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## Tactical Asset Allocation and Presidential Elections

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#### Abstract

We analyze tactical asset allocation decisions around presidential elections using traditional methodology and then in the context of an efficient frontier analysis rather than the traditional stock-only or bond-only allocations in prior literature. To our knowledge, this is the first paper in the literature that addresses asset returns around presidential elections in a mean-variance efficient frontier framework. We find that the efficient frontier is sensitive to presidential time periods, with Democrats providing the best risk-reward opportunities over the long term, while Republicans provide better opportunities over the past quarter century.



#### **1. Introduction**

The issue of tactical asset allocation (TAA) around calendar events—such as U.S. presidential elections—is a controversial issue in finance.<sup>1</sup> At the heart of the matter is whether or not the capital market is efficient in the sense that security prices fully reflect the information content of known events. If so, then calendar events, such as presidential elections, are irrelevant to current investment decision making because security prices already reflect the information content of any perceived patterns or cyclicality. Conversely, if investors evaluate the investment consequences of calendar events in a somewhat inefficient market, or if the outcomes of presidential elections impact the returns on various asset classes, then a series of questions emerge that are relevant to tactical investing.

Applied to U.S. presidential elections—a prominent four-year calendar event—these active investing questions are as follows: Are asset prices impacted by a four-year presidential election cycle? If so, what are the effects on different asset classes (stocks, bonds, bills, etc.) according to the political party elected into office? More importantly, as presidential elections come and go should investors depart from their long-term or strategic asset allocation to pursue a TAA posture? Also, can the outcomes of presidential elections be forecasted and, if so, what are the factors that impact these outcomes?

Our initial focus is on whether asset prices are impacted by the four-year presidential election calendar and whether asset returns vary by the political party in office. If asset prices are related to presidential elections, then investors will want to consider information pertaining to election outcomes in making asset allocation decisions. Tactical investing around a four-year



election calendar would hold the possibility of earning superior returns (alpha). Anecdotal evidence suggests that many investors follow expected election outcomes closely. However, prior evidence on movements in asset prices around presidential elections is incomplete, provides mixed results, and is largely dated. We provide evidence, contrary to earlier findings, that there is no statistically significant pattern in asset prices (with the exception of T-bills) around U.S. presidential elections over the past two decades. Our findings also show that political party differences are statistically insignificant, although the raw average return difference on common stocks continues to favor the Democrats, albeit by a smaller margin. While Government bond and bill returns are higher under Republican administrations— consistent with a historical pro-active stance against inflation—the only statistical difference during the 1981 to 2000 period is that T-bill returns remain significantly higher under Republican administrations.

We then argue that the TAA decision around presidential elections should be addressed in the context of an efficient frontier analysis of portfolio opportunities rather than the traditional stock-only or bond-only allocations examined in prior literature. To our knowledge, this is the first paper in the literature that addresses asset returns around presidential elections in a meanvariance efficient frontier framework. We find that the efficient frontier is sensitive to presidential time periods, with Democrats providing the best risk-reward opportunities over the long term, while Republicans provide better tradeoffs over the past quarter century when considering bond-stock allocations typical for diversified investors. Moreover, when segmenting the value stock (style) premium by political party over the past quarter century, we find that Republicans provide a better risk-reward tradeoff over Democrats when looking at portfolios of



value stocks, bonds and bills.<sup>2</sup> We also present a simple model that utilizes economic variables to forecast election results.

The remainder of the paper is organized as follows: In Section 2, we review the established literature on asset prices around U.S. presidential elections. In Section 3, we present our empirical findings on broad asset classes including stocks, bonds, and bills. In Section 4, we discuss the tactical asset allocation implications of our findings for broad asset classes. In Section 5, we consider the TAA implications of other return phenomena, particularly the value stock (style) premium segmented by four-year election periods. In Section 6, we present a presidential election forecasting model. A summary and conclusion, including some caveats, is then presented in Section 7.

