

RETIREMENTOPTIMIZER.COM INC.

User Guide

ALDA Comparison Worksheet

READ THIS USER GUIDE
BEFORE RUNNING THE PROGRAM.

Installing the ALDA Comparison Worksheet:

ALDA spreadsheets work with Excel 2007 or newer with a PC type computer.

1. Save the spreadsheet and the user guide provided in the email to a folder of your choice.
2. Double Click on the downloaded program file name (ALDAComp.xlsx) to open the spreadsheet.

How are Sheets Organized?

The spreadsheet consists of 2 Tabs (pages). You can switch between the pages in any order by clicking on its tab:



Enter the Input data in the **green cells** only. If you attempt to enter data in other cells you will get an error message.

Charts - This is the main page. This is where you enter essential information. Also, results are depicted in three charts.

Tables – Here, the results are presented in a table format.

The Charts Page

The basic information is entered into the "Main" page. Enter data in **green cells** only. If you attempt to enter data in other cells, you will get an error message.

The Charts page looks like this:

ALDA or NO ALDA?

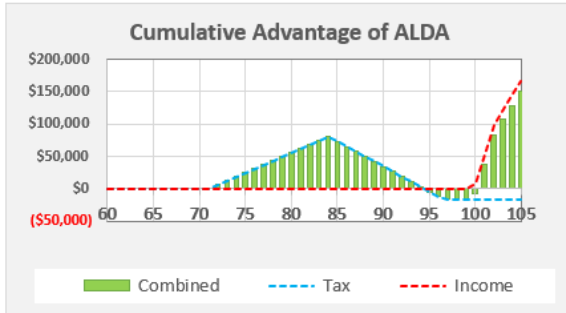
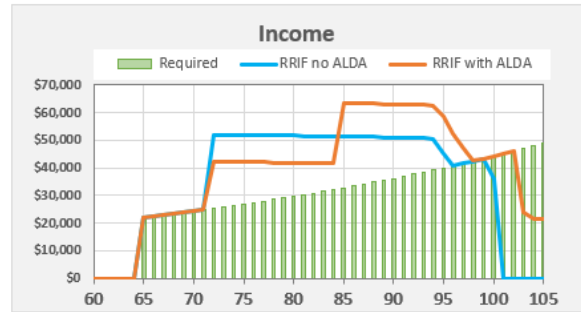
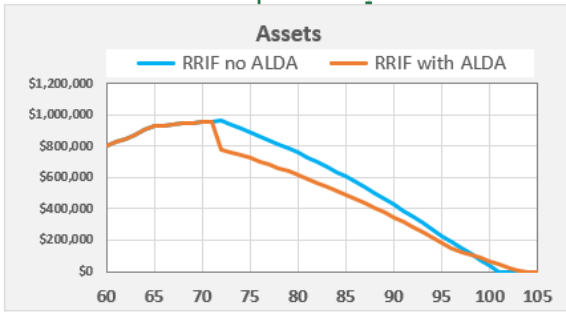
Current Age: 60
 Current Assets: \$800,000
 Assumed Portfolio Growth Rate: 3.0%
 Assumed Inflation Rate: 2.0%
 Annual Savings until retirement: \$0
 Retirement Age: 65
 Required Withdrawal (not MRW): \$20,000 (current dollar adjusted Initial Withdrawal Rate at retirement: 2.4%)
 Marginal Tax Bracket: 36.0%

buy ALDA age: 71
 ALda pays: 12.0%
 starting age: 85

When to convert RSP to a RRIF?

Partial at retirement, fully at the end of age 71

At Retirement Age



Show OAS Clawback region

Notes for Cumulative Advantage Chart:
 Tax component is the cumulative advantage of tax deferral.
 Tax component does not include any potential OAS clawback amounts.
 Income component is the cumulative income difference when ALDA is purchased.

Input:

Current Age: enter current age. If the current age is less than 60, then the charts and tables will show ages between 60 and 105

Current Assets: enter total RRSP and/or RRIF asset value here. If current age is below 60, then the future value of assets will be calculated and displayed at age 60 in the Tables page.

Assumed Portfolio Growth Rate: Enter here the assumed average future portfolio growth rate. A good starting place is the recommended assumption guidelines published each year by Financial Planning Standards Council (FPSC), 3.2% for a conservative portfolio (April 30, 2019).

