

# NYSE Data Analysis by excel sheets

## Report

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This study contains the following files

1. Book1: Datasets of this study (xlsx file).
  - Data-NYSE.
  - Data-health care sectors.
  - Data-health care equipment.
  - Data-health care distributors.
  - Health sectors pivot table.
  - Health care equipment pivot table.
  - Health care distributors pivot table.
  - Market size.
2. Book2: all statistical calculations (xlsx file).
  - For all health sectors
  - For health care equipment
  - For health care distributors.
3. Book3: the Profit and Loss Statement (both one criterion and multiple criteria) and the Financial Model Scenarios (xlsx file).
  - Data-health care equipment.
  - Data-YHOO company.
  - Profit & Loss statement (multi criteria) plus the Financial Model Scenarios.
  - Profit & Loss Statement (one criterion) plus the Financial Model Scenarios.
  - Profit & Loss Statement (one criterion-using different formula) plus the Financial Model Scenarios.
  - Pivot table to **Validate Data** (applying data validation)
  - Data validation1 – for health equipment ticker symbol
  - Data validation1 – for financial model scenarios
4. This report (pdf).

In this analysis we'll try to answer some questions and reach insights from our data, the scope of this project is limited to the total revenue only of the relevant sectors:

This analysis is concerned in the relationship (similarity/non-similarity) between the health care equipment and health care distributors (both of which are part of the health sector); as well as the overall interaction with the health sectors as whole. Here is in brief our main questions that need to find their ultimate answers.

1. What is similarity and differences between the health care equipment comparing to the health care distributors, based on the total 4 years of this data?
2. How the total revenues changed by time, what is the time of peak revenue and rock bottom for the health care equipment, health care distributors and the whole health sectors.
3. How are each of the health care equipment companies and the health care distributors contribute in the total health sector revenue (market size).

The statistics in this study were calculated by the formulas and by the pivot tables, in both cases we obtained the same matched results. This will include all statistics in each year (Year1, Year2, Year 3 and Year4) and finally the statistics for all four years.

For the health sectors we have the following statistics from the formulas.

Total Revenue Statistics - Health Sectors					
	Year 1	Year 2	Year 3	Year 4	All Years
<b>Sum</b>	\$ 963,813,675,000.00	\$ 1,039,341,879,000.00	\$ 1,171,182,213,000.00	\$ 1,283,674,608,000.00	\$ 4,458,012,375,000.00
<b>Mean</b>	\$ 20,079,451,562.50	\$ 21,652,955,812.50	\$ 24,918,770,489.36	\$ 27,312,225,702.13	\$ 23,463,223,026.32
<b>StdDev</b>	\$ 30,695,416,707.52	\$ 33,761,430,337.90	\$ 40,645,108,250.77	\$ 45,067,079,223.47	\$ 37,710,947,028.73
<b>Median</b>	\$ 7,551,300,000.00	\$ 8,929,500,000.00	\$ 9,946,000,000.00	\$ 10,629,719,000.00	\$ 8,563,050,000.00
<b>1stQuartile</b>	\$ 2,806,136,000.00	\$ 2,917,989,250.00	\$ 3,010,850,000.00	\$ 3,150,900,000.00	\$ 2,924,057,250.00
<b>3rdQuartile</b>	\$ 18,769,500,000.00	\$ 19,758,500,000.00	\$ 20,954,500,000.00	\$ 22,925,000,000.00	\$ 21,347,750,000.00
<b>IQR</b>	\$ 15,963,364,000.00	\$ 16,840,510,750.00	\$ 17,943,650,000.00	\$ 19,774,100,000.00	\$ 18,423,692,750.00
<b>Max</b>	\$ 122,489,000,000.00	\$ 137,392,000,000.00	\$ 179,045,000,000.00	\$ 190,884,000,000.00	\$ 190,884,000,000.00
<b>Min</b>	\$ 1,293,338,000.00	\$ 1,211,975,000.00	\$ 580,415,000.00	\$ 1,032,336,000.00	\$ 580,415,000.00
<b>Range</b>	\$ 121,195,662,000.00	\$ 136,180,025,000.00	\$ 178,464,585,000.00	\$ 189,851,664,000.00	\$ 190,303,585,000.00
<b>CV</b>	153%	156%	163%	165%	161%
<b>Count</b>			48		

And here is the statistics from pivot table:

- Sum of total revenue

Row Labels	Column Labels	Year 1	Year 2	Year 3	Year 4	Grand Total
Health Care Distributors		\$ 339,652,775,000.00	\$ 375,894,992,000.00	\$ 445,777,537,000.00	\$ 488,511,737,000.00	\$ 1,649,837,041,000.00
Managed Health Care		\$ 262,528,200,000.00	\$ 293,240,500,000.00	\$ 336,744,100,000.00	\$ 379,011,500,000.00	\$ 1,271,524,300,000.00
Pharmaceuticals		\$ 155,188,000,000.00	\$ 151,734,400,000.00	\$ 136,182,600,000.00	\$ 136,054,700,000.00	\$ 579,159,700,000.00
Health Care Equipment		\$ 90,339,523,000.00	\$ 88,663,644,000.00	\$ 97,787,326,000.00	\$ 103,448,051,000.00	\$ 380,238,544,000.00
Biotechnology		\$ 46,987,233,000.00	\$ 54,904,232,000.00	\$ 73,859,943,000.00	\$ 87,284,763,000.00	\$ 263,036,171,000.00
Health Care Facilities		\$ 54,253,680,000.00	\$ 58,900,350,000.00	\$ 63,159,706,000.00	\$ 69,632,937,000.00	\$ 245,946,673,000.00
Health Care Supplies		\$ 8,153,366,000.00	\$ 8,253,717,000.00	\$ 8,630,525,000.00	\$ 10,027,817,000.00	\$ 35,065,425,000.00
Life Sciences Tools & Services		\$ 3,800,150,000.00	\$ 4,347,341,000.00	\$ 4,615,209,000.00	\$ 4,906,630,000.00	\$ 17,669,330,000.00
Health Care Technology		\$ 2,910,748,000.00	\$ 3,402,703,000.00	\$ 4,425,267,000.00	\$ 4,796,473,000.00	\$ 15,535,191,000.00
<b>Grand Total</b>		<b>\$ 963,813,675,000.00</b>	<b>\$ 1,039,341,879,000.00</b>	<b>\$ 1,171,182,213,000.00</b>	<b>\$ 1,283,674,608,000.00</b>	<b>\$ 4,458,012,375,000.00</b>

- Average of total revenue (mean)

Row Labels	Column Labels	Year 1	Year 2	Year 3	Year 4	Grand Total
Health Care Distributors		\$ 56,608,795,833.33	\$ 62,649,165,333.33	\$ 74,296,256,166.67	\$ 81,418,622,833.33	\$ 68,743,210,041.67
Managed Health Care		\$ 52,505,640,000.00	\$ 58,648,100,000.00	\$ 67,348,820,000.00	\$ 75,802,300,000.00	\$ 63,576,215,000.00
Pharmaceuticals		\$ 25,864,666,666.67	\$ 25,289,066,666.67	\$ 27,236,520,000.00	\$ 27,210,940,000.00	\$ 26,325,440,909.09
Health Care Facilities		\$ 13,563,420,000.00	\$ 14,725,087,500.00	\$ 15,789,926,500.00	\$ 17,408,234,250.00	\$ 15,371,667,062.50
Biotechnology		\$ 6,712,461,857.14	\$ 7,843,461,714.29	\$ 10,551,420,428.57	\$ 12,469,251,857.14	\$ 9,394,148,964.29
Health Care Equipment		\$ 6,452,823,071.43	\$ 6,333,117,428.57	\$ 6,984,809,000.00	\$ 7,389,146,500.00	\$ 6,789,974,000.00
Health Care Technology		\$ 2,910,748,000.00	\$ 3,402,703,000.00	\$ 4,425,267,000.00	\$ 4,796,473,000.00	\$ 3,883,797,750.00
Health Care Supplies		\$ 2,717,788,666.67	\$ 2,751,239,000.00	\$ 2,876,841,666.67	\$ 3,342,605,666.67	\$ 2,922,118,750.00
Life Sciences Tools & Services		\$ 1,900,075,000.00	\$ 2,173,670,500.00	\$ 2,307,604,500.00	\$ 2,453,315,000.00	\$ 2,208,666,250.00
<b>Grand Total</b>		<b>\$ 20,079,451,562.50</b>	<b>\$ 21,652,955,812.50</b>	<b>\$ 24,918,770,489.36</b>	<b>\$ 27,312,225,702.13</b>	<b>\$ 23,463,223,026.32</b>

- Standard deviation.

Row Labels	Column Labels	Year 1	Year 2	Year 3	Year 4	Grand Total
Health Care Distributors		\$ 53,018,787,600.68	\$ 60,470,861,730.28	\$ 75,232,165,514.22	\$ 81,721,973,338.70	\$ 64,701,886,893.95
Managed Health Care		\$ 43,651,179,250.37	\$ 45,794,440,790.34	\$ 54,546,289,607.68	\$ 64,442,451,619.25	\$ 49,244,557,491.23
Pharmaceuticals		\$ 20,672,707,050.86	\$ 18,770,616,414.35	\$ 18,312,281,901.83	\$ 17,241,752,063.36	\$ 17,518,349,826.60
Health Care Facilities		\$ 13,008,732,551.80	\$ 13,219,819,133.43	\$ 14,385,002,671.88	\$ 15,095,092,152.67	\$ 12,565,519,026.87
Biotechnology		\$ 6,149,747,799.18	\$ 6,642,892,686.71	\$ 9,442,088,752.73	\$ 11,524,504,235.04	\$ 8,533,657,191.84
Health Care Equipment		\$ 5,466,485,615.04	\$ 5,293,039,269.90	\$ 5,915,441,573.96	\$ 6,003,242,440.70	\$ 5,536,921,164.81
Health Care Supplies		\$ 1,040,853,617.62	\$ 949,542,761.20	\$ 1,057,645,150.00	\$ 1,805,238,088.34	\$ 1,106,774,216.36
Health Care Technology		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 876,440,345.02
Life Sciences Tools & Services		\$ 677,262,632.38	\$ 441,676,573.20	\$ 124,228,054.85	\$ 77,699,721.54	\$ 379,364,661.63
<b>Grand Total</b>		<b>\$ 30,695,416,707.52</b>	<b>\$ 33,761,430,337.90</b>	<b>\$ 40,645,108,250.77</b>	<b>\$ 45,067,079,223.47</b>	<b>\$ 37,710,947,028.73</b>

- Max.