#### 2. Asset Prices and Presidential Elections

The notion that presidential elections and their outcomes may affect the economy and asset prices is not new. Nordhaus (1975) and MacRae (1977) articulate the idea of a political business cycle based on the incentives for politicians to stimulate the economy prior to presidential elections. Grier (1987) argues that Federal Reserve monetary policy is consistent with accommodating a political business cycle. Allvine and O'Neill (1980) note that John F. Kennedy was the first president to pursue overtly and systematic policies aimed at controlling the level of aggregate economic activity. Allvine and O'Neill also present evidence of a four-year cycle in the stock market during the post-war period and provide weak evidence that stock prices rise over the two years prior to a presidential election. This effect is more pronounced in the latter period, 1961-1978 vs. 1948-1978, consistent with 1960 being the first year of a more actively managed economy. Dobson and Dufrene (1993) examine the impact of U.S.



presidential elections on international security markets. They find evidence of a significant structural change in the relation between international markets and the U.S. market around presidential elections. International markets become more highly correlated with the S&P 500 in the month surrounding the election.

The issue of which political party is "better" for investors has also been studied. The results of these studies are mixed. Niederhoffer, Gibbs, and Bullock (1970) and Riley and Luksetich (1980) find that stock returns are higher around the time that a Republican is elected to office. Expanding upon Allvine and O'Neill (1980), Huang (1985) presents evidence of a pattern in common stock returns over the four-year presidential election cycle and over different party administrations. Looking at sub-periods from 1932 through 1980, he finds that returns during the last two years of a presidential cycle are higher than returns over the first two years. He finds that this effect is more pronounced for Democrats and, similar to Allvine and O'Neill (1980), it is more pronounced in the more recent period (1961-1980). Stovall (1992) and Johnson and Chittenden (1999) also present evidence of higher returns during the last two years of a presidential election cycle. Johnson and Chittenden (1999) also examine returns on broad asset classes from 1929-1996 in the years surrounding presidential elections and segment these results by political party. They find that the returns on small-cap stocks are higher under Democratic administrations, while returns on bonds are higher under Republican administrations. These results hold for both nominal and real returns, as inflation is not significantly different under either party. A recent study by Beyer, Jensen, and Johnson (2004) finds higher T-bill returns under Republican administrations. They argue that shifts in Federal Reserve monetary policy dominate political party and political gridlock in explaining stock and bond returns, although Fed policy may be related to political party.



#### **3. Empirical Results—Broad Asset Classes**

Given the dated and disparate evidence on asset prices, presidential election cycles, and political party effects, we update and expand these prior results. We first update the results of Huang (1985) on large-company stock returns. We then extend the research of Johnson and Chittenden (1999) to consider the relation between political party and post-election returns for several broad asset classes, including large-company stocks, small-company stocks, long-term Government bonds, and Treasury bills, over various sub periods.

#### Presidential Elections and Common Stock Returns

Huang (1985) finds significant differences among the average annual returns on largecompany stocks over the four years of the presidential election cycle, and in the returns over years three and four versus years one and two, particularly for the 1961-1980 period. He finds that these results are more pronounced under Democratic Party presidents. We update these results for the 1981-2000 period and find no significant difference in returns on large-company stocks over years three and four versus years one and two of the presidential election cycle. We also find no statistically significant differences in stock returns for Democratic versus Republican presidents, although the average return differential still favors the Democrats, albeit by a smaller margin. These results are shown in Table 1.



# Table 1 Mean Annual Rates of Return Around Presidential Elections

Returns are for large-company stocks using Ibbotson Associates data. 1961-1980 analysis is per Huang (1985).

Year of Election Cycle	$19\overline{81-2000} \ (n=20)$	$1\overline{961}$ -1980 (n = 20)
1	20.42%	1.80%
2	13.32%	-6.94%
3	23.35%	23.35%
4	8.94%	20.56%
<i>F</i> -statistic	1.20	7.64***
Years 1 and 2	16.87%	-2.57%
Years 3 and 4	16.15%	21.95%
<i>t</i> -statistic	0.11	4.70***
Party in Power	1981-2000	1961-1980
Democrat	18.21%	12.1%
Republican	15.37%	6.1%
t-statistic	0.43	0.77
Democrat		
Years 1 and 2	18.31%	3.33%
Years 3 and 4	18.11%	20.87%
<i>t</i> -statistic	0.02	2.10**
Republican		
Years 1 and 2	15.91%	-11.42%
Years 3 and 4	14.84%	23.58%
<i>t</i> -statistic	0.14	2.10***

\*\*\* Statistically significant at the 1% level.

\*\* Statistically significant at the 5% level.

\* Statistically significant at the 10% level.



