

# The Good Life

Ideas, advice, beliefs and perspectives for the enjoyment and education of our clients and friends

Period ending October 2016

November 2016

## What We Are Thinking

Fixed Interest					
Years	1	2	3	10	YTD
One-year	2.4	2.6	2.6	4.5	2.0
Two-year	2.7	2.8	3.0	5.0	2.5
Five-year	5.0	4.8	4.8	6.7	5.0
Long Term					
<b>Australian Shares</b>					
Large	6.3	2.9	4.3	5.0	4.6
Value	14.0	5.3	4.6	4.5	17.2
Small	14.1	8.0	4.6	4.1	11.2
<b>Global Shares</b>					
Large	-5.2	9.3	11.5	4.2	-0.8
Value	-4.1	7.6	9.6	3.1	1.7
Small	-2.0	11.8	11.9	6.0	1.6
Emerging Markets	6.4	4.2	5.4	3.8	16.9
Real Estate	6.4	12.1	13.6	0.8	5.2
<b>Description of Indexes</b>					
One-year FI	DFA Short-Term FI				
Two-year FI	DFA Two Yr Div. FI				
Five-year FI	DFA Five Yr Div. FI				
Long-Term FI	Bloomberg Aus Treas. 10+				
Australian Large	DFA Aus Large Co				
Australian Value	DFA Aus Value				
Australian Small	DFA Aus Small Co				
Global Large	DFA Global Large Co				
Global Value	DFA Global Value				
Global Small	DFA Global Small Co				
Emerging Markets	DFA Emerging Markets				
Global Real Estate	S&P/ASX 300 REIT Index				
	Data presented may be based on a combination of simulated and actual returns.				
	<b>Past performance is not indicative of future performance.</b>				

Dear Reader,

Welcome to the November edition of *The Good Life*. This month, Jim Parker writes about *Feeling the Heat, News and Markets*. He writes about what happens when an unexpected result occurs – like dare I say - Trump winning the US presidential election. You might be surprised but not if you are a keen student of history.

### Good News ... confident about the future

We're continually blown away by what's happening in what we call the EXPONENTIAL WORLD. These advances will make many existing companies obsolete more often and sooner than ever before. It will also see many costs of everyday living drop substantially.

This month we look at creating better, faster, stronger heart cells; supercomputers using solar power; Uber self- drive **trucks**; really small machines; smartphone apps to detect cancer **accurately**; 3D printing helping researchers; flexible solar panels that capture sunlight and indoor light and another example of the old (cable TV) being caught by the new (Netflix). Ready to evolve or keep on revolving?

### Sad News Vale Leonard Cohen 10 November 2016

<http://www.abc.net.au/news/2016-11-11/goodbye-leonard-you-brought-us-so-much-light/8019038>

### Inflation

A few months ago we asked you to ponder a question about inflation.

This month we continue to look at how we spend our money and the forthcoming rapid [demonetization](#) of the cost of living. Today we'll look at another 2 of the 7 broad areas of spending – **housing and education**. Both are sectors ripe for disruption; property investors and city dwellers please read.

It has started happening with education, so much is available online for free but wait until you experience what is coming...amazing.

# Feeling the Heat: News and Markets

## OUTSIDE THE FLAGS

Jim Parker,  
Vice President  
DFA Australia Limited



November 10, 2016

### **Not for the first time this year, a significant news event has confounded the expectations of many pundits. How should investors respond to the outcome of the US election?**

The election of Donald Trump as the next President of the United States, like the decision of Britons to vote for the UK's exit from the European Union, ran contrary to what most pollsters and journalists had said was the most likely outcome.

At times like this, people will turn to the media for interpretation of the events. In watching all the coverage and analysis, however, there are a couple of things you should keep in mind.