Row Labels	Column Labels	Year 1	Year 2	Year 3	Year 4	Grand Total
Health Care Distributors		\$ 122,196,000,000.00	\$ 137,392,000,000.00	\$ 179,045,000,000.00	\$ 190,884,000,000.00	\$ 190,884,000,000.00
Managed Health Care		\$ 122,489,000,000.00	\$ 130,474,000,000.00	\$ 157,107,000,000.00	\$ 184,840,000,000.00	\$ 184,840,000,000.00
Pharmaceuticals		\$ 54,657,000,000.00	\$ 51,584,000,000.00	\$ 49,605,000,000.00	\$ 48,851,000,000.00	\$ 54,657,000,000.00
Health Care Facilities		\$ 33,013,000,000.00	\$ 34,182,000,000.00	\$ 36,918,000,000.00	\$ 39,678,000,000.00	\$ 39,678,000,000.00
Biotechnology		\$ 18,676,000,000.00	\$ 20,063,000,000.00	\$ 24,890,000,000.00	\$ 32,639,000,000.00	\$ 32,639,000,000.00
Health Care Equipment		\$ 19,050,000,000.00	\$ 19,657,000,000.00	\$ 20,247,000,000.00	\$ 20,405,000,000.00	\$ 20,405,000,000.00
Health Care Supplies		\$ 3,637,212,000.00	\$ 3,585,141,000.00	\$ 3,910,865,000.00	\$ 5,386,703,000.00	\$ 5,386,703,000.00
Health Care Technology		\$ 2,910,748,000.00	\$ 3,402,703,000.00	\$ 4,425,267,000.00	\$ 4,796,473,000.00	\$ 4,796,473,000.00
Life Sciences Tools & Services		\$ 2,378,972,000.00	\$ 2,485,983,000.00	\$ 2,395,447,000.00	\$ 2,508,257,000.00	\$ 2,508,257,000.00
<b>Grand Total</b>		<b>\$ 122,489,000,000.00</b>	<b>\$ 137,392,000,000.00</b>	<b>\$ 179,045,000,000.00</b>	<b>\$ 190,884,000,000.00</b>	<b>\$ 190,884,000,000.00</b>

- Min.

A screenshot of a Microsoft Excel PivotTable Fields pane. The pane shows fields for 'Min of Total Revenue'. Under 'Choose fields to add to report:', 'Years' is checked. Under 'Drag fields between areas below:', 'Rows' is set to 'GICS Sub Industry' and 'Values' is set to 'Min of Total Revenue'.

Min of Total Revenue	Column Labels				
Row Labels	Year 1	Year 2	Year 3	Year 4	Grand Total
Managed Health Care	\$ 8,110,000,000.00	\$ 10,863,000,000.00	\$ 16,560,000,000.00	\$ 22,760,000,000.00	\$ 8,110,000,000.00
Health Care Facilities	\$ 5,671,400,000.00	\$ 5,808,300,000.00	\$ 6,011,600,000.00	\$ 7,493,000,000.00	\$ 5,671,400,000.00
Pharmaceuticals	\$ 4,561,000,000.00	\$ 4,785,000,000.00	\$ 4,765,000,000.00	\$ 4,888,000,000.00	\$ 4,561,000,000.00
Health Care Technology	\$ 2,910,748,000.00	\$ 3,402,703,000.00	\$ 4,425,267,000.00	\$ 4,796,473,000.00	\$ 2,910,748,000.00
Health Care Distributors	\$ 1,843,641,000.00	\$ 1,904,218,000.00	\$ 1,989,344,000.00	\$ 2,042,332,000.00	\$ 1,843,641,000.00
Health Care Supplies	\$ 1,587,725,000.00	\$ 1,717,776,000.00	\$ 1,797,060,000.00	\$ 1,966,814,000.00	\$ 1,587,725,000.00
Life Sciences Tools & Services	\$ 1,421,178,000.00	\$ 1,861,358,000.00	\$ 2,219,762,000.00	\$ 2,398,373,000.00	\$ 1,421,178,000.00
Health Care Equipment	\$ 1,293,338,000.00	\$ 1,377,058,000.00	\$ 1,485,807,000.00	\$ 1,601,892,000.00	\$ 1,293,338,000.00
Biotechnology	\$ 1,527,042,000.00	\$ 1,211,975,000.00	\$ 580,415,000.00	\$ 1,032,336,000.00	\$ 580,415,000.00
<b>Grand Total</b>	<b>\$ 1,293,338,000.00</b>	<b>\$ 1,211,975,000.00</b>	<b>\$ 580,415,000.00</b>	<b>\$ 1,032,336,000.00</b>	<b>\$ 580,415,000.00</b>

- Count (of companies).

A screenshot of a Microsoft Excel PivotTable Fields pane. The pane shows fields for 'Count of Total Revenue'. Under 'Choose fields to add to report:', 'Years' is checked. Under 'Drag fields between areas below:', 'Rows' is set to 'GICS Sub Industry' and 'Values' is set to 'Count of Total Revenue'.

Count of Total Revenue	Column Labels				
Row Labels	Year 1	Year 2	Year 3	Year 4	Grand Total
Health Care Equipment	14	14	14	14	56
Biotechnology	7	7	7	7	28
Health Care Distributors	6	6	6	6	24
Pharmaceuticals	6	6	5	5	22
Managed Health Care	5	5	5	5	20
Health Care Facilities	4	4	4	4	16
Health Care Supplies	3	3	3	3	12
Life Sciences Tools & Services	2	2	2	2	8
Health Care Technology	1	1	1	1	4
<b>Grand Total</b>	<b>48</b>	<b>48</b>	<b>47</b>	<b>47</b>	<b>190</b>

Accordingly, the statistics for the health care equipment:

Total Revenue Statistics - Health Care Equipment					
	Year 1	Year 2	Year 3	Year 4	All Years
<b>Sum</b>	\$ 90,339,523,000.00	\$ 88,663,644,000.00	\$ 97,787,326,000.00	\$ 103,448,051,000.00	\$ 380,238,544,000.00
<b>Mean</b>	\$ 6,452,823,071.43	\$ 6,333,117,428.57	\$ 6,984,809,000.00	\$ 7,389,146,500.00	\$ 6,789,974,000.00
<b>StdDev</b>	\$ 5,466,485,615.40	\$ 5,293,039,269.90	\$ 5,915,441,573.96	\$ 6,003,242,440.72	\$ 5,536,921,164.81
<b>Median</b>	\$ 3,760,600,000.00	\$ 3,973,500,000.00	\$ 4,044,650,000.00	\$ 4,855,900,000.00	\$ 4,092,850,000.00
<b>1stQuartile</b>	\$ 2,321,900,000.00	\$ 2,250,864,500.00	\$ 2,464,550,000.00	\$ 2,736,475,000.00	\$ 2,465,325,000.00
<b>3rdQuartile</b>	\$ 8,779,250,000.00	\$ 9,171,250,000.00	\$ 10,198,000,000.00	\$ 10,985,750,000.00	\$ 9,951,500,000.00
<b>IQR</b>	\$ 6,457,350,000.00	\$ 6,920,385,500.00	\$ 7,733,450,000.00	\$ 8,249,275,000.00	\$ 7,486,175,000.00
<b>Max</b>	\$ 19,050,000,000.00	\$ 19,657,000,000.00	\$ 20,247,000,000.00	\$ 20,405,000,000.00	\$ 20,405,000,000.00
<b>Min</b>	\$ 1,293,338,000.00	\$ 1,377,058,000.00	\$ 1,485,807,000.00	\$ 1,601,892,000.00	\$ 1,293,338,000.00
<b>Range</b>	\$ 17,756,662,000.00	\$ 18,279,942,000.00	\$ 18,761,193,000.00	\$ 18,803,108,000.00	\$ 19,111,662,000.00
<b>CV</b>	85%	84%	85%	81%	82%
<b>Count</b>			14		

And here is the statistics from pivot table:

- Sum of total revenue

Sum of Total Revenue	Column Labels					
Row Labels	Year 1	Year 2	Year 3	Year 4	Grand Total	
ABT	\$ 19,050,000,000.00	\$ 19,657,000,000.00	\$ 20,247,000,000.00	\$ 20,405,000,000.00	\$ 79,359,000,000.00	
TMO	\$ 12,509,900,000.00	\$ 13,090,300,000.00	\$ 16,889,600,000.00	\$ 16,965,400,000.00	\$ 59,455,200,000.00	
BAX	\$ 13,936,000,000.00	\$ 9,413,000,000.00	\$ 10,719,000,000.00	\$ 9,968,000,000.00	\$ 44,036,000,000.00	
SYK	\$ 9,021,000,000.00	\$ 9,675,000,000.00	\$ 9,946,000,000.00	\$ 11,325,000,000.00	\$ 39,967,000,000.00	
BDX	\$ 8,054,000,000.00	\$ 8,446,000,000.00	\$ 10,282,000,000.00	\$ 12,483,000,000.00	\$ 39,265,000,000.00	
BSX	\$ 7,249,000,000.00	\$ 7,143,000,000.00	\$ 7,380,000,000.00	\$ 7,477,000,000.00	\$ 29,249,000,000.00	
ZBH	\$ 4,471,700,000.00	\$ 4,623,400,000.00	\$ 4,673,300,000.00	\$ 5,997,800,000.00	\$ 19,766,200,000.00	
BCR	\$ 3,049,500,000.00	\$ 3,323,600,000.00	\$ 3,416,000,000.00	\$ 3,714,000,000.00	\$ 13,503,100,000.00	
VAR	\$ 2,942,897,000.00	\$ 3,049,800,000.00	\$ 3,099,100,000.00	\$ 3,217,800,000.00	\$ 12,309,597,000.00	
HOLX	\$ 2,492,300,000.00	\$ 2,530,700,000.00	\$ 2,705,000,000.00	\$ 2,832,700,000.00	\$ 10,560,700,000.00	
ISRG	\$ 2,265,100,000.00	\$ 2,131,700,000.00	\$ 2,384,400,000.00	\$ 2,704,400,000.00	\$ 9,485,600,000.00	
PKI	\$ 2,105,188,000.00	\$ 2,157,586,000.00	\$ 2,237,219,000.00	\$ 2,262,359,000.00	\$ 8,762,352,000.00	
EW	\$ 1,899,600,000.00	\$ 2,045,500,000.00	\$ 2,322,900,000.00	\$ 2,493,700,000.00	\$ 8,761,700,000.00	
IDXX	\$ 1,293,338,000.00	\$ 1,377,058,000.00	\$ 1,485,807,000.00	\$ 1,601,892,000.00	\$ 5,758,095,000.00	
<b>Grand Total</b>	<b>90,339,523,000</b>	<b>88,663,644,000</b>	<b>97,787,326,000</b>	<b>103,448,051,000</b>	<b>380,238,544,000</b>	

PivotChart Fields

Choose fields to add to report:

Search

Cost of Goods Sold  
 Other Operating Items  
 Research and Development  
 Sales, General and Admin.  
 Total Revenue  
 GICS Sector

Drag fields between areas below:

Filters Legend (Series) Years

Axis (Categories) Values Ticker Symbol Sum of Total Revenue

- Average of total revenue (mean)

