Analytical Questions:

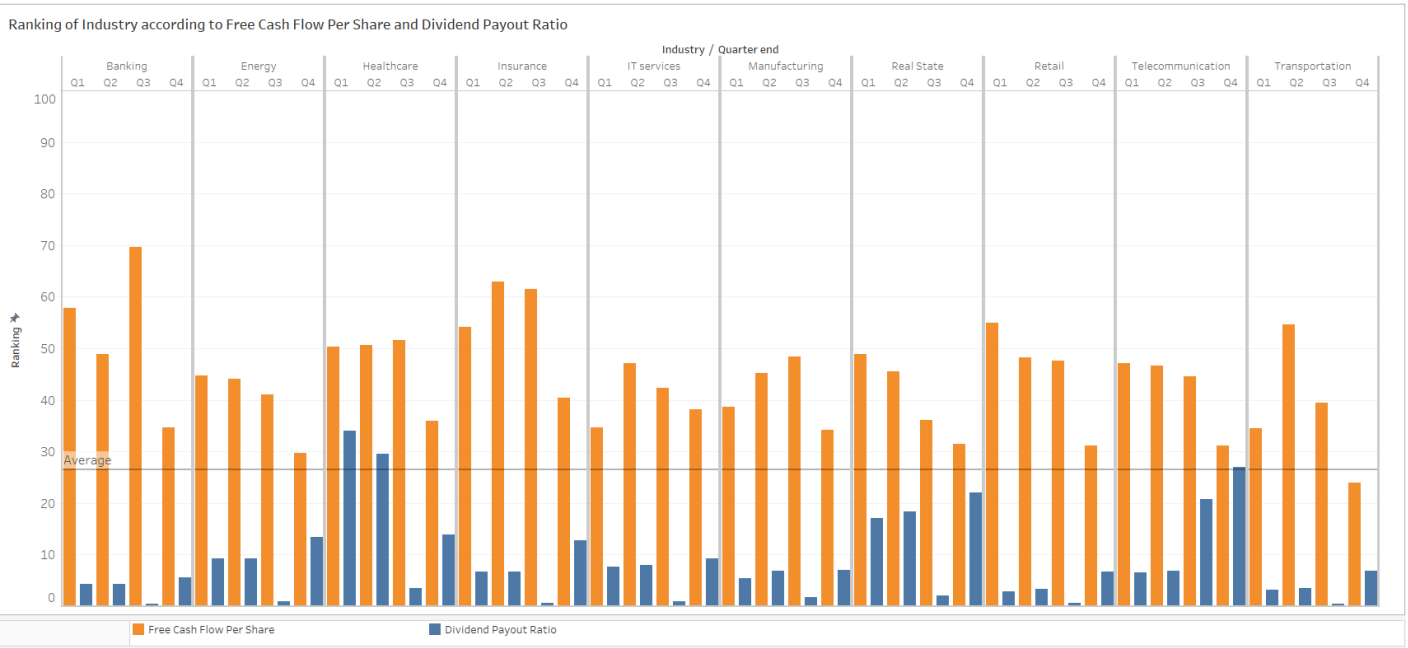
1) Which industry has the highest Free cash flow per share which also has the highest dividend payout ratio or have the best balance between these two variables and showing good growing trend over time with least fluctuations/variability?

2) Which industry gives highest wealth to ongoing shareholders (Cumulative dividends per share + Book value of equity per share) with least P/E and P/B ratio and showing good growing trend over time with least fluctuations / variability?

3) Which company has highest financial performance in least competitive industry?

Following are the visualization that were created in Tableau to answer above questions:

Bar graph with reference line (For Q #1):

