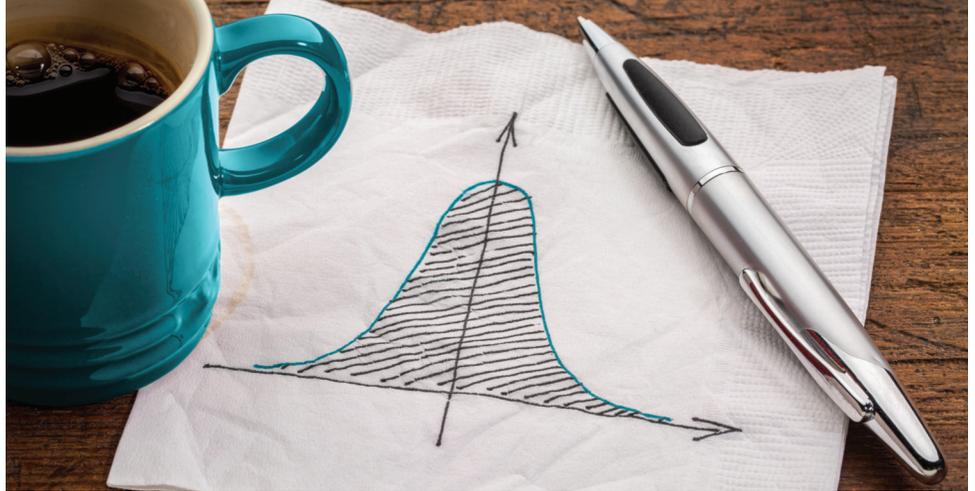


# ODLUM BROWN REPORT

## 11 2018



## The Truth about Averages

Have you heard the one about the six-foot tall statistician who drowned crossing a river that was only three feet deep, *on average*? It's an illuminating story because it highlights the limitation of simple averages.

In the investment business, forecasters often use historic averages to extrapolate trends and in doing so they often give their clients a false sense of security. The trajectories of the economy and the stock market are typically more variable than predicted. The proverbial economic and stock market rivers run both fast and slow, and they have scary rapids and waterfalls too. Yet, the prognosticators rarely broadcast those realities. The Financial Crisis of 2008/09 provides a great example. The collapse of Lehman Brothers in September 2008 is commonly regarded as the height of the crisis, and as such, Wall Street recently marked the 10-year anniversary of that traumatic event. However, it is worth considering what forecasters were predicting a year earlier.

The Survey of Professional Forecasters, the oldest survey of economic forecasts in the United States, expected the economy to grow by 2.8% in 2008, *on average*. They were wrong. The Gross Domestic Product (GDP) actually declined 0.1% in 2008 and fell a further 2.5% in 2009. Recessions are typically not recognized until well after the fact. Indeed, the National Bureau of Economic Research, the nation's business cycle arbiter, reported in November 2008 that a U.S. recession had begun in December 2007.

Investment analysts and strategists are not much better at predicting company earnings and stock returns, at least not in the short term. Some analysts go as far as making bear, base and bull case estimates, which may seem like a positive in terms of factoring in various potential outcomes. Nevertheless, the best and worst-case scenarios rarely capture actual earnings highs and lows. Why is it called a surprise when company earnings routinely vary from the estimates? Perhaps the real surprise occurs when earnings actually match the estimates.

When recent investment returns are low, investor sentiment and return expectations tend to be depressed; at this point, future returns are typically better than anticipated. The opposite is true at the other end of the spectrum. The investing crowd is usually most optimistic regarding prospective returns following a long period of rapidly rising stock prices and that sets the stage for disappointment. In our view, the surest way to achieve satisfying long-term investment results is to understand and manage our emotions. It is important to appreciate that markets are volatile and unpredictable in the short term. It is human nature to extrapolate trends and get carried away, particularly when market conditions veer toward the extremes.

We do not make official annual return predictions for the stock market, yet it is a question we are regularly asked by the media and our clients. When pressed, our answer has typically been 8-10%. One method used to forecast stock market returns is to look at the historical performance of a well-diversified stock index. This simple exercise reveals a return of 8-10% a year, *on average*. In reality, we have no idea what the market will do next year, nor do we expect to earn 10% each year we are invested. If only it were that easy!