Average of Total Revenue	Column Labels					
Row Labels	Year 1	Year 2	Year 3	Year 4	Grand Total	
ABT	\$ 19,050,000,000.00	\$ 19,657,000,000.00	\$ 20,247,000,000.00	\$ 20,405,000,000.00	\$ 19,839,750,000.00	
TMO	\$ 12,509,900,000.00	\$ 13,090,300,000.00	\$ 16,889,600,000.00	\$ 16,965,400,000.00	\$ 44,036,000,000.00	
BAX	\$ 13,936,000,000.00	\$ 9,413,000,000.00	\$ 10,719,000,000.00	\$ 9,968,000,000.00	\$ 11,009,000,000.00	
SYK	\$ 9,021,000,000.00	\$ 9,675,000,000.00	\$ 9,946,000,000.00	\$ 11,325,000,000.00	\$ 39,967,000,000.00	
BDX	\$ 8,054,000,000.00	\$ 8,446,000,000.00	\$ 10,282,000,000.00	\$ 12,483,000,000.00	\$ 39,265,000,000.00	
BSX	\$ 7,249,000,000.00	\$ 7,143,000,000.00	\$ 7,380,000,000.00	\$ 7,477,000,000.00	\$ 29,249,000,000.00	
ZBH	\$ 4,471,700,000.00	\$ 4,623,400,000.00	\$ 4,673,300,000.00	\$ 5,997,800,000.00	\$ 19,766,200,000.00	
BCR	\$ 3,049,500,000.00	\$ 3,323,600,000.00	\$ 3,416,000,000.00	\$ 3,714,000,000.00	\$ 3,375,775,000.00	
VAR	\$ 2,942,897,000.00	\$ 3,049,800,000.00	\$ 3,099,100,000.00	\$ 3,217,800,000.00	\$ 3,077,399,250.00	
HOLX	\$ 2,492,300,000.00	\$ 2,530,700,000.00	\$ 2,705,000,000.00	\$ 2,832,700,000.00	\$ 2,640,175,000.00	
ISRG	\$ 2,265,100,000.00	\$ 2,131,700,000.00	\$ 2,384,400,000.00	\$ 2,704,400,000.00	\$ 2,371,400,000.00	
PKI	\$ 2,105,188,000.00	\$ 2,157,586,000.00	\$ 2,237,219,000.00	\$ 2,262,359,000.00	\$ 2,190,588,000.00	
EW	\$ 1,899,600,000.00	\$ 2,045,500,000.00	\$ 2,322,900,000.00	\$ 2,493,700,000.00	\$ 2,190,425,000.00	
IDXX	\$ 1,293,338,000.00	\$ 1,377,058,000.00	\$ 1,485,807,000.00	\$ 1,601,892,000.00	\$ 1,439,523,750.00	
<b>Grand Total</b>	<b>6,452,823,071</b>	<b>6,333,117,429</b>	<b>6,984,809,000</b>	<b>7,389,146,500</b>	<b>6,789,974,000</b>	

PivotChart Fields

Choose fields to add to report:

Search

Cost of Goods Sold  
 Other Operating Items  
 Research and Development  
 Sales, General and Admin.  
 Total Revenue  
 GICS Sector

Drag fields between areas below:

Filters Legend (Series) Years

Axis (Categories) Values Ticker Symbol Average of Total Rev...

- Standard deviation.

StdDev of Total Revenue	Column Labels					
Row Labels	Year 1	Year 2	Year 3	Year 4	Grand Total	
TMO	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 2,394,906,794.29	
BDX	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 2,025,799,327.84	
BAX	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 2,023,390,389.09	
SYK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 969,937,240.24	
ZBH	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 709,366,047.96	
ABT	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 617,106,892.42	
BCR	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 273,977,984.21	
EW	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 267,773,403.89	
ISRG	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 244,822,234.83	
HOLX	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 158,240,268.26	
BSX	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 146,490,898.47	
IDXX	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 133,887,802.86	
VAR	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 114,069,959.54	
PKI	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 72,359,792.26	
<b>Grand Total</b>	<b>5,466,485,615</b>	<b>5,293,039,270</b>	<b>5,915,441,574</b>	<b>6,003,242,441</b>	<b>5,536,921,165</b>	

PivotChart Fields

Choose fields to add to report:

Search

Cost of Goods Sold  
 Other Operating Items  
 Research and Development  
 Sales, General and Admin.  
 Total Revenue  
 GICS Sector

Drag fields between areas below:

Filters Legend (Series) Years

Axis (Categories) Values Ticker Symbol StdDev of Total Rev...

- Max.

Max of Total Revenue	Column Labels					
Row Labels	Year 1	Year 2	Year 3	Year 4	Grand Total	
ABT	\$ 19,050,000,000.00	\$ 19,657,000,000.00	\$ 20,247,000,000.00	\$ 20,405,000,000.00	\$ 20,405,000,000.00	
TMO	\$ 12,509,900,000.00	\$ 13,090,300,000.00	\$ 16,889,600,000.00	\$ 16,965,400,000.00	\$ 16,965,400,000.00	
BAX	\$ 13,936,000,000.00	\$ 9,413,000,000.00	\$ 10,719,000,000.00	\$ 9,968,000,000.00	\$ 13,336,000,000.00	
BDX	\$ 8,054,000,000.00	\$ 8,446,000,000.00	\$ 10,282,000,000.00	\$ 12,483,000,000.00	\$ 12,483,000,000.00	
SYK	\$ 9,021,000,000.00	\$ 9,675,000,000.00	\$ 9,946,000,000.00	\$ 11,325,000,000.00	\$ 11,325,000,000.00	
BSX	\$ 7,249,000,000.00	\$ 7,143,000,000.00	\$ 7,380,000,000.00	\$ 7,477,000,000.00	\$ 7,477,000,000.00	
ZBH	\$ 4,471,700,000.00	\$ 4,623,400,000.00	\$ 4,673,300,000.00	\$ 5,997,800,000.00	\$ 5,997,800,000.00	
BCR	\$ 3,049,500,000.00	\$ 3,323,600,000.00	\$ 3,416,000,000.00	\$ 3,714,000,000.00	\$ 3,714,000,000.00	
VAR	\$ 2,942,897,000.00	\$ 3,049,800,000.00	\$ 3,099,100,000.00	\$ 3,217,800,000.00	\$ 3,217,800,000.00	
HOLX	\$ 2,492,300,000.00	\$ 2,530,700,000.00	\$ 2,705,000,000.00	\$ 2,832,700,000.00	\$ 2,832,700,000.00	
ISRG	\$ 2,265,100,000.00	\$ 2,131,700,000.00	\$ 2,384,400,000.00	\$ 2,704,400,000.00	\$ 2,704,400,000.00	
EW	\$ 1,899,600,000.00	\$ 2,045,500,000.00	\$ 2,322,900,000.00	\$ 2,493,700,000.00	\$ 2,493,700,000.00	
PKI	\$ 2,105,188,000.00	\$ 2,157,586,000.00	\$ 2,237,219,000.00	\$ 2,262,359,000.00	\$ 2,262,359,000.00	
IDXX	\$ 1,293,338,000.00	\$ 1,377,058,000.00	\$ 1,485,807,000.00	\$ 1,601,892,000.00	\$ 1,601,892,000.00	
<b>Grand Total</b>	<b>19,050,000,000</b>	<b>19,657,000,000</b>	<b>20,247,000,000</b>	<b>20,405,000,000</b>	<b>20,405,000,000</b>	

PivotChart Fields

Choose fields to add to report:

Search

Cost of Goods Sold  
 Other Operating Items  
 Research and Development  
 Sales, General and Admin.  
 Total Revenue  
 GICS Sector

Drag fields between areas below:

Filters Legend (Series) Years

Axis (Categories) Values Ticker Symbol Max of Total Revenue

- Min

PivotChart Fields

Min of Total Revenue	Column Labels	Year 1	Year 2	Year 3	Year 4	Grand Total
Row Labels		Year 1	Year 2	Year 3	Year 4	Grand Total
ABT	\$ 19,050,000,000.00	\$ 19,657,000,000.00	\$ 20,247,000,000.00	\$ 20,405,000,000.00	\$ 19,050,000,000.00	
TMO	\$ 12,509,900,000.00	\$ 13,090,300,000.00	\$ 16,889,600,000.00	\$ 16,965,400,000.00	\$ 12,509,900,000.00	
BAX	\$ 13,936,000,000.00	\$ 9,413,000,000.00	\$ 10,719,000,000.00	\$ 9,968,000,000.00	\$ 9,413,000,000.00	
SYK	\$ 9,021,000,000.00	\$ 9,675,000,000.00	\$ 9,946,000,000.00	\$ 11,325,000,000.00	\$ 9,021,000,000.00	
BDX	\$ 8,054,000,000.00	\$ 8,446,000,000.00	\$ 10,282,000,000.00	\$ 12,483,000,000.00	\$ 8,054,000,000.00	
BSX	\$ 7,249,000,000.00	\$ 7,143,000,000.00	\$ 7,380,000,000.00	\$ 7,477,000,000.00	\$ 7,143,000,000.00	
ZBH	\$ 4,471,700,000.00	\$ 4,623,400,000.00	\$ 4,673,300,000.00	\$ 5,997,800,000.00	\$ 4,471,700,000.00	
BCR	\$ 3,049,500,000.00	\$ 3,323,600,000.00	\$ 3,416,000,000.00	\$ 3,714,000,000.00	\$ 3,049,500,000.00	
VAR	\$ 2,942,897,000.00	\$ 3,049,800,000.00	\$ 3,099,100,000.00	\$ 3,217,800,000.00	\$ 2,942,897,000.00	
HOLX	\$ 2,492,300,000.00	\$ 2,530,700,000.00	\$ 2,705,000,000.00	\$ 2,832,700,000.00	\$ 2,492,300,000.00	
ISRG	\$ 2,265,100,000.00	\$ 2,131,700,000.00	\$ 2,384,400,000.00	\$ 2,704,400,000.00	\$ 2,131,700,000.00	
PKI	\$ 2,105,188,000.00	\$ 2,157,586,000.00	\$ 2,237,219,000.00	\$ 2,262,359,000.00	\$ 2,105,188,000.00	
EW	\$ 1,899,600,000.00	\$ 2,045,500,000.00	\$ 2,322,900,000.00	\$ 2,493,700,000.00	\$ 1,899,600,000.00	
IDXX	\$ 1,293,338,000.00	\$ 1,377,058,000.00	\$ 1,485,807,000.00	\$ 1,601,892,000.00	\$ 1,293,338,000.00	
<b>Grand Total</b>	<b>1,293,338,000</b>	<b>1,377,058,000</b>	<b>1,485,807,000</b>	<b>1,601,892,000</b>	<b>1,293,338,000</b>	

### - Count (of companies).

PivotTable Fields

Count of Total Revenue	Column Labels	Year 1	Year 2	Year 3	Year 4	Grand Total
Row Labels		Year 1	Year 2	Year 3	Year 4	Grand Total
IDXX	1	1	1	1	1	4
TMO	1	1	1	1	1	4
PKI	1	1	1	1	1	4
BAX	1	1	1	1	1	4
ZBH	1	1	1	1	1	4
BCR	1	1	1	1	1	4
ISRG	1	1	1	1	1	4
BDX	1	1	1	1	1	4
SYK	1	1	1	1	1	4
BSX	1	1	1	1	1	4
VAR	1	1	1	1	1	4
EW	1	1	1	1	1	4
ABT	1	1	1	1	1	4
HOLX	1	1	1	1	1	4
<b>Grand Total</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>56</b>	

And the statistics for health care distributors.