Huang finds average annual returns of 12.1% under Democratic administrations versus 6.1% under Republicans, but the difference is not statistically significant. He does find significant differences for Democrats of 3.33% versus 20.87% for post-election years one and two versus years three and four, respectively. He also finds significant differences for Republicans of -11.42% versus 23.58% for post-election years one and two versus years three and four. We find that these average return effects largely go away in the 1981-2000 period. For example, average annual returns on large company stocks are 18.21% for Democrats and 15.37% for Republicans. The average returns for Democrats are 18.31% versus 18.11% for post-election years one and two versus three and four, respectively, while these returns are 15.91% and 14.84% for Republicans. None of the return differences are statistically significant in the 1981-2000 period.<sup>3</sup>

#### Presidential Elections and Returns on Major Asset Classes

We next examine the behavior of U.S. capital markets following presidential elections for the period 1929-2000, using data from Ibbotson Associates (2004). We examine the returns on four asset classes (large-company stocks, small-company stocks, long-term U.S. Government bonds, and Treasury bills) for this period and for various sub periods. We examine average annual returns for the four years following each presidential election and segment the results by political party. The results are shown in Table 2.



### Table 2

### **Returns on Asset Classes Around Presidential Elections Segmented by Political Party**

Returns are average returns for four-year presidential election cycles, calculated using Ibbotson Associates data.

	Large-	Small-	Long-Term	
	Company	Company	Government.	
Time Period	Stocks	Stocks	Bonds	T-Bills
1929-2000 (n = 72)				
All	12.23%	17.13%	5.71%	3.88%
Democrat	14.94%	25.53%	3.68%	2.79%
Republican	8.85%	6.62%	8.25%	5.26%
t-statistic	1.29	2.43**	-2.06**	-3.45***
1020, 1060 (n - 22)				
1929-1900 (II – 32) A 11	11 150/	17 110/	2 150/	1 1 20/
All	11.13%	17.11%	5.15%	1.12%
Democrat	15.55%	27.49%	3.22%	0.48%
Republican	4.16%	-0.20	3.04%	2.18%
t-statistic	1.26	1.82*	0.09	-5.92***
10(1,1000(, 00)				
$\frac{1961-1980 (n=20)}{1961-1980 (n=20)}$	0.600/	10 500/	2 500/	5.500/
All	9.69%	19.58%	2.78%	5.53%
Democrat	12.1%	29.48%	0.04%	5.30%
Republican	6.1%	4.73%	6.89%	5.89%
t-statistic	0.77	1.87*	-2.68**	-0.54
1981-2000 (n = 20)				
All	16.51%	14.72%	12.74%	6.66%
Democrat	18.21%	14.73%	10.31%	4.79%
Republican	15.37%	14.71%	14.37%	7.91%
•				
t-statistic	-0.43	0.00	-0.65	-2.89***

\*\*\* Statistically significant at the 1% level.

\*\* Statistically significant at the 5% level.

\* Statistically significant at the 10% level.



For the entire 1929-2000 period, the average annual return on large-company stocks was 12.23%, averaging 14.94% during Democratic administrations and 8.85% during Republican administrations. The difference is not statistically significant. Small-company stocks averaged returns of 17.13% during this period, averaging 25.53% during Democratic administrations and 6.62% under Republicans. The small-company stock return difference is statistically significant at the 5% level. In turn, the average returns on long-term Government bonds and T-bills were statistically higher under Republican administrations than under Democrats (8.25% vs. 3.68% for long-term Government bonds, and 5.26% vs. 2.79% for T-bills). These empirical results are similar to those of Johnson and Chittenden (1999).<sup>4</sup>

We also analyze the returns for three sub periods—1929-1960 (before the acknowledgement of active management of the economy around presidential elections); 1961-1980 (a twenty-year period characterized by Allvine and O'Neill (1980) as the beginning of overt and systematic presidential policies aimed at controlling the level of aggregate economic activity, also analyzed by Huang (1985)); and 1981-2000 (the more recent twenty-year period, characterized by growth in an integrated global economy and a Fed Chairman whose term has spanned multiple party administrations). From 1929-1960, returns on large- and small-company stocks are not statistically different under either party—although the average return differences are noticeably higher under Democratic administrations. During this sub period, returns on long-term Government bonds are statistically indistinguishable, while T-bill returns were higher under Republican administrations. From 1961-1980, returns on large- and small-company stocks were also not statistically different under Democratic and Republican administrations, while returns on long-term Government bonds are statistically higher under Republican administrations, and T-Bill return differences are statistically indistinguishable. Again, the average return difference for



large- and small-company stocks is higher under Democratic administrations, although a narrowing of the gap is evident for large-company stocks. For the more recent period, covering 1981-2000, there is no statistical evidence of a political party effect on stock and bond returns. While large- and small-company average returns are higher under Democratic administrations (albeit, marginally so for small-company stocks), and long-term Government bond returns are higher under Republican administrations, the return differences are not statistically significant.<sup>5</sup> As with the 1929-1960 period, T-bill returns are significantly higher under Republican administrations.