Take a guess at the last time the S&P 500 Total Return Index generated a calendar year return of 8-10%. It was 1993. Annual stock returns are far more volatile than their historical average. In fact, the annual tally for U.S. stocks was negative 20% (or worse) only three times over the last 50 years. People tend to think of volatility as loss, but volatility is the measure of deviation from an average, and this divergence can be positive as well. U.S. stocks have gained 20% or more annually 17 times over the same period. Given this historical pattern of higher and more frequent positive outcomes, it pays to avoid making short-term forecasts and to stay invested over time. At the risk of repeating ourselves: it's time in the market, not market timing that counts. *Continued on next page*



**ODLUM BROWN**  
Investing for Generations®

### INSIDE THIS ISSUE

Page 1

[The Truth about Averages](#)

Page 2

[Canada Pension Plan \(CPP\) Enhancements](#)

#### Odlum Brown Limited

Suite 1100 - 250 Howe Street  
Vancouver BC V6C 3S9

**Main** 604 669 1600

**Toll Free** 1 888 886 3586

**Kelowna** 250 861 5700

**Victoria** 250 952 7777

**Chilliwack** 604 858 2455

**Courtenay** 250 703 0637

**Langley** 604 607 7500

**Email** [information@odlumbrown.com](mailto:information@odlumbrown.com)



Odlum Brown Limited



Odlum Brown Community



@Odlum\_Brown



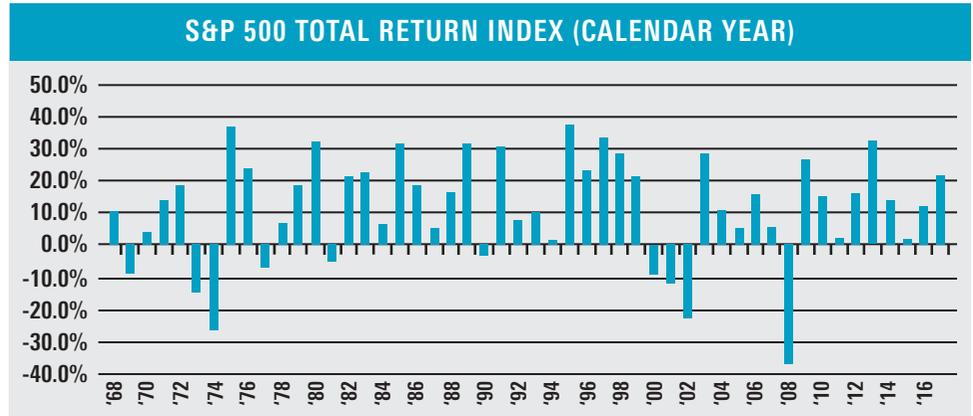
OdlumBrown



## St. Paul's Foundation – Lights of Hope

November 16, 2018 Vancouver, BC

Lights of Hope inspires a beacon of joy and a sense of community during the darkest time of the year. The largest annual fundraising event for St. Paul's Foundation, this incredible light display is the collaborative work of volunteers and sponsors. For 15 years, Odium Brown has proudly been a corporate sponsor, supporting the life-saving work being done at St. Paul's and the other Providence Health Care sites throughout Vancouver. For more information, visit [lightsofhope.helpstpauls.com](http://lightsofhope.helpstpauls.com)



Source: Odium Brown, Bloomberg

Having a long-term investment plan and sticking to it is easier said than done. Investors are only human and we are all ingrained with certain self-defeating, emotional tendencies. Managing those emotions is a critical part of successfully meeting our financial goals. Asking certain questions can help keep us on track. Are we overly confident or optimistic when markets are performing well? What risks are we ignoring when stocks are rising? Similarly, how do we behave when the market goes down and pessimism peaks? Do we run for safety after the damage is already done?

The ups and downs of individual stocks make it difficult for investors to stay the course. Take Amazon for example. Since its IPO in May 1997, Amazon has appreciated 130,000%, which equates to a 40% compounded annual rate of return. While that may seem like a slam dunk in hindsight, it was not so for the average investor. Along the way, Amazon shares declined by more than 40% on three separate occasions. Between November 1999 and September 2001, Amazon lost 93% of its value! It is probably safe to say that few investors had the guts and the conviction to hang on for the whole ride.