Total Revenue Statistics - Health Care Distributors					
	Year 1	Year 2	Year 3	Year 4	All Years
<b>Sum</b>	\$ 339,652,775,000.00	\$ 375,894,992,000.00	\$ 445,777,537,000.00	\$ 488,511,737,000.00	\$ 1,649,837,041,000.00
<b>Mean</b>	\$ 56,608,795,833.33	\$ 62,649,165,333.33	\$ 74,296,256,166.67	\$ 81,418,622,833.33	\$ 68,743,210,041.67
<b>StdDev</b>	\$ 53,018,787,600.68	\$ 60,470,861,730.28	\$ 75,232,165,514.22	\$ 81,721,973,338.70	\$ 64,701,886,893.95
<b>Median</b>	\$ 52,790,083,500.00	\$ 53,734,500,000.00	\$ 59,205,000,000.00	\$ 69,053,000,000.00	\$ 52,790,083,500.00
<b>1stQuartile</b>	\$ 11,110,225,250.00	\$ 11,266,735,250.00	\$ 11,748,292,500.00	\$ 12,112,289,250.00	\$ 10,168,704,250.00
<b>3rdQuartile</b>	\$ 97,809,541,750.00	\$ 112,447,845,250.00	\$ 127,604,102,250.00	\$ 140,523,764,500.00	\$ 121,708,500,000.00
<b>IQR</b>	\$ 86,699,316,500.00	\$ 101,181,110,000.00	\$ 115,855,809,750.00	\$ 128,411,475,250.00	\$ 111,539,795,750.00
<b>Max</b>	\$ 122,196,000,000.00	\$ 137,392,000,000.00	\$ 179,045,000,000.00	\$ 190,884,000,000.00	\$ 190,884,000,000.00
<b>Min</b>	\$ 1,843,641,000.00	\$ 1,904,218,000.00	\$ 1,989,344,000.00	\$ 2,042,332,000.00	\$ 1,843,641,000.00
<b>Range</b>	\$ 120,352,359,000.00	\$ 135,487,782,000.00	\$ 177,055,656,000.00	\$ 188,841,668,000.00	\$ 189,040,359,000.00
<b>CV</b>	94%	97%	101%	100%	94%
<b>Count</b>			6		

And here is the statistics from pivot table:

- Sum of total revenue

Row Labels	Year 4	Year 3	Year 2	Year 1	Grand Total
MCK	\$ 190,884,000,000.00	\$ 179,045,000,000.00	\$ 137,392,000,000.00	\$ 122,196,000,000.00	\$ 629,517,000,000.00
ABC	\$ 146,849,686,000.00	\$ 135,961,803,000.00	\$ 119,569,127,000.00	\$ 87,959,167,000.00	\$ 490,339,783,000.00
CAH	\$ 121,546,000,000.00	\$ 102,531,000,000.00	\$ 91,084,000,000.00	\$ 101,093,000,000.00	\$ 416,254,000,000.00
BMY	\$ 16,560,000,000.00	\$ 15,879,000,000.00	\$ 16,385,000,000.00	\$ 17,621,000,000.00	\$ 66,445,000,000.00
HSIC	\$ 10,629,719,000.00	\$ 10,371,390,000.00	\$ 9,560,647,000.00	\$ 8,939,967,000.00	\$ 39,501,723,000.00
WAT	\$ 2,042,332,000.00	\$ 1,989,344,000.00	\$ 1,904,218,000.00	\$ 1,843,641,000.00	\$ 7,779,535,000.00
<b>Grand Total</b>	<b>\$ 488,511,737,000.00</b>	<b>\$ 445,777,537,000.00</b>	<b>\$ 375,894,992,000.00</b>	<b>\$ 339,652,775,000.00</b>	<b>\$ 1,649,837,041,000.00</b>

- Average of total revenue (mean)

Row Labels	Year 4	Year 3	Year 2	Year 1	Grand Total
MCK	\$ 190,884,000,000.00	\$ 179,045,000,000.00	\$ 137,392,000,000.00	\$ 122,196,000,000.00	\$ 157,379,250,000.00
ABC	\$ 146,849,686,000.00	\$ 135,961,803,000.00	\$ 119,569,127,000.00	\$ 87,959,167,000.00	\$ 122,584,945,750.00
CAH	\$ 121,546,000,000.00	\$ 102,531,000,000.00	\$ 91,084,000,000.00	\$ 101,093,000,000.00	\$ 104,063,500,000.00
BMY	\$ 16,560,000,000.00	\$ 15,879,000,000.00	\$ 16,385,000,000.00	\$ 17,621,000,000.00	\$ 16,611,250,000.00
HSIC	\$ 10,629,719,000.00	\$ 10,371,390,000.00	\$ 9,560,647,000.00	\$ 8,939,967,000.00	\$ 9,875,430,750.00
WAT	\$ 2,042,332,000.00	\$ 1,989,344,000.00	\$ 1,904,218,000.00	\$ 1,843,641,000.00	\$ 1,944,883,750.00
<b>Grand Total</b>	<b>\$ 81,418,622,833.33</b>	<b>\$ 74,296,256,166.67</b>	<b>\$ 62,649,165,333.33</b>	<b>\$ 56,608,795,833.33</b>	<b>\$ 68,743,210,041.67</b>

- Standard deviation.

Row Labels	Year 4	Year 3	Year 2	Year 1	Grand Total
HSIC	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 772,249,436.94
WAT	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 88,273,576.47
MCK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 32,809,166,598.94
BMY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 732,484,527.71
ABC	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 25,662,928,165.38
CAH	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ 12,718,459,720.68
<b>Grand Total</b>	<b>\$ 81,721,973,338.70</b>	<b>\$ 75,232,165,514.22</b>	<b>\$ 60,470,861,730.28</b>	<b>\$ 53,018,787,600.68</b>	<b>\$ 64,701,886,893.95</b>

- Max.

Row Labels	Year 4	Year 3	Year 2	Year 1	Grand Total
MCK	\$ 190,884,000,000.00	\$ 179,045,000,000.00	\$ 137,392,000,000.00	\$ 122,196,000,000.00	\$ 190,884,000,000.00
ABC	\$ 146,849,686,000.00	\$ 135,961,803,000.00	\$ 119,569,127,000.00	\$ 87,959,167,000.00	\$ 146,849,686,000.00
CAH	\$ 121,546,000,000.00	\$ 102,531,000,000.00	\$ 91,084,000,000.00	\$ 101,093,000,000.00	\$ 121,546,000,000.00
BMY	\$ 16,560,000,000.00	\$ 15,879,000,000.00	\$ 16,385,000,000.00	\$ 17,621,000,000.00	\$ 17,621,000,000.00
HSIC	\$ 10,629,719,000.00	\$ 10,371,390,000.00	\$ 9,560,647,000.00	\$ 8,939,967,000.00	\$ 10,629,719,000.00
WAT	\$ 2,042,332,000.00	\$ 1,989,344,000.00	\$ 1,904,218,000.00	\$ 1,843,641,000.00	\$ 2,042,332,000.00
<b>Grand Total</b>	<b>\$ 190,884,000,000.00</b>	<b>\$ 179,045,000,000.00</b>	<b>\$ 137,392,000,000.00</b>	<b>\$ 122,196,000,000.00</b>	<b>\$ 190,884,000,000.00</b>

- Min

PivotTable Fields pane shows fields: Ticker Symbol, Years, Total Revenue, Cost of Goods Sold, Sales, General and Admin.

		Year 4	Year 3	Year 2	Year 1	Grand Total
Row Labels	MCK	\$ 190,884,000,000.00	\$ 179,045,000,000.00	\$ 137,392,000,000.00	\$ 122,196,000,000.00	\$ 122,196,000,000.00
ABC	\$ 146,849,686,000.00	\$ 135,961,803,000.00	\$ 119,569,127,000.00	\$ 87,959,167,000.00	\$ 87,959,167,000.00	
CAH	\$ 121,546,000,000.00	\$ 102,531,000,000.00	\$ 91,084,000,000.00	\$ 101,093,000,000.00	\$ 91,084,000,000.00	
BMY	\$ 16,560,000,000.00	\$ 15,879,000,000.00	\$ 16,385,000,000.00	\$ 17,621,000,000.00	\$ 15,879,000,000.00	
HSIC	\$ 10,629,719,000.00	\$ 10,371,390,000.00	\$ 9,560,647,000.00	\$ 8,939,967,000.00	\$ 8,939,967,000.00	
WAT	\$ 2,042,332,000.00	\$ 1,989,344,000.00	\$ 1,904,218,000.00	\$ 1,843,641,000.00	\$ 1,843,641,000.00	
<b>Grand Total</b>	<b>\$ 2,042,332,000.00</b>	<b>\$ 1,989,344,000.00</b>	<b>\$ 1,904,218,000.00</b>	<b>\$ 1,843,641,000.00</b>	<b>\$ 1,843,641,000.00</b>	

- Count (of companies).

PivotTable Fields pane shows fields: Ticker Symbol, Years, Total Revenue, Cost of Goods Sold, Sales, General and Admin.

		Year 4	Year 3	Year 2	Year 1	Grand Total
Row Labels	HSIC	1	1	1	1	4
WAT	1	1	1	1	4	
MCK	1	1	1	1	4	
BMY	1	1	1	1	4	
ABC	1	1	1	1	4	
CAH	1	1	1	1	4	
<b>Grand Total</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>24</b>	

As per statistics of total revenue (for all years - four years) we have the health care sectors that consist of 48 companies (count = 48), in various specializations and activities with a total revenue of about (4458 billion US\$). The scope of this analysis is confined in two sectors of which, the health care distributors and the health care equipment.

The health distributors with a number of companies equal only 6 companies (count = 6) and a total revenue reaches about (1650 billion US\$) that mean about (37%) of the total revenues for all health care sectors. In the other hand, the health equipment sector that consists of 14 companies (count = 14) with a total revenue of (380 billion US\$) that is consist about (8.5%) of the total revenue of the whole health sectors.

the mean of health care distributors equal (68.7 billion) which is ten times the magnitude of mean of health care equipment with only (6.8 billion). while, the median of the health distributors equals about (52.8 billion) which is about thirteen times the median of health equipment (4.1 billion). Also, the standard deviation for the heath distributors companies is (64.7 billion) is about twelve times the standard deviation of health equipment companies with a standard deviation of only (5.5 billion), this indicates the variability or variation in total revenues is many times higher for the health distributors companies than the health equipment companies, and the revenues of health distributors companies are more spread out over a wider range than the health equipment companies. This is also clearly noticeable when comparing the ranges between

these two sectors; the range of the health distributors companies is about (189 billion) almost equal the range of the all-health sectors (190 billion); this means that the health distributors have companies with the higher revenue and the lower revenue within the whole health sectors companies. While the range of health equipment is only about (19 billion) about one tenth the range of health distributors companies. The other measure for the spread of our data is the coefficient of variation (CV), the relative measure of variability; where the CV of health distributors is about (94%) higher than the CV of the health equipment (82%).

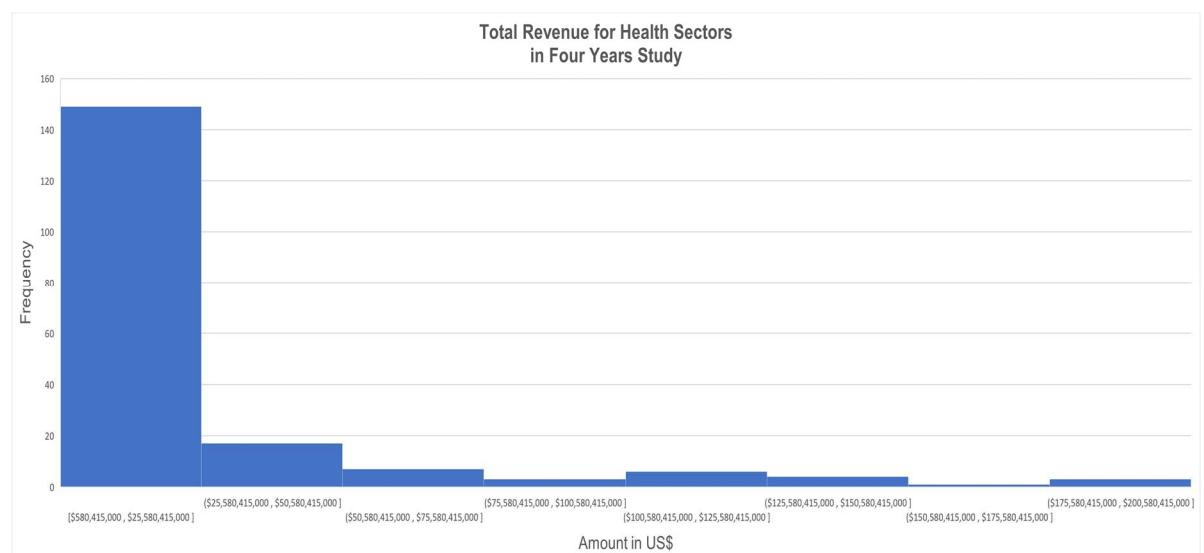
The other statistical measure of spread is the interquartile range (IQR) that measure the spread of the middle half of data values. In other words, 50% of data values will be within this range. The IQR of health distributors is between (3<sup>rd</sup> quartile equals about 122 billion) and (1<sup>st</sup> quartile equals about 10 billion) with a total IQR equals about (112 billion) while the health equipment has far less value of IQR equals (7.5 billion) ranges between (3<sup>rd</sup> quartile = 10 billion) to (1<sup>st</sup> quartile equal 2.5 billion).