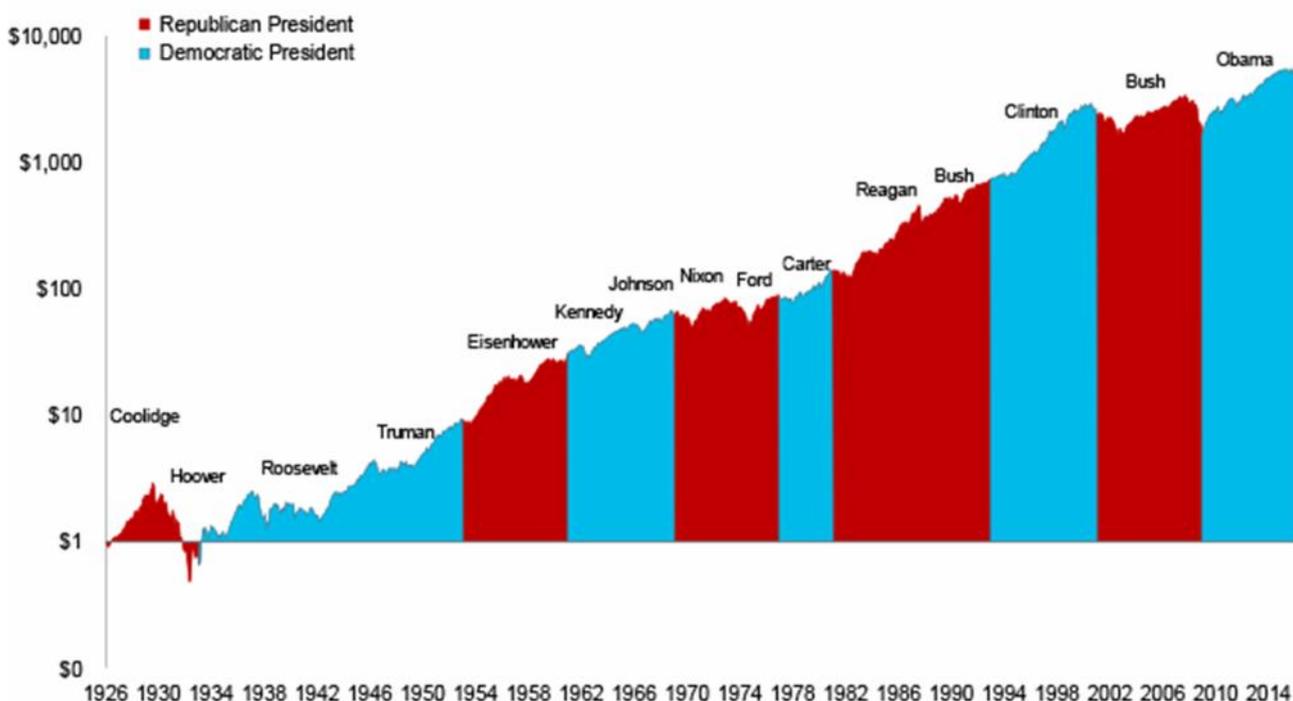
Firstly, many of those sharing their views about the likely repercussions of the election result are the same ones who told you this was unlikely to happen.

You may remember that a day before Brexit in late June, many polls and pundits said the referendum was unlikely to be carried. When it went contrary to expectations, both sterling and the FTSE-100 index were pummelled. By October, however, the UK index was at record highs.

This is not to suggest that markets will behave in a similar way following the Trump win, but it does offer a caution against making long-term portfolio decisions on the basis of breaking news.

The second thing is that history shows no obvious long-term link between market returns and who is occupying the White House. Markets are influenced by multiple factors, politics being only one.

### GROWTH OF A DOLLAR INVESTED IN THE S&P 500 JANUARY 1926–JUNE 2016



We can't control the ups and downs of markets. And we've seen that basing an investment strategy on the prognostications of media pundits is not exactly a rock solid idea either.

