solari Report should be taken as individual investment advice. Anyone seeking investment advice for his or her personal financial situation is advised to seek out a qualified advisor or advisors and provide as much information as possible to the advisor in order that such advisor can take into account all relevant circumstances, objectives, and risks before rendering an opinion as to the appropriate investment strategy.