Assumed Inflation Rate: Enter here the assumed average future inflation rate. Again, a good starting place is the recommended assumption guidelines by FPSC, 2.1% (April 30, 2019).

Annual Savings until retirement: Enter here the dollar amount of future annual savings until retirement.

Retirement Age: Enter here the retirement age. If already retired, enter same as the current age. It cannot be lower than 60.

Required Withdrawals: Enter here in dollars, what you need as income from the RRIF portfolio only. Just to clarify, this not the minimum mandatory withdrawal amount from the RRIF, it is what you actually need from these savings.

Marginal Tax Bracket: Enter here estimated, approximate marginal tax bracket in percentage. It is not a critical input; does not have to be totally accurate. It is only used to calculate the tax deferral advantage of purchasing an ALDA.

Buy ALDA at age: Enter here the age you want to buy the ALDA.

ALDA pays: Enter here the payout, the annual income from ALDA expressed as a percentage of the premium paid to purchase ALDA. This will be ultimately available from your ALDA provider when these products become available. The numbers on this spreadsheet is just estimates of what might be.

Starting age: This is the age when ALDA payments start. The maximum age is 85.

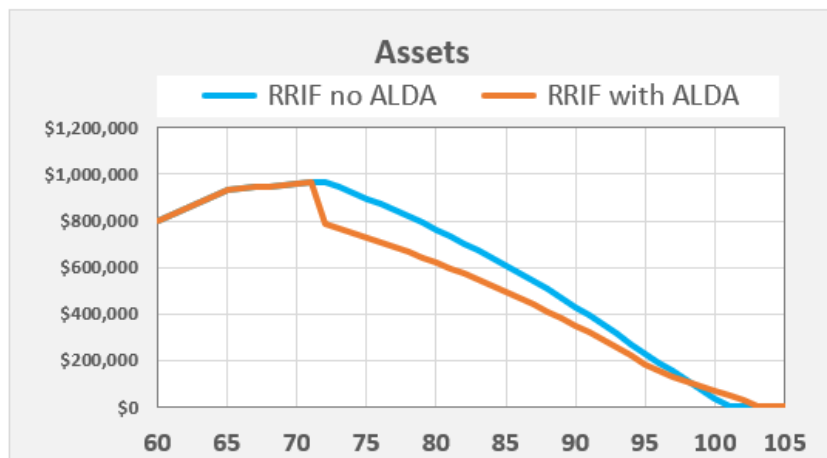
When to convert RSP to a RRIF: This is the age when the RRSP is converted to a RRIF. There are two options here.

The first option is used only when part of the RRSP is converted to a RRIF, just enough to pay the income needs until the mandatory conversion age of 71. At 71, the remaining RRSP must be converted to a RRIF. This option is feasible if income required is smaller than the minimum mandatory withdrawals for the entire RRSP; deferring income taxes until after age 71.

The second option is to convert the entire RRSP account(s) into a RRIF. This is feasible when the required income exceeds the minimum mandatory withdrawals or when you want to draw down the RRIF assets faster.

Check box "Show OAS Clawback region": If you check this box, then the Income Chart will also display the OAS clawback region relative to income received. Keep in mind, you will likely have income from different sources (other than this RRIF), so this is meant only a visual aid and not an estimation of clawback amounts.

Charts:



The asset chart shows the RRIF assets with no ALDA (the blue line) and RRIF assets when ALDA is purchased (the orange line). Notice the orange line: when ALDA is purchased (at age 71 in the example above), the asset value drops by the amount of the ALDA premium. This premium is no longer an asset for the annuitant.

In some scenarios, you might notice that eventually, asset value might be higher when an ALDA is purchased (i.e. the orange line crosses over the blue line). This can happen when the withdrawals required from the RRIF portfolio is reduced sufficiently and it lasts longer. This is usually the case when the initial required withdrawal rate is between 2% and 3%.

The maximum premium for an ALDA is currently the lesser of \$150,000 (in year 2020), or 25% of the asset value of the eligible asset at the end of the preceding calendar year. The \$150,00 limit is indexed to CPI each year and it is increased in \$10,000 increments in future years. The calculations take that into account. So, don't be surprised if you see a purchase amount of \$190,000 at a future age in the tables for ALDA premium.

The horizontal scale is fixed, starting at age 60, ending at age 105.