As above-mentioned, the median of health distributors companies equals about (52.8 billion) this mean that 50% of the revenue are above this figure (52.8 billion). However, the 50% of the health equipment companies with a total revenue exceed (4.1 billion).

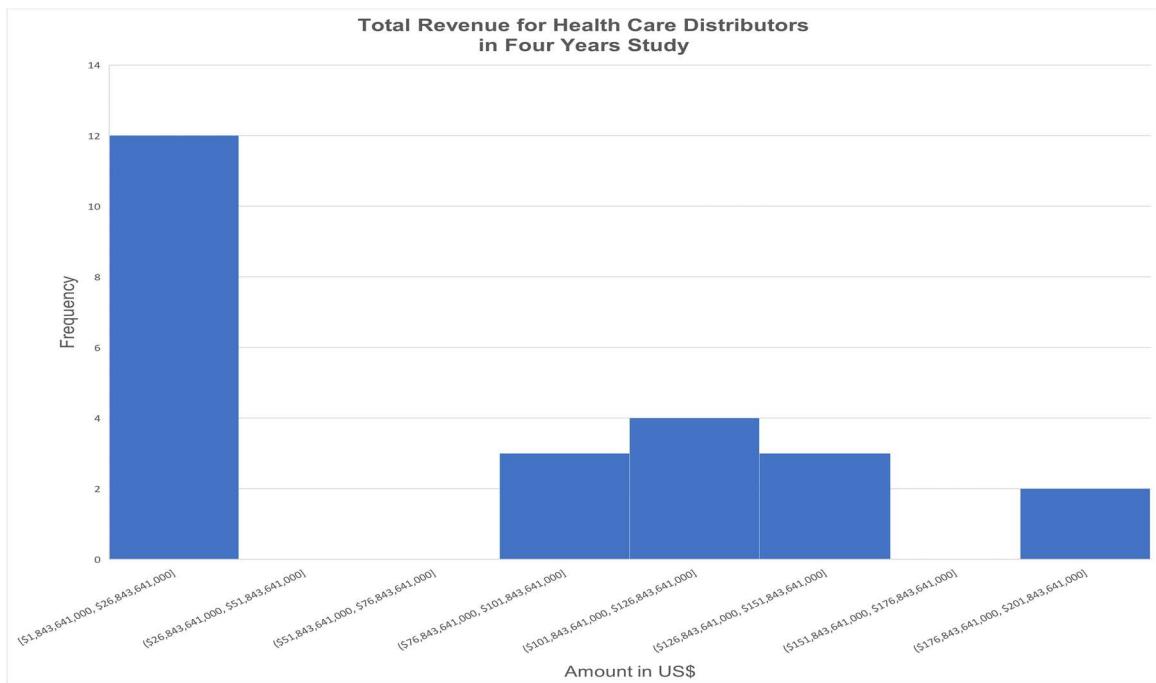
In both sectors, the distribution of data is right skewed (positively skewed) this means that the mean (in each of which) is higher than the median... it is clear also in our statistical figures.

The following graphs will allow us to show all these information in simple histograms and other plots:

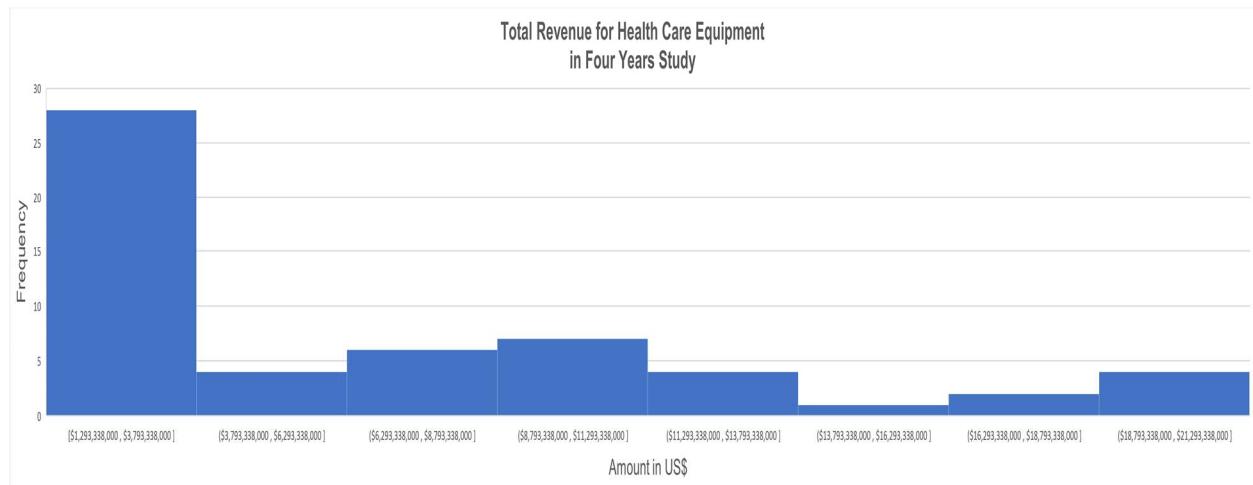
The histogram for the health sectors.



The histogram for the health care distributors companies

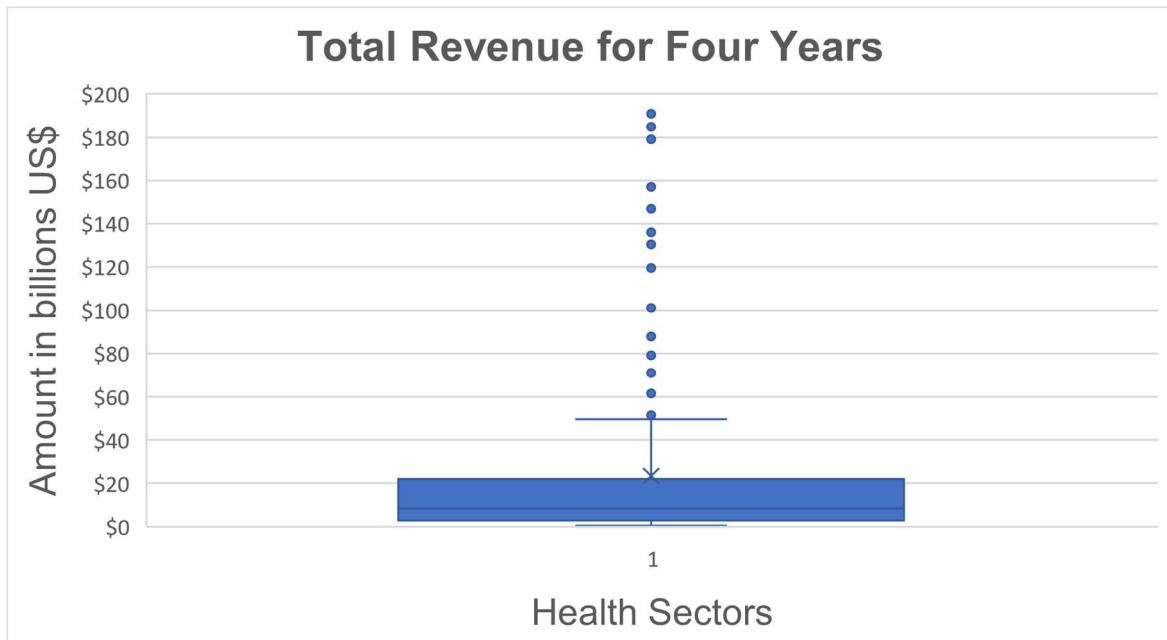


And the histogram for the health care equipment companies

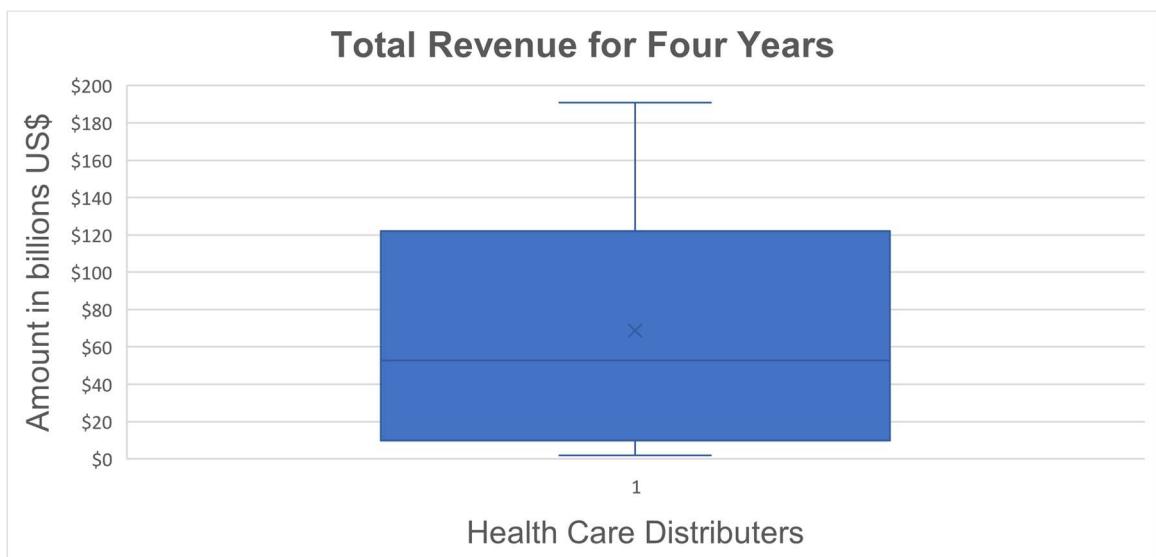


Accordingly, the relevant boxplots: shows the distribution of our data in the health care sectors as well the health care distributors companies and the health care equipment companies.