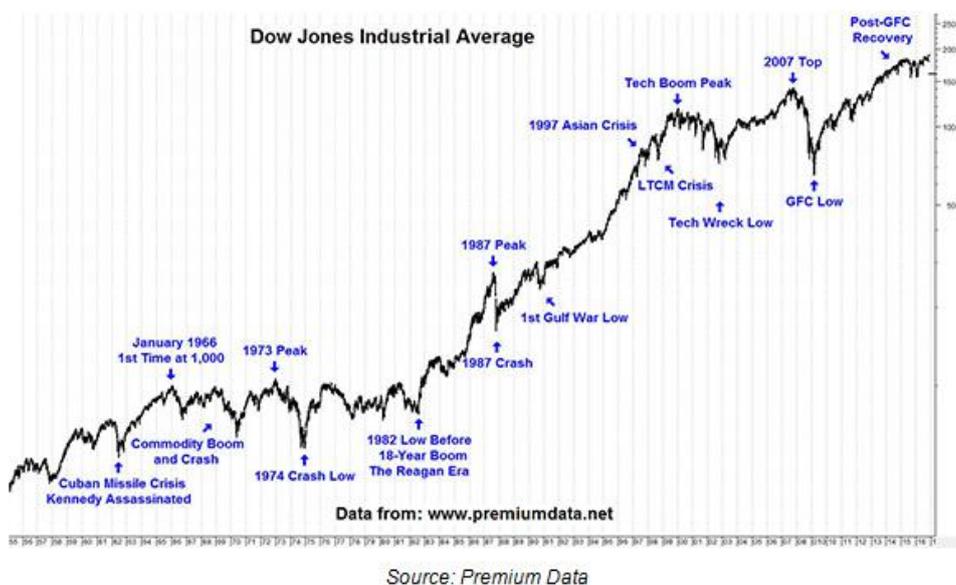
So as investors, we have to focus on what we know. We can stay focused on our long-term goals, diversify around the known dimensions of returns, rebalance occasionally to stay within our chosen limits and be mindful of costs and taxes.

Most of all, we need to exercise discipline and keep our heads. Over the long-term, markets have rewarded investors who have stayed true to an appropriately diversified plan built for them around the long-term drivers of return.

A new presidency will bring new policies and uncertainties, to be sure. But markets will work through those as they do with all news. All opinions will be accommodated in prices and there is little that any one person can do to change that.

Ultimately, when the news environment is at its hottest, successful long-investors must be at their coolest.

### Booms and Busts over the last 60 years of our life.



We hope you enjoyed this issue and would like to receive your feedback on articles you would be interested in or ways we can improve our newsletter. We have a lot more information on our website at [www.integratedwealthsolutions.com.au](http://www.integratedwealthsolutions.com.au) where you can register to receive this free monthly newsletter.

**John McMorrow**  
Editor

#### Disclosure & Disclaimer

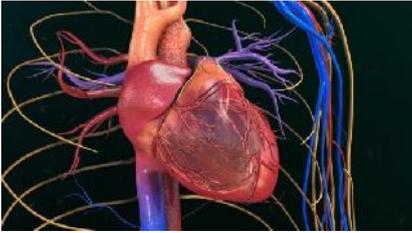
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# That Bit Extra...

## More Amazing Research Happenings in the EXPONENTIAL WORLD to Make Our Lives Better

### [Scientists Create Heart Cells Better, Faster, Stronger](#)



**What it is:** **Scientists at The Gladstone Institutes have discovered a set of chemicals that can help transform scar tissue into healthy, beating heart muscle. This discovery enables new, effective treatments for heart failure via cellular reprogramming, or turning one type of adult cell into another. Scientists hope to integrate muscle cell regeneration with gene therapy and drugs to create better treatments and ultimately cure heart failure.**

**Why it's important:** Peter's blog on [Disrupting Today's Healthcare System](#) mentioned how large-scale genomic sequencing and machine learning will help us better understand the root cause of heart disease and other cancers in the body. As we continue to improve our use of genomics and big data, we'll be able to eradicate conditions like cancer and heart disease -- which in turn enable us to extend the [healthy human lifespan](#). [Join the Discussion](#)