On balance, we find that the political party effect on common stocks reported in prior studies does not hold for the more recent 1981-2000 period. Except for T-bills, the significant political party return differences reported by Huang (1985) and Johnson and Chittenden (1999) do not hold for varying sub periods, notably the 1981-2000 period. The fading party effect may reflect an anomalous twenty-year period and long-run trends may reemerge in the future. However, the results for the recent period seem consistent with financial markets becoming more efficient over time with respect to this information. Although conjecture, the results are consistent with the notion that in an integrated global economy there is less room for short-term manipulation of the economy for political purposes. This is consistent with one Federal Reserve Chairman, Alan Greenspan, continuing to serve after seventeen years, four presidents, and two political parties. The continuation of higher T-bill returns under Republican administrations is consistent with Beyer, Jensen, and Johnson (2004). Historically, Republicans are perceived as having a more pro-active stance against inflation, while Democrats pursue more expansionary monetary polices. This effect has persisted in the recent period, despite the continuity of the Fed Chairman.<sup>6</sup>



#### **4.** Tactical Asset Allocation Implications

Our finding that the impact of U.S. presidential elections on stock and bond prices has diminished over time and is no longer statistically significant should not be interpreted to mean that presidential election outcomes are a matter of indifference to investors. Over the past two decades the average return on stocks (at least large cap stocks) is still higher (economically but not statistically) under Democratic than Republican administrations, while the average return on bonds and bills are higher under Republicans. This latter finding gives some credence to the notion that active investors should increase their stock allocations (relative to bonds and bills) under Democratic administrations and increase their bond and bill allocations under Republican administrations.

It is also important to emphasize that the judicious mix of stocks, bonds and bills in a portfolio, whether or not segmented by presidential election periods, is also impacted by risk and diversification considerations as measured by own volatilities and correlations. From a portfolio management perspective, a more complete measure of whether Democrats or Republicans are actually better for investors requires an "efficient frontier" analysis of opportunities based on average returns, standard deviations, and correlations among asset classes. In this regard, Figures 1 and 2 show two respective portfolio frontiers of stocks, bonds and bills based on long-term return data over the 1926-2003 period and asset returns over the past quarter-century. Figure 2 spans two twelve-year periods of Democratic and Republican presidencies including James E. Carter (1977-1980)-William J. Clinton (1993-2000) and Ronald Reagan (1981-1988)-George H. W. Bush (Bush I, 1989-1992).









Figure 2: Efficient Frontier: 12-Year Periods Democrats (D) (Carter: Clinton) vs. Republicans (R) (Reagan: Bush I) % Stocks/Gov Bonds/T-Bills

Figure 1 reveals that the long-term risk-reward tradeoff is better under Democratic presidents than Republican presidents. The portfolio frontier under Democrats dominates the Republican frontier everywhere except at a mix of about 35% stocks and 65% bonds and bills. While Republicans provide investors with positive long-term returns on stocks and bonds, the narrow spread between stock and bond returns results in somewhat lower diversification opportunities when compared to the risk management opportunities under Democrats. To support this, Panel A of Table 3 shows that the historical correlation (1926-2003) between Government bond and large-company stock returns is 0.08 under Democratic administrations and 0.21 under Republican administrations. In addition, the long-term correlation among Government bond and T-Bill returns is -0.02 under Democrats and 0.32 under Republicans.



With lower correlation in returns under Democrats, these ex post values point to somewhat better

(arguably slightly) long-term diversification opportunities under Democratic administrations.

#### Table 3

#### **Correlation in Asset Class Returns by Presidential Party**

Panel A and B correlations are based on returns on large-cap stocks, Government bonds, and T-Bills obtained from Ibbotson Associates (2004). Panel C correlations are based (in part) on returns on S&P/Barra large-cap value stocks obtained from <u>www.barra.com</u>.