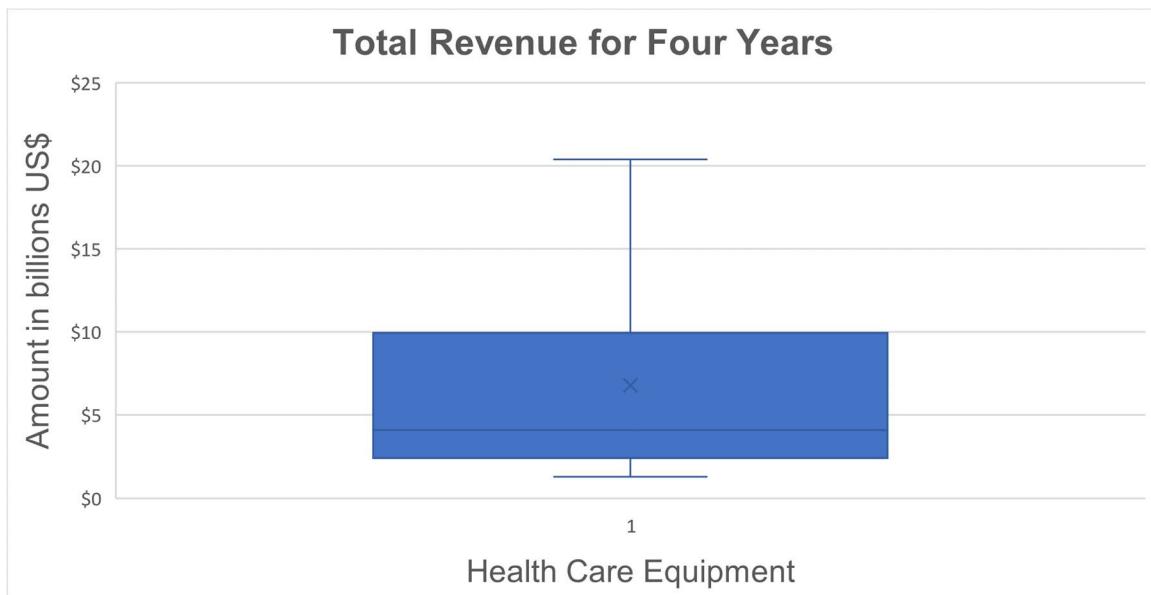
1.



2.



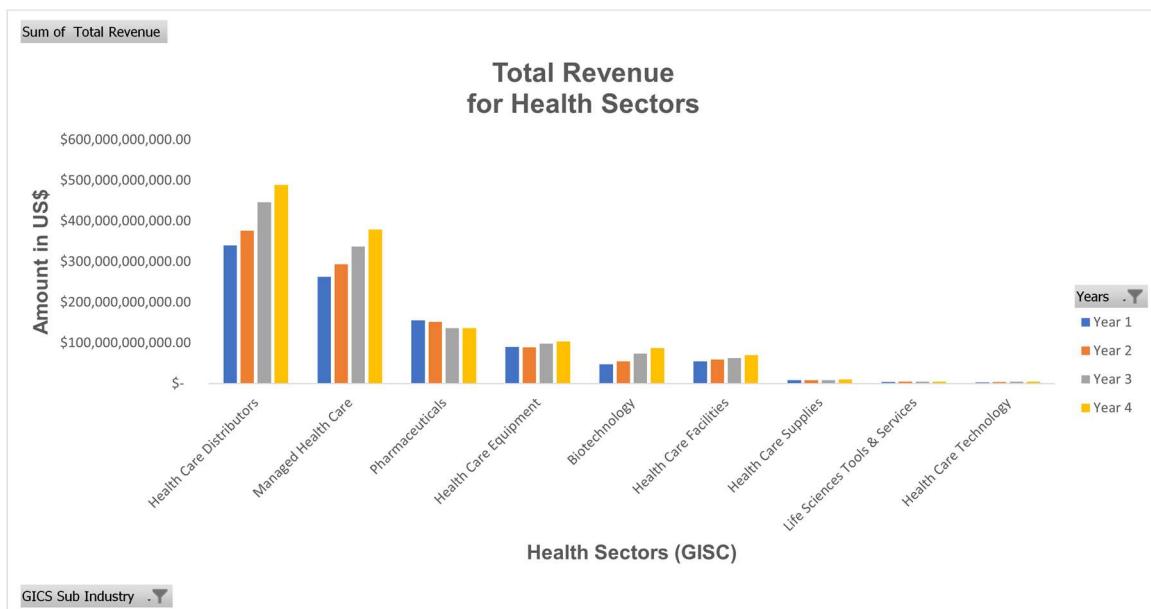
3.



### Revenue fluctuation over time (from year to year):

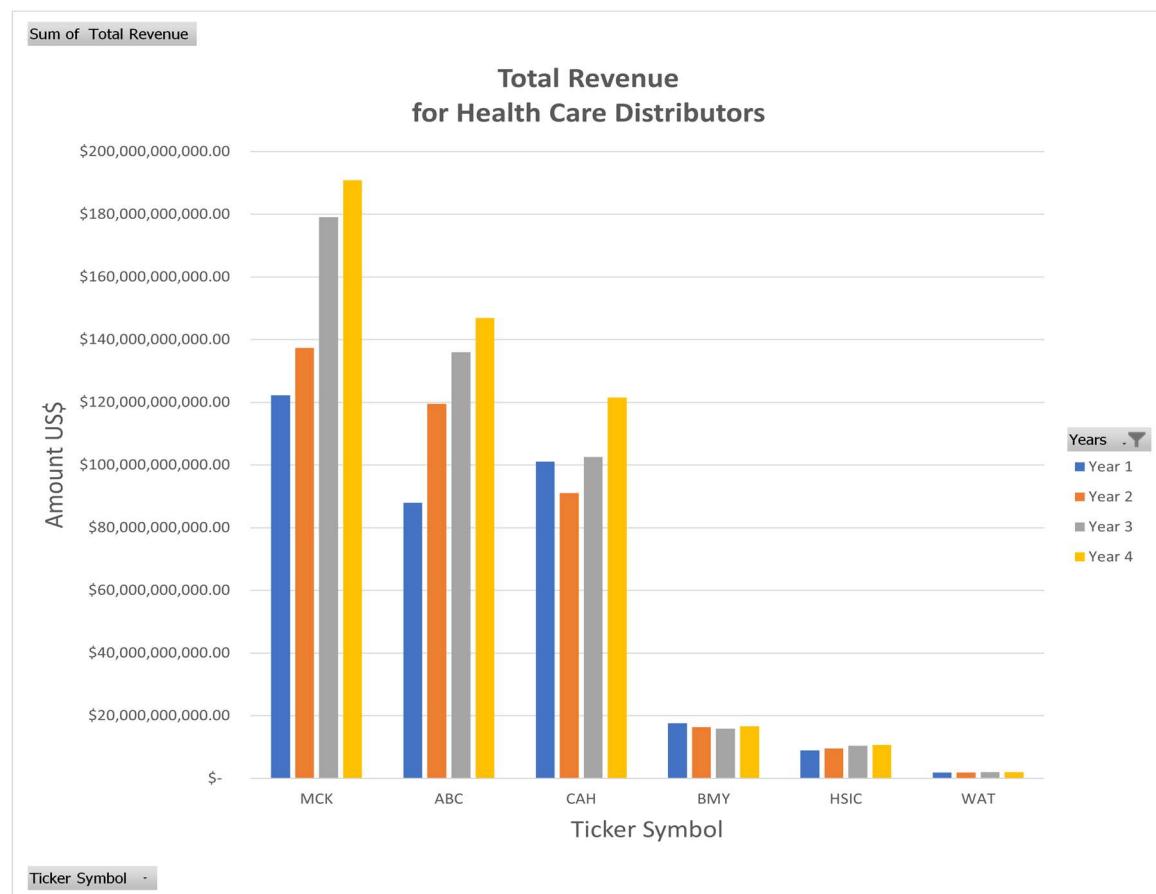
From the following column charts for the health care sectors, the health distributors companies and the health equipment companies, that show the total revenues from year to year (over the four years of NYSE data).

### 1st the health care sectors



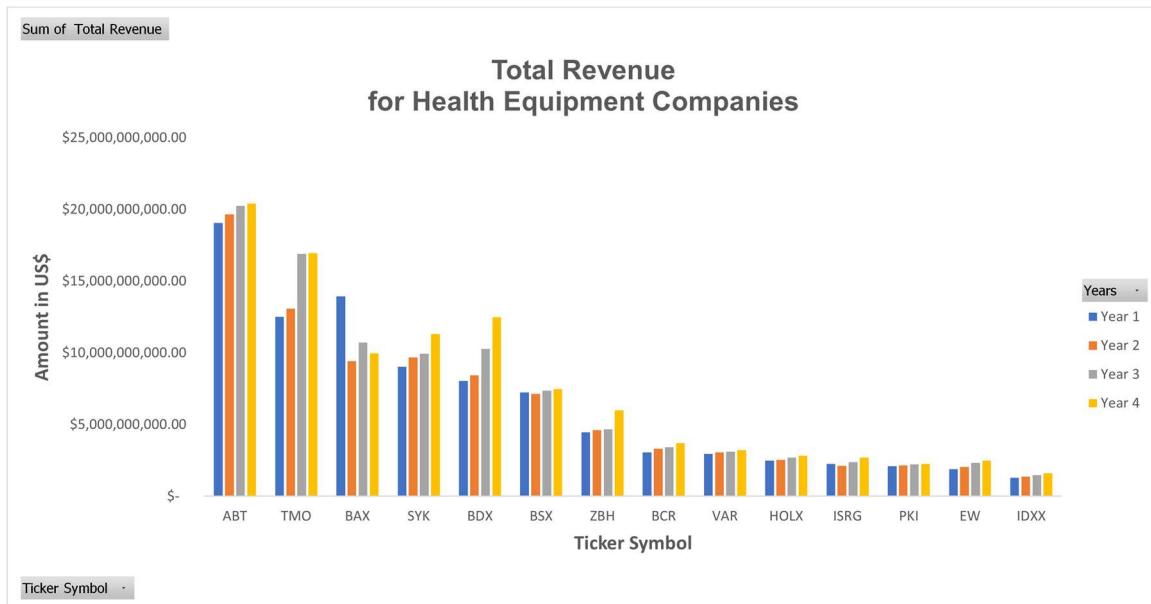
The graph above depicts the total revenue for all nine health sectors. Starting with the sector of health care distributors with the highest revenues (regardless of the year of measurement) and a total revenue in the fourth year of approximately (490 billion), we move to the sector of health care technology with the lowest revenues and a total revenue in the fourth year of less than (5 billion). The revenue of the health care equipment sector is somewhere in the middle, with a total revenue in the fourth year of about (104 billion). It is noticeable (except in the pharmaceutical sector) that total revenue is increasing year after year in all sectors.

## 2<sup>nd</sup> the health care distributors companies



The column graph of the health care distributors shows the total revenue for all six companies in this sector and the changes in this revenue from year to year, the graph clearly shows that the revenue is increasing from year to year (regardless of the company in this sector), but there is a large variation in total revenue in this sector, the (MCK) with the highest total revenue in this field of work reaches the amount of about (US\$ 191 billion) in the fourth year, whereas the lowest company is (WAT) with total revenue in the fourth year of about only (US\$ 2 billion).