There is no easy solution to managing our behavioural tendencies, especially when Mr. Market goes manic. There is often a slew of bullish and bearish forecasters making the news. Resisting the urge to time the market during these inevitable highs and lows is difficult, but not impossible. Go for a walk, play with the kids or get some exercise. The businesses we own will be bigger, more profitable and more valuable down the road.



**STEVEN ZICHERMAN, MBA, CFA**  
Equity Analyst  
[@OBDifference](https://twitter.com/OBDifference)

### ODLUM BROWN FINANCIAL SERVICES LIMITED

## Canada Pension Plan (CPP) Enhancements

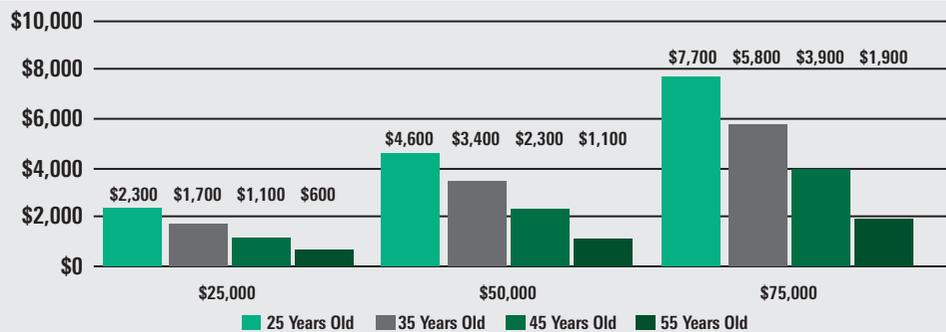
**Starting in 2019, the Canada Pension Plan (CPP) will be gradually enhanced. If you work and make CPP contributions as of January 1, 2019, you will receive higher benefits in exchange for making higher contributions.**

The enhancements will increase CPP retirement, post-retirement, disability and survivor's pensions. Retirement and disability pension enhancements will depend on how much and for how long the pensioner (or deceased spouse or common-law partner in the case of the survivor's pension) contributes to the enhanced CPP.

#### Current Benefits and Contributions

Currently, for an individual retiring at age 65 in 2018, the maximum annual CPP retirement benefit is \$13,610. The contribution rate is 4.95% each for employees and employers, and 9.9% for self-employed individuals. This contribution rate applies to pensionable income above \$3,500 up to a maximum income level known as the "Year's Maximum Pensionable Earnings" or YMPE. The YMPE for 2018 is \$55,900.

## ESTIMATED CPP INCREASE IN INCOME (ADJUSTED FOR INFLATION)



Assumptions: Retirement at age 65, 2% inflation, salary and YMPE increase. Source: Manulife.

The goal of the CPP enhancement is to increase the maximum annual pension benefit from approximately 25% to 33% of pre-retirement eligible income (YMPE). Once the enhancements have been fully implemented by 2025, the maximum CPP retirement benefit will be increased by about 50% to a new maximum benefit of over \$20,000 in today's dollars.

As shown in the chart above, the impact of the enhancement will be affected by a contributor's income level (up to the YMPE) and current age. For example, a contributor who is currently 25 years old can expect to receive a larger increase in CPP retirement benefits than someone who is currently 55 years old earning the same amount as a result of making larger contributions for a longer period of time.

### Impact on Contributions

To fund the benefit enhancements, the government will implement a two-step increase in contributions over the next seven years, as shown in the table below.

Contribution rate on employment earnings between:	Current	Timing	Enhanced
1) \$3,500 and the annual earnings limit (\$55,900 for 2018)	4.95% 9.90%*	Gradual increase from 2019-2023	5.95% 11.90%*
2) the original earnings limit (indexed for inflation) and an additional earnings limit, which will be 14% higher by 2025 (estimated to be \$79,400)	N/A	Starting 2024	4.00% 8.00%*

\* Self-employed individuals contribute both the employee and equal employer portion on the original and additional earnings range.

