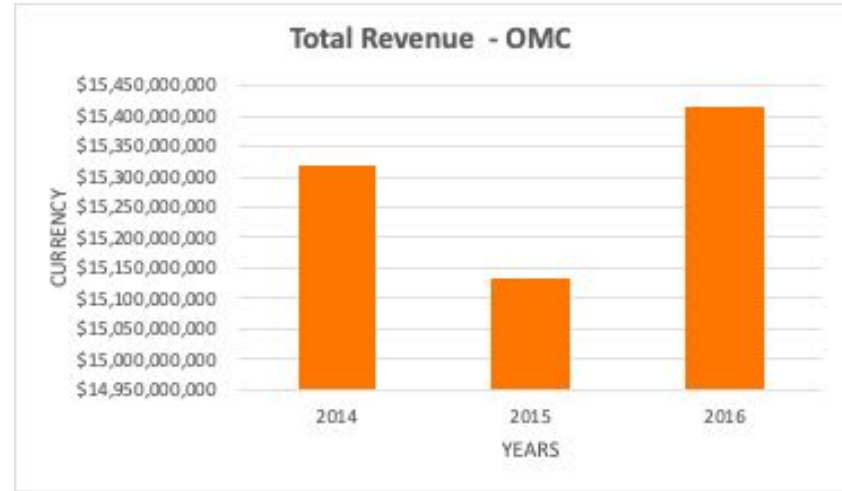


Business Analytics

Analyze NYSE Data

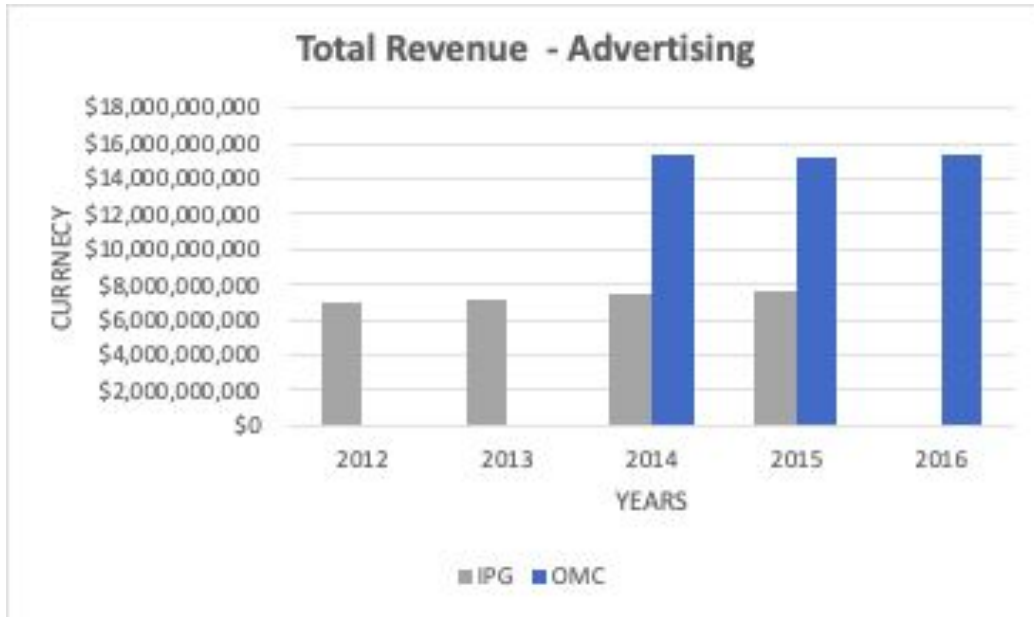
(Advertisement
Industry)

Q. Quantitative analysis of the total revenue of the companies in the Advertising Industry, in different years.



- There are only two companies lying under the Advertising Industry i.e IPG and OMC.
- The above histograms indicate the total revenue for both IPG and OMC primarily describing the revenue difference in different years.
- As we can see, there was no revenue for the OMC industry in the year 2012 and 2013. Similarly, no revenue for the IPG industry in the year 2016.