### 3rd the health care equipment companies



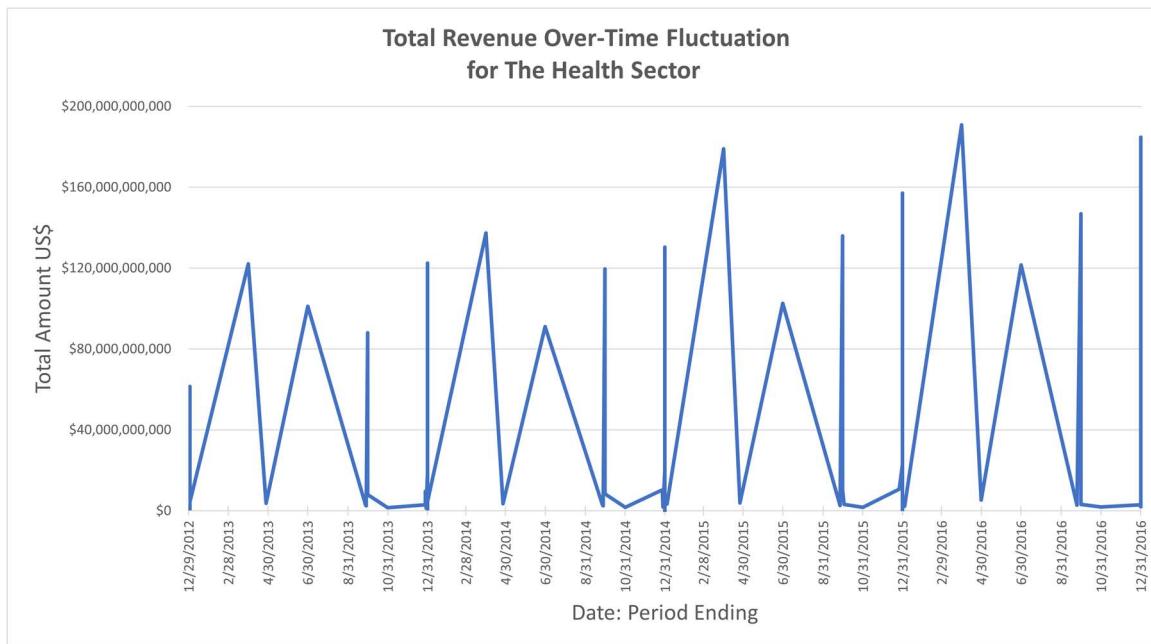
The column graph of the health care equipment that consists of 14 companies, shows the similarity with the health care distributors (and even with the health sectors) as the total revenue is (in general) growing up too from year to year, though the variation in total revenue amounts from company to another, the ABT company records the highest total revenue with about (US\$ 20.5 billion) in the fourth year, however the IDXX have the lowest total revenue with about (US\$ 2.5 billion) in the fourth year.

### The revenue fluctuation over time (within one year):

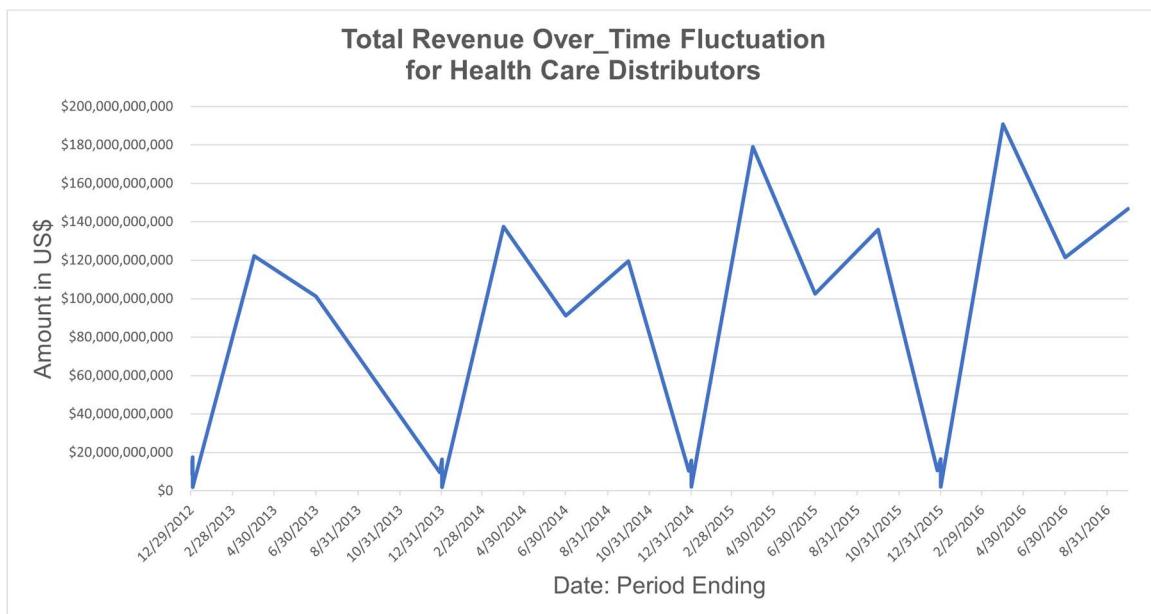
The following line graphs are showing the changes in total revenues over time, they will illustrate all dramatical changes in revenues during all seasons or months of one year.

Starting with the health sectors:

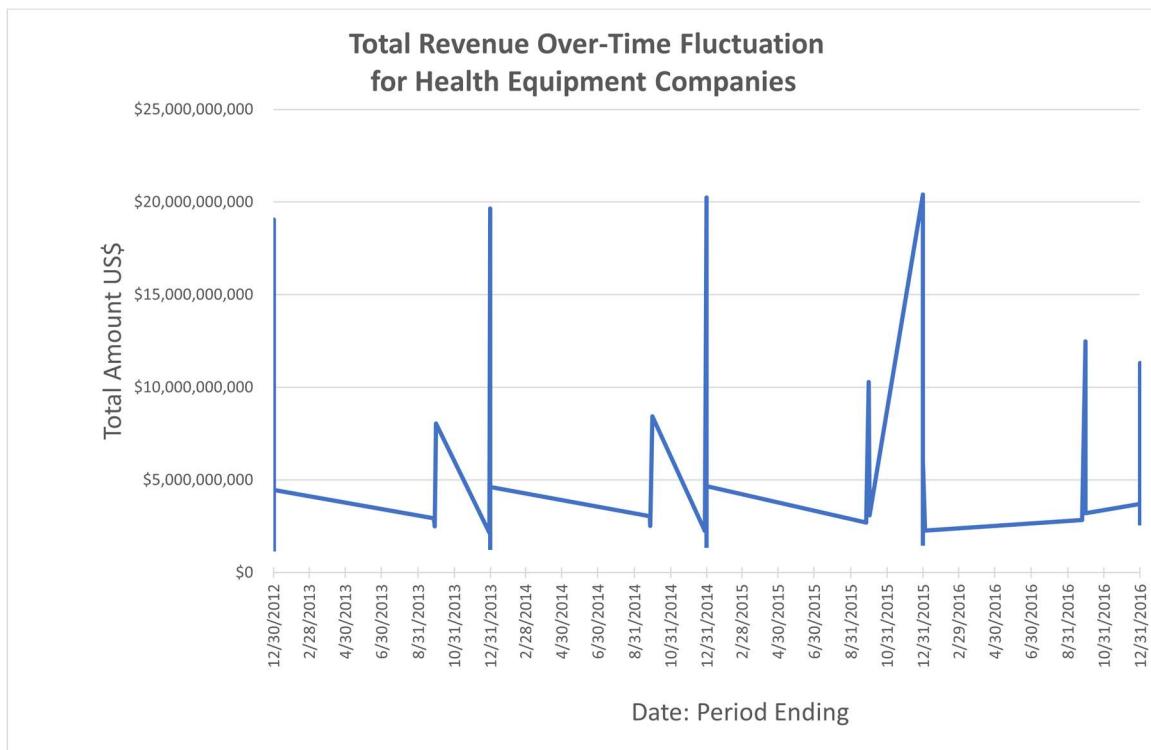
As per the line chart below: Revenue rises at the beginning of each year to a peak at the end of March, then gradually declines to the bottom of revenue at the end of April, to take a second cycle of increase and reach its second peak at the end of June, and then reverse the trend to reach the bottom for the second time in mid-September to reverse the rise for a limited period (until the beginning of October); then revenue rises suddenly again in October to its another peak and decreases suddenly too. Afterwards; revenue continues at rock bottom for the remaining two months until the end of the year to repeat the same cycle again next year



In line chart (below) for the health care distributors companies; Total revenues rebound at the beginning of each year and remain on the rise until the end of February of each year, after which revenue tends to decrease from the beginning of March until the end of June, then rebound from the beginning of July until October, then reverse the trend again to gradually decline until the end of the year and so on. this cycle continues at the same pace every year, repeats itself year after year. In general, we can say that the maximum revenue is generated at the end of the second month of each year. and the minimum at the conclusion of each year.



The line chart for the health care equipment companies (below): the total revenue begins with the end-of-year rocket rise; as of the beginning of the year, revenue start to decline and goes down to the normal levels, with a modest and limited reduction in revenue by time until October. Then, commencing this month, overall revenue rises again (a small leap in revenue at the start of this month), and then the trend flips, with revenue falling fast until the end of the year. . . This trend continues year after year.

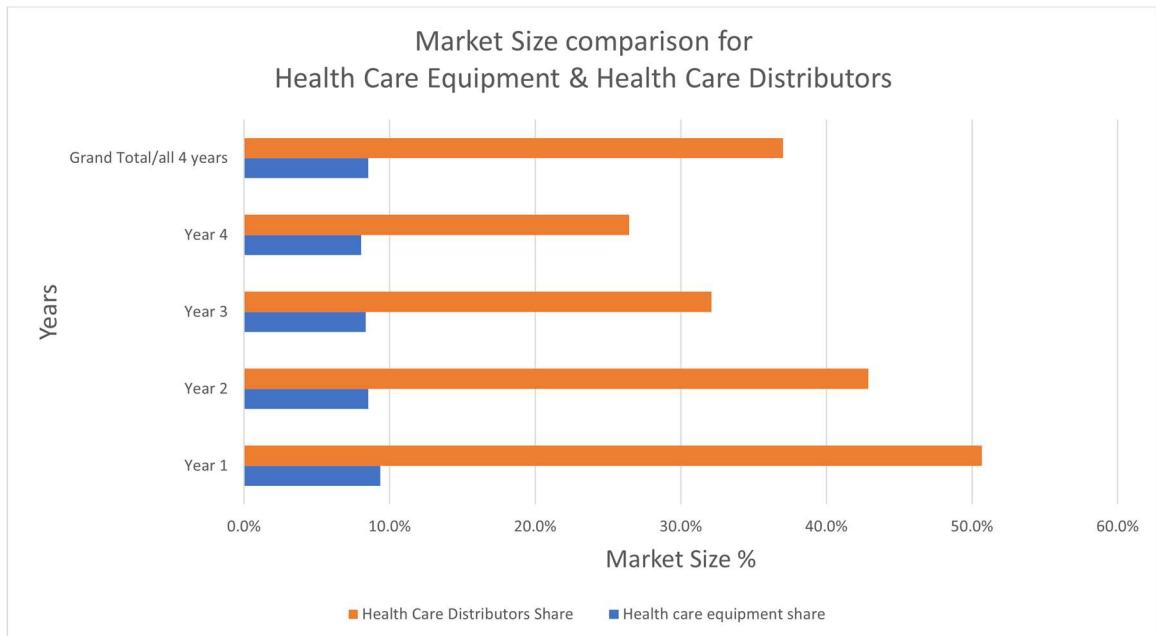


## The market size:

In the following table and bar graph, they show clearly the market size of both sectors in the total health care sectors in each year of our four years then as an average for all these four years altogether.