For more information on the CPP enhancement, visit the Government of Canada website.<sup>1</sup> For clients nearing retirement, we revisit the age-old question of when to start collecting CPP below.

### When Should I Start Collecting CPP?

You can apply to begin receiving your Canada Pension Plan (CPP) retirement benefits between the ages of 60 and 70. Service Canada uses age 65 as the benchmark age at which to start receiving your pension benefit such that:

- If you collect CPP before age 65, benefits are reduced by 0.6%/month (7.2%/year).
- If you collect CPP after age 65, benefits are increased by 0.7%/month (8.4%/year).

Your contributory period begins when you turn 18 and ends when you start collecting CPP or turn 70, whichever comes first. Your benefits are based on the amounts contributed and period of contribution; therefore, years of low or no income (subject to the drop-out provisions noted below) reduce your benefit amount. So, if you are under 65 and neither contributing to nor collecting CPP, you may be inadvertently reducing your pension benefits.

A pensioner entitled to the full CPP retirement benefit at age 65 (in 2018) would be entitled to a monthly amount of \$1,134; if they apply for CPP at age 60, they would be entitled to \$726 per month, a 36% reduction; and if they apply at age 70, they would be entitled to \$1,611 per month, a 42% increase.

*Continued on next page*



Vimy

by Vern Thiessen

Kay Meek Arts Centre

Play Series Sponsor 2018-19



General Victor W. Odlum

November 2018 marks 100 years since the end of the First World War. One of our founders, General Victor Odlum, served our country in both World War I and II.

To commemorate this anniversary, the Kay Meek Arts Centre presents *Vimy*, a striking drama about a group of Canadian soldiers convalescing in a field hospital after facing the horrors of Vimy Ridge. Odlum Brown is pleased to honour our founder, General Victor Odlum, by partnering with Kay Meek as the 2018/19 Play Series Sponsor, in support of *Vimy* and other productions throughout the year. For more information, visit [kaymeek.com/events/vimy-2](http://kaymeek.com/events/vimy-2)

From a purely mathematical perspective, deciding when to start collecting CPP would be made easier if we knew how long we are going to live. For reference, the average life expectancy in Canada (as of 2017) is 79 years for men and 83 for women.<sup>2</sup> Such averages are not a crystal ball and vary by province, health status and other indicators.

Since the CPP pays inflation-adjusted benefits for life, we can calculate the cumulative benefits received over time, factoring in any reductions or increases relating to early or delayed application, respectively. However, if you delay your CPP you may need to fund your retirement from other sources. If you forfeit annualized returns on withdrawals from a retirement account or incur debt to afford delaying your CPP, this opportunity cost should be captured in the calculation.

The following table summarizes the optimal age to start collecting CPP for various lifespans. The middle row shows the optimal start age assuming cumulative benefits are received without considerations to the opportunity cost (expressed here as discount rate). The bottom row demonstrates the impact of using a hypothetical 5% discount rate. As an example, if you are planning around a lifespan of 85 years, your optimal CPP start age would be around age 68 to 69. A higher discount rate would project an earlier CPP start date.

Optimal age to start collecting CPP																				
Lifespan	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90+
<b>Optimal Start Age</b>																				
<b>No Discount Rate</b>	61	62	62	63	63	64	64	66	66	67	67	68	68	69	69	70	70	70	70	70
<b>5% Discount Rate</b>	61	61	62	62	63	63	63	64	64	66	66	67	67	67	68	68	69	69	69	70

Adapted from an article that originally appeared in CPA Magazine in January 2018

The above table is based on pre-enhancement CPP data; however, the same monthly reduction and increase framework will apply post-enhancement.

**Qualitative Considerations**

**Health and Longevity.** If you have any health concerns or a shortened life expectancy, you may want to consider collecting CPP early to maximize the benefits received. Conversely, if you expect a long retirement or are concerned about outliving your money, consider deferring your CPP. **Cash flow needs.** If you are 60 or older and experiencing cash flow difficulties, it may make sense to collect CPP early to meet your immediate needs. On the other hand, if you expect to depend on stable CPP benefits in your later years as a core source of income, you may wish to delay your application. **Other sources of income.** If you have other sources of taxable income and do not need the additional cash flow, consider delaying receipt as your CPP benefits will be added to your taxable income and potentially be taxed at a higher rate.

