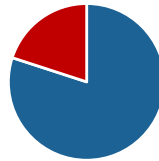


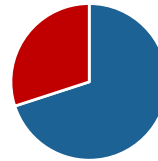


# Model ETF Portfolios: Vanguard

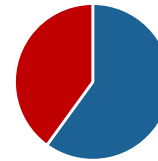
80% bonds  
20% equities



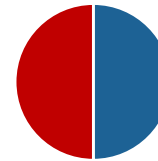
70% bonds  
30% equities



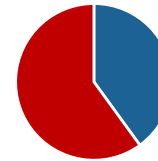
60% bonds  
40% equities



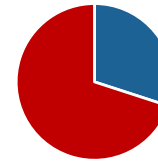
50% bonds  
50% equities



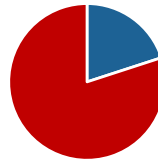
40% bonds  
60% equities



30% bonds  
70% equities



20% bonds  
80% equities



Vanguard Conservative  
Income ETF Portfolio  
VCIP 100%

Vanguard Conservative  
ETF Portfolio  
VCNS 100%

Vanguard  
Balanced  
ETF Portfolio  
VBAL 100%

Vanguard  
Growth  
ETF Portfolio  
VGRO 100%

Security Name	Ticker	80% bonds 20% equities	70% bonds 30% equities	60% bonds 40% equities	50% bonds 50% equities	40% bonds 60% equities	30% bonds 70% equities	20% bonds 80% equities
<b>Vanguard Canadian Aggregate Bond Index ETF</b>	<b>VAB</b>	47%	<b>70%</b>	35%	<b>50%</b>	24%	<b>30%</b>	12%
Vanguard U.S. Aggregate Bond Index ETF	VBU	15%		11%		7%		4%
Vanguard Global ex-U.S. Aggregate Bond Index ETF	VBG	18%		14%		9%		4%
<b>Vanguard All-Equity ETF Portfolio</b>	<b>VEQT</b>		<b>30%</b>		<b>50%</b>		<b>70%</b>	
Vanguard FTSE Canada All Cap Index ETF	VCN	6%	9%	12%	15%	18%	21%	24%
Vanguard U.S. Total Market Index ETF	VUN	8%	12%	16%	20%	24%	28%	32%
Vanguard FTSE Developed All Cap ex North America Index ETF	VIU	5%	7%	9%	12%	14%	16%	18%
Vanguard FTSE Emerging Markets All Cap Index ETF	VEE	1%	2%	3%	3%	4%	5%	6%
		<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Weighted Average Management Expense Ratio (MER)</b>		<b>0.25%</b>	<b>0.14%</b>	<b>0.25%</b>	<b>0.17%</b>	<b>0.25%</b>	<b>0.20%</b>	<b>0.25%</b>

## Hypothetical Model Portfolio Performance as of December 31, 2019

1-Year Return	9.51%	10.65%	12.06%	13.39%	14.81%	16.13%	17.66%
3-Year Annualized Return	4.59%	5.25%	5.81%	6.44%	7.04%	7.60%	8.27%
5-Year Annualized Return	4.26%	4.96%	5.53%	6.20%	6.81%	7.43%	8.08%
10-Year Annualized Return	5.26%	5.92%	6.41%	7.04%	7.55%	8.13%	8.67%
20-Year Annualized Return	5.14%	5.37%	5.15%	5.28%	5.10%	5.13%	4.99%
25-Year Annualized Return	6.38%	6.75%	6.72%	7.00%	7.00%	7.19%	7.22%
Lowest 12-Month Return (March 2008 to February 2009)	<b>-5.49%</b>	<b>-9.09%</b>	<b>-13.56%</b>	<b>-17.06%</b>	<b>-21.08%</b>	<b>-24.48%</b>	<b>-28.10%</b>
Annualized Standard Deviation (Volatility)	3.71%	4.65%	5.21%	6.35%	7.23%	8.41%	9.46%

Sources: Morningstar Direct, MSCI, S&P Dow Jones and FTSE Russell Index Fact Sheets

**NOTE: ETFs printed in grey type are the underlying holdings of VCIP, VCNS, VBAL, VGRO and VEQT. They are presented here for information purposes only. Allocations are rounded for simplicity.**

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## Model Portfolio Return Methodology

as of December 31, 2019

The performance data in the table above is a blend of actual fund returns and index returns.

The Vanguard asset allocation ETFs in the model portfolios were launched in 2018 and 2019. We used actual fund returns beginning in the first full month after each fund's inception. For earlier periods we used the returns of the fund's benchmark indexes, or closely related indexes, and subtracted the current management expense ratio of the asset allocation ETF (0.24% annually). This is an imperfect but reasonable proxy for how index funds would have performed.

All portfolios were assumed to be rebalanced monthly, since the asset allocation ETFs will likely stay close to their target mix of stocks and bonds at all times.

*Past performance does not guarantee future results.* The historical performance of indexes is illustrative only and will not necessarily mirror the future performance of any fund tracking that benchmark.

### **Canadian Stocks**

MSCI Canada IMI Index, minus 0.24% annually: January 1995–January 2019

### **Global Stocks (excluding Canada)**

MSCI ACWI ex Canada IMI Index (net div.) in Canadian dollars, minus 0.24% annually: January 1995–January 2019

### **Canadian Bonds**

FTSE Canada Universe Bond Index, minus 0.24% annually: January 1995–December 2019

### **Global Bonds**

FTSE Canada Universe Bond Index, minus 0.24% annually: January 1995–December 1996

ICE BofA Merrill Lynch Global Broad Market Index (CAD Hedged), minus 0.24% annually: January 1997–January 2019

### **Vanguard Canadian Aggregate Bond Index ETF (VAB)**

Actual fund returns: February 2018–present

FTSE Canada Universe Bond Index, minus 0.09% annually: January 1995–January 2018

### **Vanguard Conservative Income ETF Portfolio (VCIP)**

Actual fund returns: February 2019–present

47% Canadian Bonds + 33% Global Bonds + 6% Canadian Stocks + 14% Global Stocks (excluding Canada): January 1995–January 2019

**Vanguard Conservative ETF Portfolio (VCNS)**

Actual fund returns: February 2018–present

35.3% Canadian Bonds + 24.7% Global Bonds + 12% Canadian Stocks + 28% Global Stocks (excluding Canada): January 1995–January 2018

**Vanguard Balanced ETF Portfolio (VBAL)**

Actual fund returns: February 2018–present

23.5% Canadian Bonds + 16.5% Global Bonds + 18% Canadian Stocks + 42% Global Stocks (excluding Canada): January 1995–January 2018

**Vanguard Growth ETF Portfolio (VGRO)**

Actual fund returns: February 2018–present

11.8% Canadian Bonds + 8.2% Global Bonds + 24% Canadian Stocks + 56% Global Stocks (excluding Canada): January 1995–January 2018

**Vanguard All-Equity ETF Portfolio (VEQT)**

Actual fund returns: February 2019–present

30% Canadian Stocks + 70% Global Stocks (excluding Canada): January 1995–January 2019