Regarding the health care distributors companies, the market size of this sector (according to the total revenue) ranging from about 51% in (Year 1) to about 26.5% in (Year 4) it is noticeable that its market size decreased though the consistent rising of the total revenue year after year. With an average market size of about 37% for all four years, which is considered the biggest portion in all health sectors.

	Market Size				
	Year 1	Year 2	Year 3	Year 4	Grand Total/all 4 years
Health Care Equipment	\$ 90,339,523,000.00	\$ 88,663,644,000.00	\$ 97,787,326,000.00	\$ 103,448,051,000.00	\$ 380,238,544,000.00
Health care equipment share	9.4%	8.5%	8.3%	8.1%	8.5%
Health Care Distributors	\$ 488,511,737,000.00	\$ 445,777,537,000.00	\$ 375,894,992,000.00	\$ 339,652,775,000.00	\$ 1,649,837,041,000.00
Health Care Distributors Share	50.7%	42.9%	32.1%	26.5%	37.0%
Health Sectors	\$ 963,813,675,000.00	\$ 1,039,341,879,000.00	\$ 1,171,182,213,000.00	\$ 1,283,674,608,000.00	\$ 4,458,012,375,000.00



In the other hand, the market size of the health care equipment varies from about (9.5%) in (Year 1) to about (8.1%) in (Year 4), with an average market size equals about (8.5%) for all four years of revenue, the market size for this sector also decreased although the continual rising in revenue year after year. This market size is far less than the market size of the distributors sectors, it is less than quarter the portion of market of the health distributors.

We can draw the following conclusions and brief insights from this analysis:

- Both health care distributors and health care equipment are right skewed (or positively skewed), with the mean being higher than the median and the data values being widely spread out from its measure of center (mean or median), with increasing total revenue from year to year.
- Each sector has a particular pattern of revenue changes from month to month throughout a year, and this cycle or pattern occurs repeatedly from year to year.
- The health care distributors sector is substantially larger than the health care equipment sector, accordingly the market size is much larger.
- The market sizes of both sectors (distributors and equipment) are shrinking year after year in comparison to the overall health sectors, despite the ongoing year-over-year growth in revenue in both sectors

Ticker Symbols

## **Profit and Loss Statement for Health Care Equipment Companies (Multiple Criteria)**

Multiple Criteria

ABT

Income Statement						
	Historical			Forecast		
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Revenues	\$ 19,050,000,000.00	\$ 19,657,000,000.00	\$ 20,247,000,000.00	\$ 20,405,000,000.00	\$ 20,878,953,024.55	\$ 21,363,914,697.45
COGS	\$ 8,899,000,000.00	\$ 9,193,000,000.00	\$ 9,218,000,000.00	\$ 8,747,000,000.00	\$ 11,385,520,527.38	\$ 11,649,975,410.50
<b>Gross Profit</b>	<b>\$ 10,151,000,000.00</b>	<b>\$ 10,464,000,000.00</b>	<b>\$ 11,029,000,000.00</b>	<b>\$ 11,1658,000,000.00</b>		
Sales, General and Admin.	\$ 6,735,000,000.00	\$ 6,372,000,000.00	\$ 6,530,000,000.00	\$ 6,785,000,000.00		
Research and Development	\$ 1,461,000,000.00	\$ 1,371,000,000.00	\$ 1,345,000,000.00	\$ 1,405,000,000.00		
Other Operating Expenses	\$ 595,000,000.00	\$ 588,000,000.00	\$ 555,000,000.00	\$ 601,000,000.00		
<b>Total Operating Expenses</b>	<b>\$ 8,791,000,000.00</b>	<b>\$ 8,331,000,000.00</b>	<b>\$ 8,430,000,000.00</b>	<b>\$ 8,791,000,000.00</b>		
<b>Operating Income/EBIT</b>	<b>\$ 1,360,000,000.00</b>	<b>\$ 2,133,000,000.00</b>	<b>\$ 2,599,000,000.00</b>	<b>\$ 2,867,000,000.00</b>	<b>\$ 2,342,469,836.63</b>	<b>\$ 2,396,879,082.60</b>

## Operating Statistics

	Historical					Assumptions	
	Year 1	Year 2	Year 3	Year 4	Year 5		Year 6
Revenue Growth%	Base Case	3.2%	3.0%	0.8%	2.3%		2.3%
Gross Margin	0.53	0.53	0.54	0.57	0.55		0.55
Operating Margin	0.07	0.11	0.13	0.14	0.11		0.11

## Scenario

Base Case

## Operating scenarios - sensitivity analysis

Revenue growth (%)			Year 4	Year 5
Gross Margin		Strong case	3.0%	3.0%
		Base case	2.3%	2.3%
		Weak case	1.6%	1.6%
Operating Margin	Strong case	1	0.71	0.71
	Base case	2	0.55	0.55
	Weak case	3	0.38	0.38
Strong case	1	0.15	0.15	
Base case	2	0.11	0.11	
Weak case	3	0.08	0.08	

Ticker Symbol  
YHOO

## Profit & Loss Statement for YHOO One Criterion

Income Statement					
	Historical			Forecast	
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Revenues</b>	\$ 4,986,566,000.00	\$ 4,680,380,000.00	\$ 4,618,133,000.00	\$ 4,968,301,000.00	\$ 4,970,160,543.23
COGS	\$ 1,620,566,000.00	\$ 1,349,380,000.00	\$ 1,387,375,000.00	\$ 2,077,748,000.00	\$ 4,972,020,782.45
<b>Gross Profit</b>	\$ 3,366,000,000.00	\$ 3,331,000,000.00	\$ 3,230,758,000.00	\$ 2,890,553,000.00	\$ 3,315,206,480.46
Sales, General and Admin.	\$ 1,641,819,000.00	\$ 1,751,275,000.00	\$ 1,770,710,000.00	\$ 1,768,552,000.00	\$ 3,316,447,300.97
Research and Development	\$ 895,824,000.00	\$ 957,587,000.00	\$ 1,156,386,000.00	\$ 1,177,923,000.00	
Other Operating Expenses	\$ 35,819,000.00	\$ 44,841,000.00	\$ 66,750,000.00	\$ 79,042,000.00	
<b>Total Operating Expenses</b>	\$ 2,563,462,000.00	\$ 2,753,703,000.00	\$ 2,993,846,000.00	\$ 3,025,487,000.00	
<b>Operating Income/EBIT</b>	\$ 862,538,000.00	\$ 57,297,000.00	\$ 236,912,000.00	\$ (134,934,000.00)	\$ 383,231,013.74
					\$ 383,374,450.03

Operating Statistics					
	Historical			Assumptions	
	Year 1	Year 2	Year 3	Year 4	Year 5
Revenue Growth%	Base Year	-6.14%	-1.33%	7.58%	0.04%
Gross Margin	0.675	0.712	0.700	0.582	0.667
Operating Margin	0.161	0.123	0.051	-0.027	0.077

Scenario

Base Case

### Operating Scenarios - sensitivity analysis

	Assumptions		
	Year 4	Year 5	
<b>Revenue growth (%)</b>			
Strong case	1	7.04%	7.04%
Base case	2	0.04%	0.04%
Weak case	3	-6.96%	-6.96%
<b>Gross Margin</b>			
Strong case	1	0.737	0.737
Base case	2	0.667	0.667
Weak case	3	0.597	0.597
<b>Operating Margin</b>			
Strong case	1	0.177	0.177
Base case	2	0.077	0.077
Weak case	3	-0.023	-0.023

Ticker Symbol

**YHOO**

### Profit & Loss Statement for YHOO

One Criterion

using different formula

	Historical				Forecast	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Revenues	\$ 4,986,566,000.00	\$ 4,680,380,000.00	\$ 4,618,133,000.00	\$ 4,968,301,000.00	\$ 4,970,160,543.23	\$ 4,972,020,782.45
COGS	\$ 1,620,566,000.00	\$ 1,349,380,000.00	\$ 1,387,375,000.00	\$ 2,077,748,000.00	\$ 3,315,206,480.46	\$ 3,316,447,300.97
<b>Gross Profit</b>	<b>\$ 3,366,000,000.00</b>	<b>\$ 3,331,000,000.00</b>	<b>\$ 3,230,758,000.00</b>	<b>\$ 2,890,553,000.00</b>		
Sales, General and Admin.	\$ 1,641,819,000.00	\$ 1,751,275,000.00	\$ 1,770,710,000.00	\$ 1,768,522,000.00		
Research and Development	\$ 85,824,000.00	\$ 957,587,000.00	\$ 1,156,386,000.00	\$ 1,177,923,000.00		
Other Operating Expenses	\$ 35,819,000.00	\$ 44,841,000.00	\$ 66,750,000.00	\$ 79,042,000.00		
<b>Total Operating Expenses</b>	<b>\$ 2,593,462,000.00</b>	<b>\$ 2,753,703,000.00</b>	<b>\$ 2,993,846,000.00</b>	<b>\$ 3,025,487,000.00</b>		
<b>Operating Income/EBIT</b>	<b>\$ 802,538,000.00</b>	<b>\$ 577,297,000.00</b>	<b>\$ 236,912,000.00</b>	<b>\$ (134,934,000.00)</b>	\$ 383,231,013.74	\$ 383,374,450.03

### Income Statement

	Historical				Forecast	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Revenue	\$ 4,986,566,000.00	\$ 4,680,380,000.00	\$ 4,618,133,000.00	\$ 4,968,301,000.00	\$ 4,970,160,543.23	\$ 4,972,020,782.45
Gross Profit	\$ 3,366,000,000.00	\$ 3,331,000,000.00	\$ 3,230,758,000.00	\$ 2,890,553,000.00	\$ 3,315,206,480.46	\$ 3,316,447,300.97
Sales, General and Admin.	\$ 1,641,819,000.00	\$ 1,751,275,000.00	\$ 1,770,710,000.00	\$ 1,768,522,000.00		
Research and Development	\$ 85,824,000.00	\$ 957,587,000.00	\$ 1,156,386,000.00	\$ 1,177,923,000.00		
Other Operating Expenses	\$ 35,819,000.00	\$ 44,841,000.00	\$ 66,750,000.00	\$ 79,042,000.00		
<b>Total Operating Expenses</b>	<b>\$ 2,593,462,000.00</b>	<b>\$ 2,753,703,000.00</b>	<b>\$ 2,993,846,000.00</b>	<b>\$ 3,025,487,000.00</b>		
<b>Operating Income/EBIT</b>	<b>\$ 802,538,000.00</b>	<b>\$ 577,297,000.00</b>	<b>\$ 236,912,000.00</b>	<b>\$ (134,934,000.00)</b>	\$ 383,231,013.74	\$ 383,374,450.03

### Operating Statistics

	Historical				Assumptions	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Revenue Growth%	-6.14%	-1.33%	7.58%	0.04%	0.04%	
Gross Margin	0.675	0.712	0.700	0.582	0.667	0.667
Operating Margin	0.161	0.123	0.051	-0.027	0.077	0.077

### Scenario

**Base Case**

### Operating Scenarios - sensitivity analysis

	Assumptions			
	Year 4	Year 5	Year 6	Year 7
Revenue growth (%)	7.04%	7.04%	0.04%	0.04%
Strong case	1			
Base case	2			
Weak case	3			
<b>Gross Margin</b>				
Strong case	1	0.704%	0.667%	-6.96%
Base case	2	0.667%	0.597%	0.597%
Weak case	3	0.597%		
<b>Operating Margin</b>				
Strong case	1	0.177	0.177	
Base case	2	0.077	0.077	
Weak case	3	-0.023	-0.023	