*Spotted by Gregory Scherf / Written by Sydney Fulkerson*



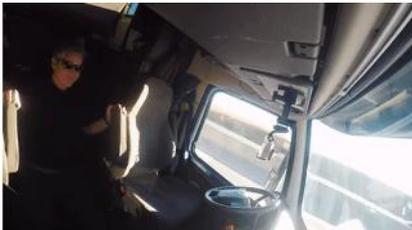
### [New Hikari Supercomputer Starts Solar HDVC](#)

**What it is:** A collaboration between Japan and Texas has produced a new computing system called the Hikari (Japanese for "light") -- the first microgrid in the U.S. that supports a supercomputer. Hikari runs on solar power (up to 208 kilowatts) during the day, and high voltage direct current, or HVDC -- resulting in a predicted 15% reduction in power use compared to conventional systems. One of the primary focuses for this development is to make data centers more sustainable by reducing an industry's overall power consumption.

**Why it's important:** As the Rising Billion come online and the planet's computational needs grow, we'll need increasingly efficient data centers. This solar-powered data center also incorporates other sustainable technologies, including a warm water-based liquid cooling system that streamlines the heat removal process. What happens to our global data-processing capabilities when powerful data centers can run completely off the grid? [Join the Discussion](#)

*Spotted by Daniel Micali / Written by Sydney Fulkerson*

### [Uber's Self-Driving Truck Makes its First Delivery: 50,000 Beers](#)

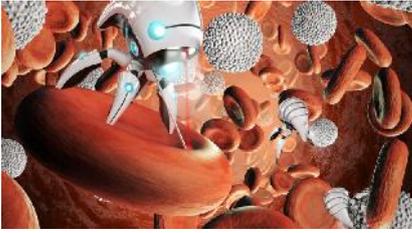


**What it is:** Uber recently made the world's first autonomous truck delivery, driving 120 miles to Colorado Springs, carrying 50,000 Budweiser cans as cargo. The self-driving semi uses three LIDAR laser detection units, a radar on its bumper and a camera above the windshield. Otto's long-term goals for the technology include navigating construction zones, predicting drivers' movements and dealing with hazards like bad weather.

**Why it's important:** In previous Abundance Insider issues, we've shared self-driving [tractors](#), [speedboats](#) and [delivery robots](#). Fully autonomous trucks in the future will not only help fill the trucking industry's driver shortage, but it will also improve safety, reduce emissions and boost efficiency -- a win for us all. [Join the Discussion](#)

*Spotted by Aryadeep S. Acharya / Written by Sydney Fulkerson*

### [Can This Year's Nobel-Prize Winning Invention Enable Immortality?](#)

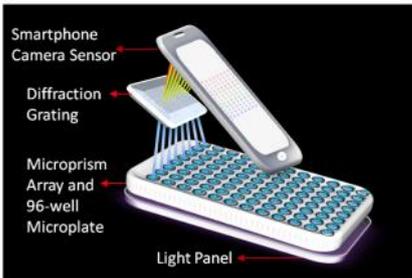


**What it is:** This year's Nobel Prize in chemistry went to three scientists who developed "the world's smallest machines," and these molecular machines could hold the key to true longevity. Jean-Pierre Sauvage, Sir J. Fraser Stoddart and Bernard L. Feringa developed the nano-machines to target a human's plagued cells with the exact medicines needed; in the long run, they could even perform microsurgeries, changing medicine as we know it.

**Why it's important:** The global nanotechnology industry is projected to reach \$75.8 billion (USD) by 2020. Peter's [blog on nanorobots](#) mentioned how entrepreneurial and scientific applications of nanotechnology -- including nanoscale drug delivery mechanisms -- can solve some of the biggest problems we face today. [Join the Discussion](#)

*Spotted by Peter Diamandis / Written by Sydney Fulkerson*

### [Scientists Develop a Cancer-Detecting Smartphone Add-on That's Up to 99% Accurate](#)



**What it is:** Researchers from Washington State University have come up with a smartphone-based diagnostic rig that can diagnose cancer with 99% accuracy. The rig involves a 96-well ELISA assaying plate, a 3D printed cradle, a smartphone with a camera, and a microprism array. It detects the inflammatory biomarker interleukin-6 (IL-6); while this marker is mostly linked to depression, allergies and mood disorders, the researchers say it's also "closely linked" to a variety of skin, lung, liver and breast cancers.