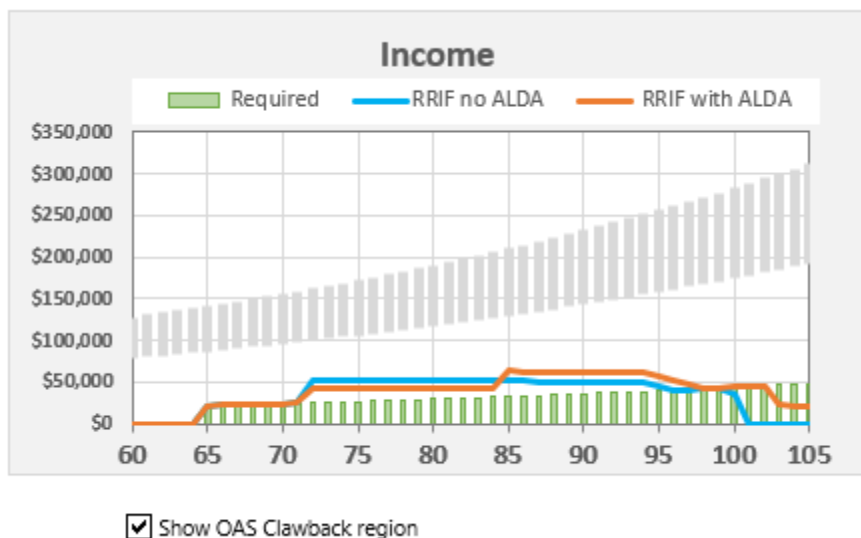
The income chart shows the required income (green columns), the income taken from a RRIF with no ALDA (the blue line), and the income taken from a RRIF and ALDA (the orange line).

The horizontal scale will start at the current age or at age 60, whichever is larger. It will show 45 years of retirement time horizon.

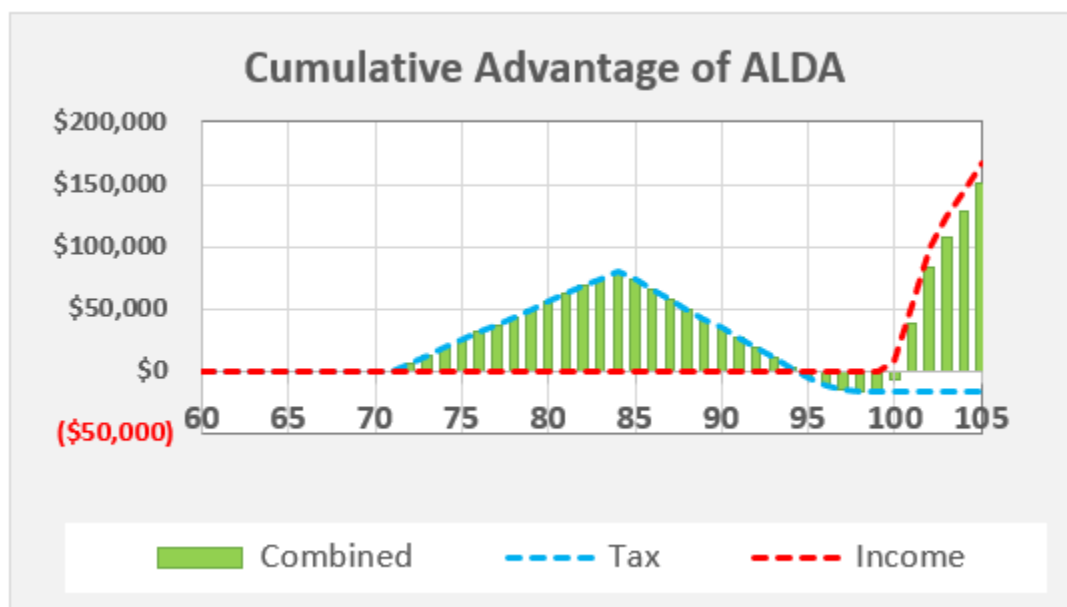
Note that -in the above scenario, between ages 72 and until at least age 97, the required income was less than minimum mandatory withdrawals. However, when ALDA was purchased (the orange line), the reduction in RRIF assets reduced the minimum mandatory withdrawals from the RRIF. This created a tax advantage. The downside is, at age 85, when the ALDA payments start, the combined ALDA payments and the minimum mandatory withdrawal amounts from the RRIF, exceeded the amount of income if no ALDA was purchased. So, buying an ALDA, in this particular example, created a larger tax burden after payments from ALDA starts.

