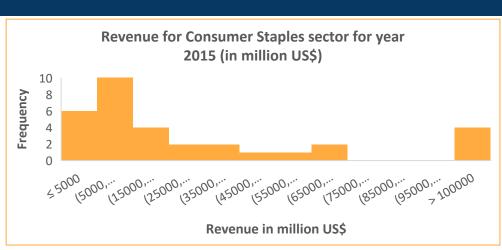
DA101.3 Project: Analyze NYSE Data

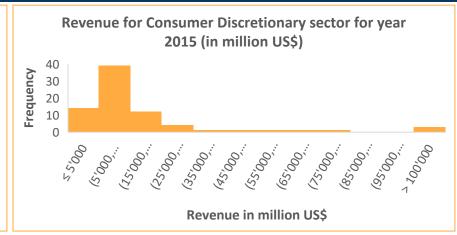
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Masterschool Data Analysis

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Is the revenue distribution for Consumer Staples and Consumer Discretionary sectors is similar in year 2015?





- The histograms show the total revenue for Consumer Staples and Consumer Discretionary sectors reported for all companies in year 2015.
- The total revenues for both sectors is around \$US 1.4 trillion. However, the mean for Consumer Staples is **2.4 times** higher than for Consumer Discretionary (around \$US 45 billion vs. \$US 19 billion). This is due to the larger number of sector players in Consumer Discretionary.
- Both distributions are asymmetric and right-skewed or positively skewed i.e. the means for both sectors are higher than the medians. However, there are differences in the distribution of revenues among the companies.

Is the revenue distribution for Consumer Staples and Consumer Discretionary sectors is similar in year 2015?

	Consumer Discretionary	Consumer Staples	Revenue for Consumer Discretionary and Consumer Spales sectors for year 2015 (in		
	Measures of central tendency		million US\$)		
Median	9'474	14'985	110'000		_
Mean	18'649	44'787	100'000		
			90'000		
	Measures of spread		80'000		
MIN	1'492	2'723	70'000		
Q1	5'949	5'777	60'000		
Q3	16'439	47'584	50'000		
MAX	152'356	485'651	40'000		×
Range	150'864	482'928	30'000		
IQR	10'490	41'808	20'000	*	
Outlier -lower limit	-9'786	-56'935	10'000		
Outlier - higher limit	32'174	110'295	_		
Standard deviation	28'247	88'732		Consumer Discretionary	Consumer Staples

• The median for Consumer Staples is **1.6 times** more than for Consumer Discretionary (around \$US 15 billion vs. \$US 9.5 billion). The standard deviation for Consumer Staples is **3 times** more than for Consumer Discretionary (around \$US 89 billion vs. \$US 28 billion), reflecting higher variability of revenues of companies in Consumer Staples than in Consumer Discretionary. The range in Consumer Staples is **3.2 times** more than for Consumer Discretionary (around \$US 483 billion vs. \$US 152 billion), it also indicates that the revenues are more spread out in Consumer Staples. This finding is confirmed by the IQR, which excludes the effect of higher outliers, IQR in Consumer Staples is **4 times** more than for Consumer Discretionary.