**Why it's important:** This particular diagnostic will help patients quickly determine whether to get more detailed bloodwork done, but it's also a huge step toward an actual consumer tricorder. Imagine what healthcare -- and scientific research -- will look like when citizen-scientists have smartphone-sized handheld devices that combine the Internet, blockchain, health diagnostics, Geiger counters, projector and zoom lenses, infrared CCD cameras, a variety of lasers, and full-blown spectrometry and bioassay analytics? [Join the Discussion](#)

*Spotted by Peter Diamandis / Written by Jason Goodwin*

### [Harvard Researchers 3D Print a Heart-on-a-Chip](#)

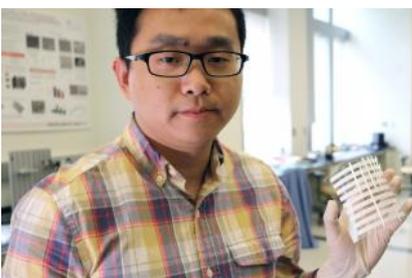


**What it is:** Harvard researchers have developed new printable inks for multimaterial 3D printing, allowing them to 3D print a heart-on-a-chip with integrated sensors to simplify data collection. In all, the team developed six custom 3D-printable materials that could replicate the structure of human heart tissue, except with embedded soft strain sensors, according to New Atlas.

**Why it's important:** Organs-on-chips let researchers study the effect of drugs, cosmetics and diseases on the human body without human or animal testing. Manufacturing and retrieving data from these chips can be costly and time-consuming, but this heart-on-a-chip addresses both of these challenges. By integrating sensors into the material, researchers can conduct complex drug screenings and disease modeling. What opportunities might arise when we can build such sensors into organ replacements, or embed them in healthy organs? [Join the Discussion](#)

*Spotted by Aryadeep S. Acharya / Written by Jason Goodwin*

### [Virginia Tech Flexible Solar Panel Goes Where Silicon Can't](#)

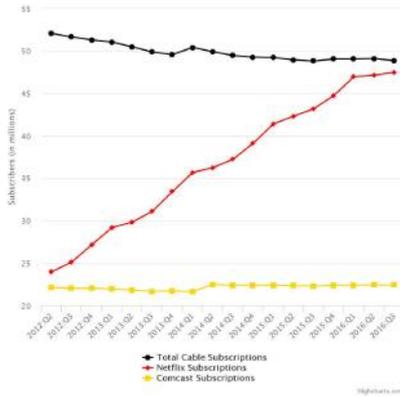


**What it is:** Engineers and chemists at Virginia Tech have produced flexible solar panels that capture light from both the sun and indoor light fixtures. The panels were created through a screen-printing process that used low-temperature titanium oxide paste as part of a five-layer structure, similar to how bathroom tiles are layered. A single palm-sized panel provides about 75 milliwatts of power, and a panel the size of a standard sheet of paper could recharge a smartphone. The process enables us to efficiently fabricate large-area modules and place them in areas where silicon and glass aren't feasible -- for example, light-harvesting wallpaper, lampshades and curtains.

**Why it's important:** Similar to the [shape-shifting panels from last week's Insider](#), these flexible solar panels open up a door to an entirely new era of energy-saving -- one that is more cost-effective, customized, adaptable and capable of capturing a wider variety of light wavelengths. When we can demonetize and democratize home energy recycling, we enable [an abundant solar economy](#). [Join the Discussion](#)

*Spotted by Gregory Scherf / Written by Sydney Fulkerson*

### [Netflix vs. Cable, By the Numbers](#)



**What it is:** Data scientist Samuel Bennett's latest chart compares cable, Netflix and Comcast subscriptions by quarter, and the trend lines are staggering. Between Q2 2012 and Q3 2016, cable subscriptions have decreased by just over 6%, while Netflix subscriptions have increased by over 98% and Comcast subscriptions have increased by 1.27%. If these growth patterns continue, we'll see more active Netflix subscriptions than cable subscriptions sometime in 2017.