Explanation

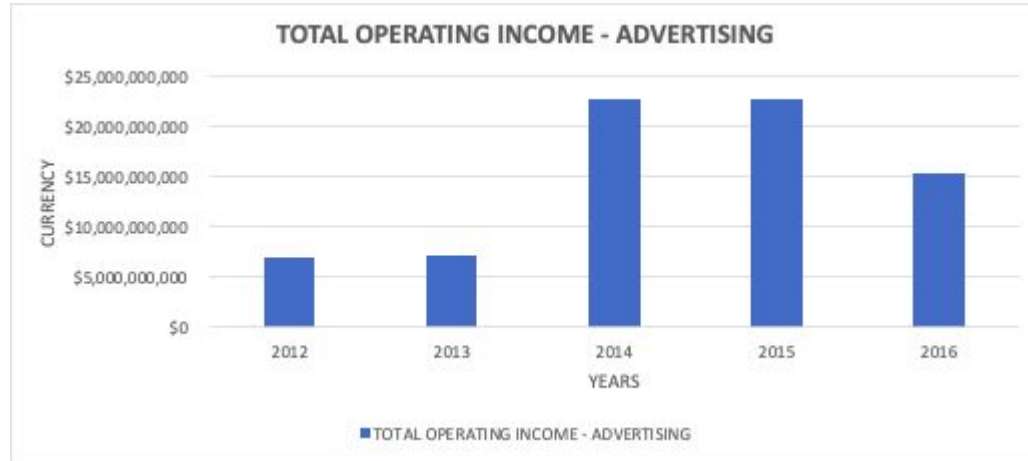


The graph depicts the difference in years for both the industries. Most importantly we can see that the average revenue of OMC is higher than that of IPG.

Average Revenue of IPG
(2012-2015) = \$7307350000.00

Average Revenue of OMC
(2014-2016) = \$15289700000.00

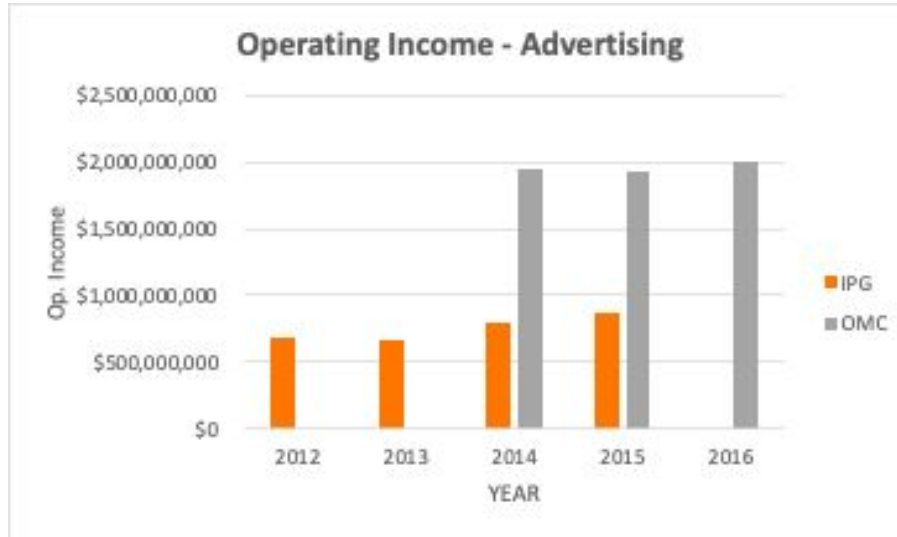
Q. In which year, the operating income was at its peak in the advertising industry?



In the year 2014, the advertising industry incurred the highest operating income i.e. \$22,854,900,000 .

Whereas, in the year, 2012, the total operating income was the lowest i.e. \$6,956,200,000.

Comparison of operating income between different Companies of advertising industry.



There was no operating income for OMC in the years 2012 and 2013 and there was no operating income for IPG in the year 2016.

In both 2014 and 2015 operating income of OMC surpassed the operating income of IPG, as it was more than double of the operating income of IPG.

Measures of Central Tendencies for Operating income of all the companies in the advertising industry.

IPG		OMC	
Mean	748925000.00	Mean	1957700000.00
Standard Error	49803085.16	Standard Error	26520935.13
Median	732850000.00	Median	1944100000.00
Mode	#N/A	Mode	#N/A
Standard Deviation	99606170.32	Standard Deviation	45935607.10
Sample Variance	9921389166666670.00	Sample Variance	2110080000000000.00
Range	212200000.00	Range	88800000.00
Minimum	658900000.00	Minimum	1920100000.00
Maximum	871100000.00	Maximum	2008900000.00
Sum	2995700000.00	Sum	5873100000.00
Count	4.00	Count	3.00

We can see the mean of Operating income of IPG is \$748925000 while for OMC it is \$1957700000.

As, Operating income is an accounting figure that measures the amount of profit realized from a business's operations, after deducting operating expenses, therefore, through the mean of both the companies, it is clear that OMC is running in more profit than IPG.

Standard Deviation

IPG		OMC	
Mean	748925000.00	Mean	1957700000.00
Standard Error	49803085.16	Standard Error	26520935.13
Median	732850000.00	Median	1944100000.00
Mode	#N/A	Mode	#N/A
Standard Deviation	99606170.32	Standard Deviation	45935607.10
Sample Variance	9921389166666670.00	Sample Variance	2110080000000000.00
Range	212200000.00	Range	88800000.00
Minimum	658900000.00	Minimum	1920100000.00
Maximum	871100000.00	Maximum	2008900000.00
Sum	2995700000.00	Sum	5873100000.00
Count	4.00	Count	3.00

The standard deviation of IPG(99606170.32) is more than OMC(45935607.10) which depicts that there is more fluctuation of operating income in IPG.

THANK YOU !!