Eventually, when the minimum mandatory withdrawal rates increase to 20% (at age 95), it drained the RRIF assets sufficiently, so that after age 100 and 97 (with and without ALDA, respectively), the excess tax burden disappeared.

If you check the box "Show OAS Clawback region" just below this chart, then it will display the OAS claw-back region. The bottom of the gray bars is where the OAS claw-back starts and the top is where 100% of OAS is clawed back. Keep in mind; if you delayed your OAS payment starting date beyond age 65, the dollar amount of the 100% clawback will be larger than displayed in this graph:



You might be wondering, how to precisely determine if an ALDA is suitable or not. The next chart, the "Cumulative Advantage of ALDA", can help you determine exactly that.



ALDA can have two benefits:

Tax advantage:

By purchasing an ALDA, the asset value of the RRIF is reduced which decreases the minimum mandatory withdrawals. After ALDA payments start, you can have either a continued tax advantage, or it might create a tax burden, depending on the total income from ALDA payments and the minimum mandatory withdrawals from the RRIF.

The tax advantage (a positive number) or tax burden (a negative number), is shown on this chart as a dashed blue line.

On our scenario above, the mandatory withdrawals are reduced with ALDA until age 85. Thus, we observe that the cumulative tax advantage climbs until age 85. After that, ALDA income plus mandatory withdrawals from RRIF are larger. Therefore, the cumulative tax advantage declines. So, if you happen to die at age 85, you had the largest tax advantage (cumulatively about \$80,000) up to that point. If you lived until age 95, your cumulative tax advantage is zero dollars. If you keep living beyond 96, you end up with a tax burden that would not be present if no ALDA was purchased.

Income advantage: ALDA continues to provide a partial lifelong income when and if the RRIF portfolio depletes. However, beware that, if your assets are insufficient to start with, then buying an ALDA shifts the shortfall of income from advanced ages to younger ages during retirement.

The income advantage (if a positive number) or income disadvantage (if a negative number), is shown on this chart as a dashed red line.

On our scenario above, the RRIF portfolio without an ALDA lasted until age income lasted until age 100. On the other hand, the RRIF portfolio with an ALDA depleted a bit later, at age 102. So, the income advantage of buying an ALDA was two full years of income during those ages, plus the income payments from ALDA (that covers the required income only partially) after that age.

Combined advantage: The combined advantage of the tax and income advantage is indicated as green columns on the chart.

On our scenario above, we observe that if this person dies between ages 95 and 100, ALDA created a disadvantage. For all ages between before 95 and after 100, ALDA provided an advantage.

Rule of Thumb: There are too many variables to have a reliable set of guidelines. However, without being too specific, you might find ALDA is suitable when the required initial withdrawal rate between 2.5% and 3.5% of the portfolio value at retirement age.

When the required withdrawal rate is below 2.5%, the income advantage becomes zero as no income guarantee is required. And, the tax burden keeps increasing after age 85, without the benefit of the offsetting income advantage. So, if no money is needed from RRIF, consider using this money for TFSA contributions or for discretionary expenses. This might free up more efficient use of income from other sources, and at the same time, increase the cumulative advantage of ALDA.

When the required initial withdrawal rate is above 3.5%, the shortfall of income will likely shift from final years of retirement to earlier years. That is because when ALDA is purchased, there is less money in the RRIF that pays a larger amount of withdrawals and also grows sufficiently. Buying an ALDA is usually not advantageous when the required withdrawal rate is larger than sustainable.

If you use a portfolio growth rate that is larger than suggested in the assumption guidelines recommended by FPSC, then the cumulative advantage of buying an ALDA will be higher. While this might be tempting, it is safer to stick to FPSC guidelines. If purchasing an ALDA makes sense with conservative portfolio growth rate assumptions, then it will certainly be more so with higher returns. Don't fudge assumptions just to justify the purchase of an ALDA.

Decide on the age until which you will likely live, and observe the cumulative combined advantage or burden on the chart (or look at the Tables). If a chart shows a great advantage for ALDA at age 115, you know that is an improbable outcome. Be realistic, run your most likely scenario, print it out, then rerun worst-case scenarios to stress-test it. See what works for you.

Tables:

Tables provide details breakdown of all numbers that make up the charts.

Printing:

Use the "File/Print" command of Excel to print the Charts and Tables pages.

Exiting:

Use the "File/Close" command of Excel or click on the "X" to quit Excel.