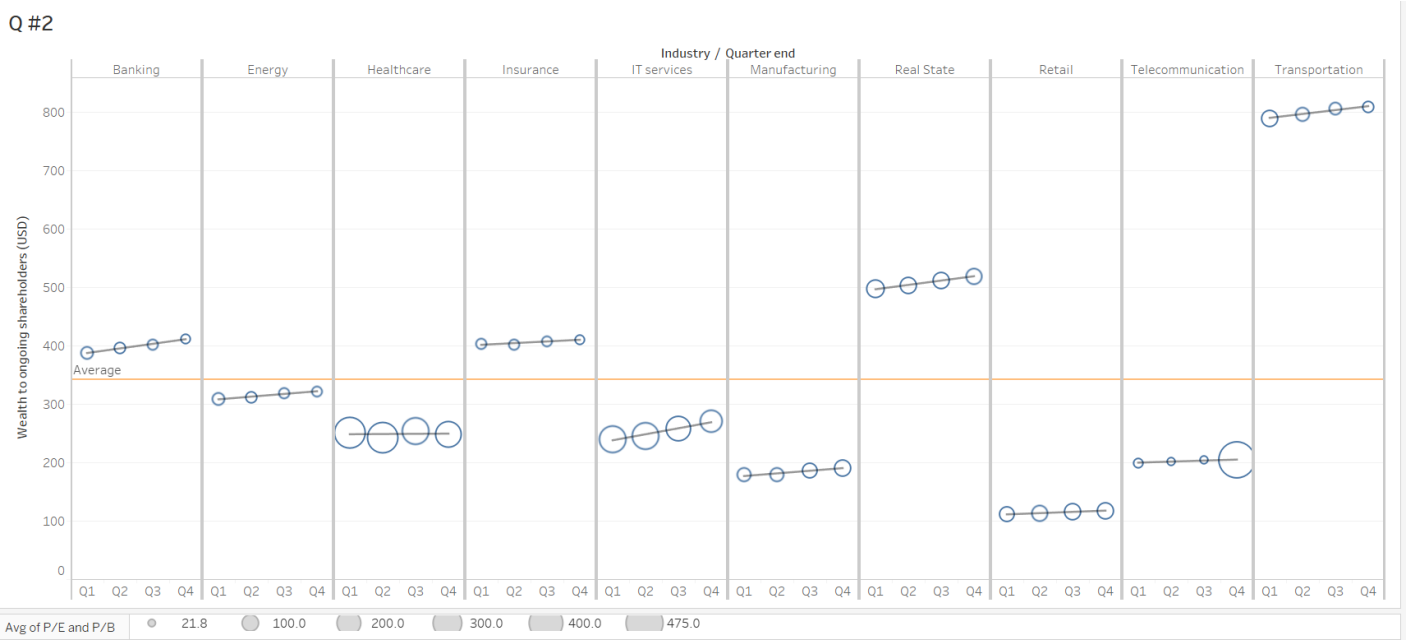


How it answers the question?

By first looking at the industry with highest FCF bar and then compare the bar heights of Dividend payout ratio with those industries whose FCF bars are closest in height and in this comparison distance between height of FCF bar and DPR bar can be considered for finding industry with good balance of these variables. Variability of the trend can be observed with the help of amount of increase and decrease in the bar heights through different quarters

Pros	Cons
Separation of each industry by thick line.	Label of vertical axis is also vertical which is unnatural to read.
Legends are arranged in order and placed in appropriate position; it follows S. Few guidelines of choosing the appropriate place for legends label.	Difficult to match bars corresponding to each quarter due to lack of spacing and separation line.
Easy to find answer of the question by just looking at the length of the graphs for highest value and for good balance one can look at difference between the heights, variability and trend can also be analyzed by looking at the bars from left to right from Q1 to Q4	Due to unavailability of trend line it breaks one of gestalt laws of continuity.
Follows Tufte's guideline of Graphical Excellence by giving the idea in shortest possible time with the help of average line in the middle.	Violates one of Tufte's guideline of avoiding separating keys and legends
Follows Tufte's guideline of good data to ink ratio by only using the necessary amount of ink needed to show the data.	Due to need of showing scale from 0 to 100 space in the upper portion of the graph is wasted. So according to Tufte's Data Density is not maximized.
Follow Tufte's guideline of graphical integrity as choice of appropriate scale and its multiple leads to correct visualization of the data.	
It also leverages human capabilities of filtering and scanning.	
Easy to compare industries and quarters from left to right.	
It clearly follows S. Few guidelines of identifying the message and delivering it.	