Panel A:	Historical Correlation in Stocks, Bonds, and Bills:
	(1926-2003)

	Large Cap	Gov. Bonds	T-Bills
Democrat			
Large-cap stocks	1.0000		
Government bonds	0.0829	1.0000	
T-Bills	0.0614	-0.0244	1.0000
<u>Republican</u>			
Large-cap stocks	1.0000		
Government bonds	0.2086	1.0000	
T-Bills	- <u>0.0164</u>	0.3180	1.0000

Panel B:	Correlation in Stocks, Bonds, and Bills:
	Carter (1977-1980)-Clinton (1992-2000)
	Reagan (1981-1988)-Bush I (1989-1991)

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	Large Cap	Gov. Bonds	T-Bills
Democrat			
Large-cap stocks	1.0000		
Government bonds	0.2028	1.0000	
T-Bills	0.2550	-0.2728	1.0000
Republican			
Large-cap stocks	1.0000		
Government bonds	0.5977	1.0000	
T-Bills	-0.2653	0.0484	1.0000

Panel C:	Correlation in Value Stocks, Bonds, and Bills:
	Carter (1977-1980)-Clinton (1992-2000)
	Reagan (1981-1988)-Bush I (1989-1991)

	Large Value	Gov. Bonds	<b>T-Bills</b>
Democrat			
Large Value stocks	1.0000		
Government bonds	0.4971	1.0000	
T-Bills	0.2369	-0.2728	1.0000
<u>Republican</u>			
Large-cap stocks	1.0000		
Government bonds	0.5304	1.0000	
T-Bills	-0.1816	0.0484	1.0000

Figure 2 presents a noticeably different asset allocation picture by presidential years over the past quarter century; particularly, the two twelve-year periods covering Carter-Clinton and Reagan-Bush I. While a stock-only portfolio provides better average returns under Democratic presidents, the Republican frontier dominates the Democrat frontier over a bond-stock allocation range that diversified investors might actually choose. The figure shows that along the 40% to 80% stock component of the Democrat frontier, the corresponding Republican mix of stocks, bonds, and bills provides a better risk-reward tradeoff. Hence, when comparing portfolio frontiers under Democratic and Republican presidents over the past quarter century, we see that the Democrat frontier provides inferior opportunities, excepting at the extremes of risk tolerance such as 90-100% equities and less than 40% equities.

The source of improved portfolio opportunities under Republicans over the past quarter century appears to be driven by the large average return difference, at 8.07% (14.37%-6.3%), on Government bonds under Republican versus Democratic administrations. This has the effect of positioning the Republican frontier at a relatively higher starting point in the presence of a



relatively small spread between large company stock returns under Democrats versus Republicans. However, Figure 2 shows that the Republican frontier is somewhat "flatter" than the Democrat frontier over the past quarter century.

That a risk management disadvantage might exist under Republican presidents is supported in Panel B of Table 3. The panel shows a continuing lower correlation between asset returns on Government bonds and large-company stocks under Democrat presidents, at 0.20, versus a higher correlation under Republican presidents, at 0.60. Moreover, the correlation between Government bond and T-Bill returns is still lower, at -0.27 and 0.05, under Democratic versus Republican presidencies. Taken together, the portfolio frontiers segmented by the political party in office (Figures 1 and 2) are sensitive to both the time period and the party in office, making TAA by presidential parties a relevant consideration for active-minded investors.

#### **5. Empirical Results—Value Versus Growth**

To further investigate the opportunities for tactical asset allocation around U.S. presidential elections, we examine another return phenomena segmented by presidential party, notably, the value stock (style) premium. In this context, it is well known (for examples, see Fama-French (1992) and Grant (1995)) that "value" stocks with high book-to-price ratio and/or high dividend yield have outperformed the low yield "growth" stocks over long periods of time. The portfolio style question that we investigate is whether the value stock premium is a phenomenon of Democratic or Republican administrations.

The idea that value stocks might outperform growth stocks under Republican administrations is consistent with a public (or media) perception that Republicans cater to the financial needs of large- and well-established companies (often referred to as "Old Economy"



companies) while Democrats cater to large- and small-growth-oriented companies (so-called "New Economy" companies). Moreover, if Republicans do provide better returns on bonds and bills, then companies having "fixed income" characteristics—such as high dividend-paying value stocks—would show relatively better performance than growth stocks under Republican administrations. In turn, if Democrats are more pro-active on the growth side, then stocks of large- and small-growth companies would be expected to perform better under Democratic administrations.