**Why it's important:** Here's another clash between linear systems and exponential growth, as emerging business models and new technology-enabled capabilities threaten the status quo. These skirmishes will play out in nearly every area of business and industry, and organizations that aren't prepared to evolve only doom themselves to slow, inevitable extinction. [Join the Discussion](#)

*Spotted by Cody Rapp / Written by Marissa Brassfield*

## **Inflation Part 4**

**Inflation is a BIG ISSUE that's getting a lot of attention from Peter Diamandis because of the impending rapid demonetisation of the cost of living.**

That means ... it's getting cheaper and cheaper to meet our basic needs.

### ***How We Spend Our Money Today***

Spending habits around the world tell a pretty consistent story where we tend to spend money on many of the same basic products and services.

Using the US as a guide, average household expenditure in 2013 was spent on:

- housing 33%
- transportation 16%
- food 12%
- healthcare 6%
- entertainment 5%.

**Together with energy and education, more than 75% of US household expenditure is spent on these 7 categories.**

Now imagine what would happen if the cost of these items plummeted. Today, we look at another 2 – housing and education.

#### ***Housing:***

Think about what drives high housing costs. Why does a single-family apartment in Manhattan cost US\$10 million while the same amount of living space on the outskirts of St. Louis can be bought for US\$100,000?

Location. Location. Location. People flock to high-density, desired areas, near the jobs and the entertainment. This market demand drives up the price.

**Housing will demonetize for two reasons: The first reason housing will demonetize is because of two key technologies which make the proximity of your home to your job irrelevant, meaning you can live anywhere, more especially, you can live where it's more affordable and the quality of life is higher.**

(1) Autonomous Cars: If your commute time can become time to read, relax, sleep, watch a movie, have a meeting. Does it matter if your commute is 90 minutes?

(2) Virtual Reality: What happens when your workplace is actually a virtual office where your coworkers are avatars? When you no longer need to commute at all. You wake up, plug into your virtual workspace and telecommute from the farm or from the island of Lesbos.

The second technology drivers are the impact of robotics and 3D printing which will demonetize the cost of building structures.

A number of startups are now exploring how 3D printed structures and buildings can dramatically reduce the cost of construction and the amount of time it takes to build a building.

For example, the Chinese company Winsun is 3D printing entire apartment buildings.



[6-storey building 3D printed by Winsun](#)

### ***Education:***

Education has already been demonetized in many respects as most of the information you'd learn in school is available online for free.

Coursera, Khan Academy and leading colleges such as Harvard, MIT and Stanford have thousands of hours of high-quality instruction online, available to anyone on the planet with an internet connection.

But this is just the beginning. Soon the best professors in the world will be an Artificial Intelligence, an AI able to know the exact abilities, needs, desires and knowledge of a student and teach them exactly what they need in the best fashion at the perfect rate.

Accordingly, the child of a billionaire or the child of a pauper will have access to the same (best) education delivered by such an AI, effectively for free.

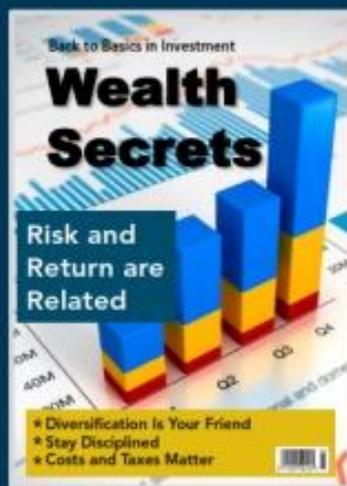
And talking of education, don't get seduced by the 'gurus' false hopes ...

Get Rich, Right Now!



Stay focussed on what you can control and stick to your plan.

What They Should Say...



**Risk and Return  
are Related** !

- Diversification Is Your Friend
- Stay Disciplined
- Costs and Taxes Matter