IAQF Student Competition Problem – 2020

Julius Baer, the Swiss private bank, has announced that they will be selling as much as $40 million of structured notes tied to US companies which they have determined will do well based on which party wins the US presidential election in 2020. They have developed two set of stocks, which they expect to exhibit differential performance. For our purposes, we will assume these to be equally weighted portfolios.

<u>The Democratic Portfolio</u>

Exelon Corp.	Home Depot Inc.
Ford Motor Co.	NextEra Energy Inc.
Aptiv PLC	CSX Corp.
Constellation Brands Inc.	McDonald's Corp.
Estee Lauder Cos.	Simon Property Group Inc.
SunPower Corp.	First Solar Inc.
Coca-Cola Co.	Norfolk Southern Corp.
Walmart Inc.	

<u>The Republican Portfolio</u>

Honeywell International Inc.	Amazon.com Inc
Alphabet Inc.	Chevron Corp.
ConocoPhillips	Facebook Inc.
Marathon Oil Corp.	Merck & Co.
Citigroup Inc.	PayPal Holdings Inc.
Salesforce.com Inc.	American Express Co.
QUALCOMM Inc.	Visa Inc.
Gilead Sciences Inc.	

Ignoring whether these seem to be the appropriate securities in each portfolio, it seems apparent that these securities were not chosen through a quantitative methodology but, rather, through qualitative means.

We would like you to: (a) determine through <u>quantitative</u> methods (*e.g.* not descriptive or judgmental) whether there are truly differences between these two portfolios and to highlight those differences; (b) determine, again, using <u>quantitative</u> methods whether these portfolios should be expected to perform differently depending on whether the White House is occupied by a Republican or a Democrat (the term of the structured notes is one year starting from January 29, 2020); and (c) construct structured notes from the portfolios which have a differentiated payoff depending on the outcome of the election.