Again, the tactical asset allocation decision should be examined in the context of annualized returns (a reflection of wealth accumulation) and own volatilities and correlations. In this context, Figure 3 presents two value-style portfolio frontiers, each based on twelve years of Democratic and Republican presidencies; specifically, Reagan-Bush I from 1981-1988 and 1989-1992, and Carter-Clinton from 1977-1980 and 1993-2000. Each frontier is constructed using portfolio inputs (average returns, standard deviations and correlations) for value stocks, bonds, and bills over the past quarter century.





Figure 3: Efficient Frontier: 12-Year Periods Democrats (D) (Carter: Clinton) vs. Republicans (R) (Reagan: Bush I) % Value Stocks/Gov Bonds/T-Bills

While the average return on value stocks is about the same for Democratic and Republican presidents, Figure 3 shows that a style-based mix of value stocks, bonds and bills favors the Republicans. That is, over the past quarter century, the risk-reward tradeoff is everywhere better under Republican administrations than under Democratic ones; specifically, Reagan-Bush I versus Carter-Clinton. Upon combining our asset allocation findings in recent decades, Figures 2 and 3, we see that recent Republican presidents have not only provided better portfolio tradeoffs in a range of stocks, bonds and bills that diversified investors might actually choose, but they have also provided better opportunities in a world where value "wins."

Again, the efficient frontier improvement under Republican administrations over the past quarter century seems driven by the large difference in average returns on Government bonds under Republican (Reagan-Bush I) versus Democratic presidencies (Carter-Clinton). This risk



management qualification is reinforced in Panel C of Table 3 by the slightly higher correlation in asset returns for Government bonds and large-cap value stocks under Republicans and the higher correlation in Government bonds and T-Bills under Republican versus Democratic administrations that we noted earlier (Panel B of Table 3).

Another consideration on the question of asset returns, presidential elections, and TAA is industry effects, which investors may interpret as a sub-classification of equity style. That active investors should be concerned with industry-based considerations around presidential elections is supported by Kim (2004) and Knight (2004). In this context, Knight finds that during the 2000 election the stock prices of Bush II (George W. Bush)-favored firms and industries performed better than Gore-favored firms and industries when the probability of a Bush victory went up. For example, tobacco stocks went up during a prospective Bush victory (where probabilities were assessed from political futures prices on the Iowa electronic market<sup>7</sup>), while the stocks of Microsoft competitors and alternative energy sources went down.<sup>8</sup> While further industry research is necessary, the alpha-generating results around U.S. presidential elections seem promising.

#### 6. Forecasting Presidential Elections

If an investor wants to re-allocate funds among asset classes around presidential election outcomes in the short-run, then it will be useful to forecast which party will be elected to office. Given that stocks have historically performed better during Democratic administrations (although insignificantly so in recent years) and bonds and bills have performed better under Republicans, an investor might want to choose a higher stock allocation under Democrats (lower bond and bill allocations) and vice versa for stocks and bond/bills under Republicans.



Additionally, investors may wish to employ TAA around value and growth strategies or other models of sector allocation, for example, those supported by Kim (2004) and Knight (2004). Such tactical departures from a long-term or strategic asset allocation make sense if the investor can in fact forecast presidential election outcomes with a measure of certainty.

While political pundits and media pollsters emphasize a sampling of voter perceptions of presidential candidates as helping to predict election outcomes, we examine the use of economic factors as potential predictors of presidential election outcomes. To illustrate the potential of economic factors, we present the results of an *ex post* model of presidential election outcomes that relies on a consensus approach of three economic variables, namely, the CPI inflation rate, the misery index (sum of the CPI inflation rate and the civilian unemployment rate), and the four-year growth in real personal consumption.<sup>9</sup>

Based on an ad hoc analysis of ex post factors, a turnover of the incumbent political party is predicted if: 1) the CPI inflation rate exceeds 4.5%, 2) the change in the misery index is greater than zero, or 3) the four-year real consumption growth is less than 11.75%. A consensus prediction of the incumbent party getting reelected is obtained when at least two-out-of-three of the predictors yield a prediction of reelection. Note that the model picks up the effect of inflation twice (once in the CPI inflation rate and again in the misery index) since most voters are impacted by inflation while the impact of unemployment is more narrowly confined.