Bubble Graph with trend line (For Q #2):



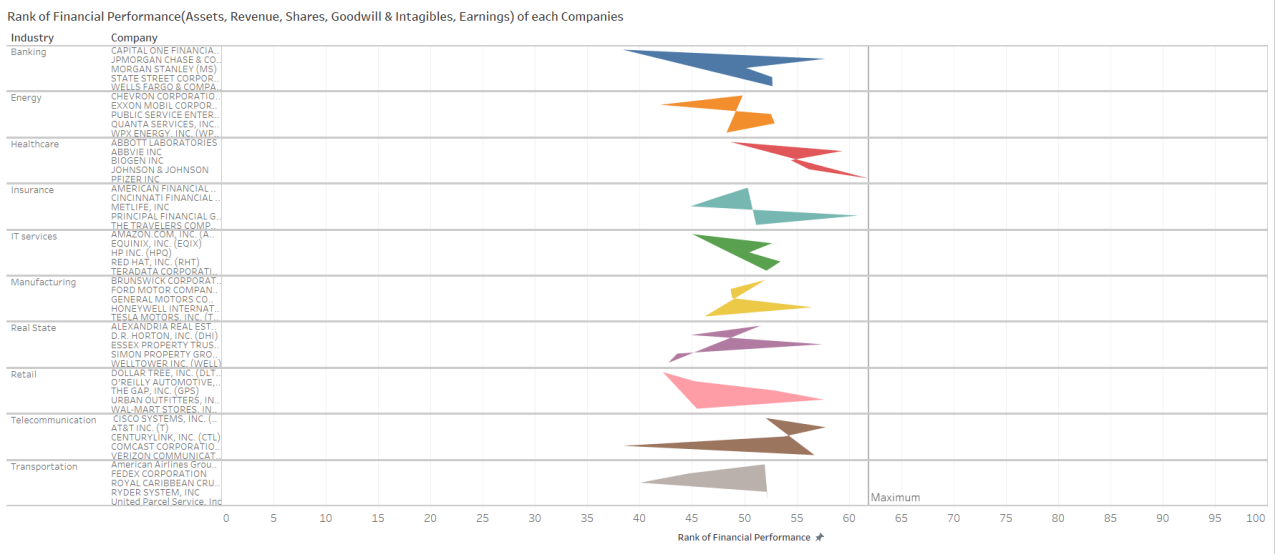
How it answers the question?

By looking for industry whose most bubbles are on the top and whose most bubbles are smallest. Trend line will help in judging the variability of the trend through the quarters.

Pros	Cons
The line to have each industry separated rather than having all of them overlapping in one-time scale. This helped to show trends and allowed for a more holistic view of the data.	Because of the separation line between industries, it is hard to compare the size of each circle with each other
Legends are arranged in order and placed in appropriate position; it follows S. Few guidelines of choosing the appropriate place for legends label.	One variable, in our case the average P/E and P/B are going to be harder to compare without going in closer.
Easy to find answer of the question by just looking at the industry whose most values are higher and have smallest circles. Variability and trend can also be seen be analyzed by looking at the circles from left to right from Q1 to Q4	Counter intuitive as generally large sizes are good but in this case user must look for small circles in order to come up with the answer.
Follows Tufte guideline of Graphical Excellence by giving the idea in shortest possible time with the help of average line in the middle and good use of space to avoid cluttering.	Label of vertical axis is oriented in unnatural way for human to read.

Follows Tufte guideline of good data to ink ratio by using only necessary ink to show data.	Difficult to locate bubbles against quarter due to absence of layering and separation which violates Tufte's guideline of appropriate use of layering and separation.
Follow Tufte’s guideline of graphical integrity as choose of appropriate scale and its multiple led to correct visualization of the data.	Color of legends mismatches the color of bubbles in the graph which is inconsistency.
It also leverages human capabilities of filtering and scanning.	
Easy to compare industries and quarters from left to right.	
It clearly follows S. Few guidelines of identifying the message and delivering it.	
Easy to judge the trend with the help of trend line, it is according to gestalt law of continuity	

Polygons (For Q #3):