**Did You Know?**

**You may share your pension.** Sharing your CPP with your spouse may result in tax savings by shifting taxable income from the higher to lower income spouse. Both spouses must be at least 60 years old and apply for sharing through Service Canada. CPP pension sharing is not available on post-retirement benefits (PRB). **There is a general drop-out provision.** Up to eight years of your lowest earnings will be dropped from the benefit calculation, thereby potentially increasing your benefit. **There is a child-rearing provision.** If you stopped working or reduced your work hours to raise young children, you may be eligible to have the child-rearing period excluded from the contributory period, thus ensuring you receive the highest possible benefit.

To get the most recent estimate of your CPP retirement benefits, contact Service Canada at 1-800-277-9914 or online through the My Service Canada Account. For more information, contact us through your Odlum Brown Investment Advisor or Portfolio Manager.



**MICHAEL EREZ, CPA, CGA, CFP**  
 Vice President, Director  
 Odlum Brown Financial Services Limited

<sup>1</sup> www.fin.gc.ca/n16/ data/16-113\_3-eng.asp  
<sup>2</sup> https://www150.statcan.gc.ca/n1/pub/89-645-x/2010001/life-expectancy-esperance-vie-eng.htm

Odlum Brown Financial Services Limited is a wholly owned subsidiary of Odlum Brown Limited, offering life insurance products, retirement, estate and financial planning exclusively to Odlum Brown clients.

DISCLAIMER & DISCLOSURE

Odlum Brown Limited is an independent, full-service investment firm focused on providing professional investment advice and objective research. We respect your right to be informed of relationships with the issuers or strategies referred to in this report which might reasonably be expected to indicate potential conflicts of interest with respect to the securities or any investment strategies discussed or recommended in this report. We do not act as a market maker in any securities and do not provide investment banking or advisory services to, or hold significant positions in, the issuers covered by our research. Analysts and their associates may, from time to time, hold securities of issuers discussed or recommended in this report because they personally have the conviction to follow their own research, but we have implemented internal policies that impose restrictions on when and how an Analyst may buy or sell securities they cover and any such interest will be disclosed in our report in accordance with regulatory policy. Our Analysts receive no direct compensation based on revenue from investment banking services. We describe our research policies in greater detail, including a description of our rating system and how we disseminate our research, on the Odlum Brown Limited website at odlumbrown.com.

This report has been prepared by Odlum Brown Limited and is intended only for persons resident and located in all the provinces and territories of Canada, where Odlum Brown Limited's services and products may lawfully be offered for sale, and therein only to clients of Odlum Brown Limited. This report is not intended for distribution to, or use by, any person or entity in any jurisdiction or country including the United States, where such distribution or use would be contrary to law or regulation or which would subject Odlum Brown Limited to any registration requirement within such jurisdiction or country. As no regard has been made as to the specific investment objectives, financial situation, and other particular circumstances of any person who may receive this report, clients should seek the advice of a registered investment advisor and other professional advisors, as applicable, regarding the appropriateness of investing in any securities or any investment strategies discussed or recommended in this report.

This report is for information purposes only and is neither a solicitation for the purchase of securities nor an offer of securities. The information contained in this report has been compiled from sources we believe to be reliable, however, we make no guarantee, representation or warranty, expressed or implied, as to such information's accuracy or completeness. All opinions and estimates contained in this report, whether or not our own, are based on assumptions we believe to be reasonable as of the date of the report and are subject to change without notice.

Please note that, as at the date of this report, the Research Analyst responsible for the recommendations herein, associates of such Analyst and/or other individuals directly involved in the preparation of this report may hold securities of the issuer(s) referred to directly or through derivatives.

No part of this publication may be reproduced without the express written consent of Odlum Brown Limited. Odlum Brown Limited is a Member-Canadian Investor Protection Fund.

Odlum Brown Limited respects your time and your privacy. If you no longer wish us to retain and use your personal information preferring to have your name removed from our mailing list, please let us know. For more information on our Privacy Policy please visit our website at odlumbrown.com.



Platinum member



MIX Paper from responsible sources  
 FSC® C101537