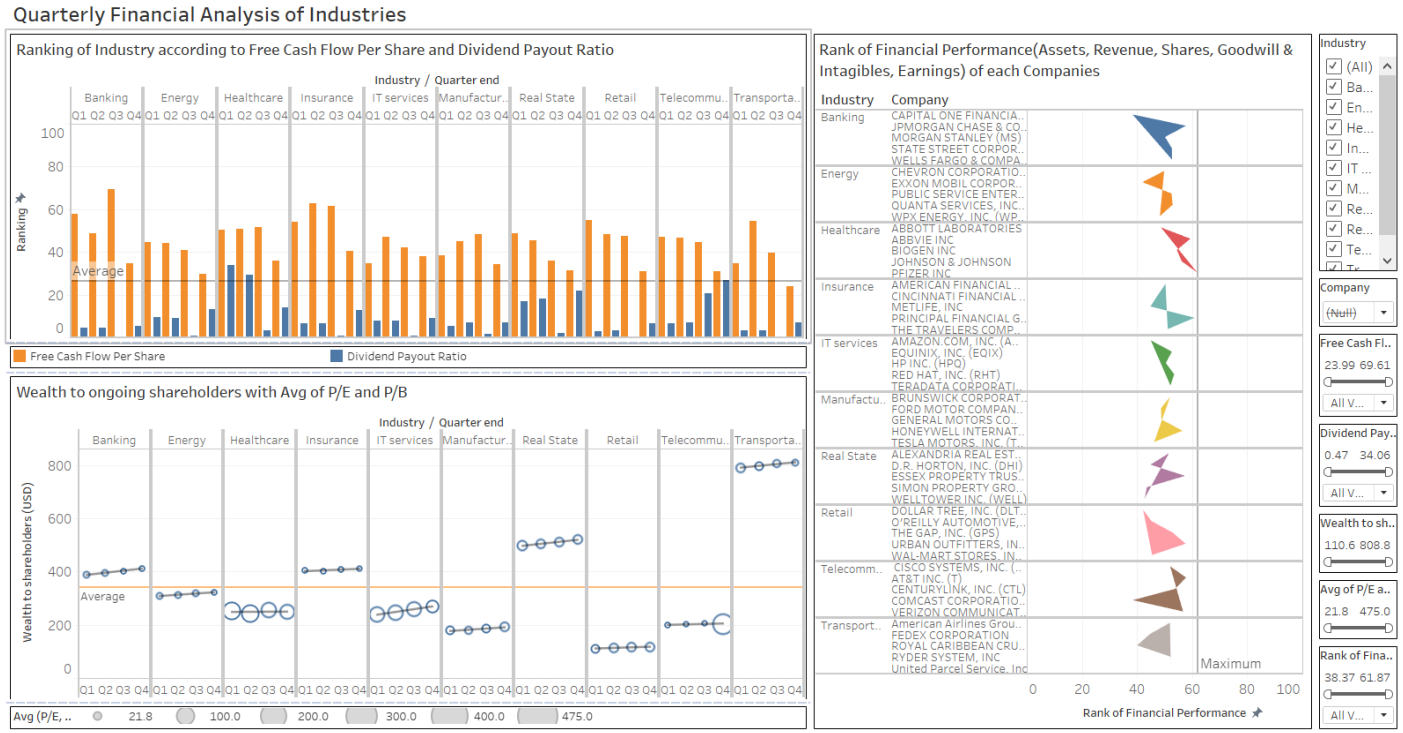


How it answers the question?

By focusing on the companies whose plots are closer to the maximum line and values of other companies in its industry are clustered together by looking at the closeness of the shape of polygon.

Pros	Cons
Follows Tufte's guideline of layering and separation in industry level as each industry is separated by line and each industry is represented by different color, so that it is easy to distinguish between plots.	Violates Tufte's guideline of good use of space as there is empty space in the left side and right side of the plots.
Follows Tufte's guideline of Graphical Excellence by giving the idea in shortest possible time with the help of maximum line in the right. One can easily focus on the plots of those industries whose values are closer to the line and can focus on the closeness of the polygon.	Violates Tufte's guideline of maximizing data density. As large portion/area of the graph is not used.
Follow Tufte's guideline of graphical integrity as choice of appropriate scale and its multiple leads to correct visualization of the data.	Less spacing between companies' name. It violates Tufte's guideline of layering and separation on company level.
It also leverages human capabilities of filtering and scanning.	Label of vertical axis is oriented in unnatural way for human to read.
Easy to compare industries from top to bottom.	Must hover over the vertices of polygon for knowing the corresponding company name.
It clearly follows S. Few guidelines of identifying the message and delivering it.	
Utilizes the concept of closure which is one of gestalt laws.	

Final Dashboard:



Good use of space and placement of the tiles are according to the requirements. Like Tile for question #3 needs to be lengthy as comparison needed to be done from top to bottom and other tiles needed to be wide enough for comparison from left to right. Filters are placed on the extreme right so they can be used for interacting with whole of the dashboard and filters for all important variables for analysis are there with appropriate selectors.