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outcomes. The Prediction of Incumbent Party Elected variable is a consensus forecast equal to yes if at least two out of three of the predictors Economic data are per Renshaw and Trahan (1990) through 1960 and the Economic Report of the President (2004) thereafter. The CPI inflation rate, Misery Index (sum of CPI inflation rate and civilian unemployment rate), and real consumption increase are used as predictors of election indicate that the incumbent party will be reelected. \* Denotes a prediction that the incumbent party will not be elected measured by a CPI inflation rate of more than 4.5%, a change in the misery index greater than zero, or a real consumption increase of less than 11.5%.

Prediction of	Incumbent	Party Elected	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Yes	
Incumbent	Party	Elected	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	No	
	Party	Elected	R	R	R	D	D	D	D	D	R	R	D	D	R	R	D	R	R	R	D	D	R	
	President	Elected	Harding	Coolidge	Hoover	Roosevelt	Roosevelt	Roosevelt	Roosevelt	Truman	Eisenhower	Eisenhower	Kennedy	Johnson	Nixon	Nixon	Carter	Reagan	Reagan	Bush I	Clinton	Clinton	Bush II	
Real	Consumption	Increase	6.7%*	29.2%	9.8%*	-11.8%*	20.6%	13.6%	$10.8\%^{*}$	22.4%	13.1%	16.7%	11.7%*	18.2%	22.4%	16.9%	12.4%	11.2%*	14.5%	17.7%	8.5%*	13.9%	19.9%	
Change in	Misery	Index	7.6%*	-13.4%	-2.6%	10.2%*	4.5%*	-2.5%	-12.6%	3.9%*	-3.1%	3.5%*	1.0%*	-1.9%	2.1%*	0.7%*	3.6%*	7.0%*	-8.2%	-1.5%	0.5%*	-1.7%	-1.3%	
	Misery	Index	19.2%	5.8%	3.2%	13.4%	17.9%	15.4%	2.8%	6.7%	3.6%	7.1%	8.1%	6.2%	8.3%	9.0%	12.6%	19.6%	11.4%	9.9%	10.4%	8.7%	7.4%	
CPI	Inflation	Rate	15.2%*	0.3%	-1.2%	-10.2%	1.0%	0.8%	1.6%	2.7%	0.9%	2.9%	1.5%	1.0%	4.7%*	3.4%	4.9%*	12.5%*	3.9%	4.4%	2.9%	3.3%	3.4%	
Civilian	Unemployment	Rate	4.0%	5.5%	4.4%	23.6%	16.9%	14.6%	1.2%	4.0%	2.7%	4.2%	6.6%	5.2%	3.6%	5.6%	7.7%	7.1%	7.5%	5.5%	7.5%	5.4%	4.0%	
		Year	1920	1924	1928	1932	1936	1940	1944	1948	1952	1956	1960	1964	1968	1972	1976	1980	1984	1988	1992	1996	2000	

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Not surprisingly, the ex post model does a reasonable job of properly classifying U.S. presidential election outcomes. The last two columns in Table 4 show whether or not the incumbent party was reelected and the consensus prediction of whether or not the incumbent party would be reelected. A match in these two columns indicates that the ex post model makes the correct prediction, while a mismatch indicates that the model's prediction is incorrect.

The model errs in two of 21 elections. In 1952, Dwight Eisenhower defeated incumbentparty candidate Adlai Stevenson, even though all three economic predictor variables forecasted that the incumbent party would win the election. In this case, the candidacy of a popular general from World War II prevailed over strong economic fundamentals registered by the incumbent party. The other case of an error in the model's prediction was the presidential election in 2000, when George W. Bush narrowly defeated incumbent party candidate Al Gore. Again, all three economic predictor variables were consistent with a victory by the incumbent-party candidate; in this case, Al Gore. As is well known, the results of the 2000 presidential election were hotly contested, coming down to the court-challenged ballots in Florida and the case of the "hanging chads."

While the screens used in Table 4 were developed ad hoc, they seem consistent over time. For example, the screens can be developed using data for the first half of the period studied (1920-1960) and then applied to the second half of the period. The model correctly classifies all but one election in each of the two periods. Additionally, the model was tested on the 2004 election using data available just prior to the election. In October of 2004, the CPI inflation rate reported by the U.S. Department of Labor, Bureau of Labor Statistics (bls.gov) was 2.7%. The unemployment rate reported by the Bureau of Labor Statistics was 5.4%, and the four-year real personal consumption growth (using the 2000-2003 increase reported by the U.S.



Department of Commerce, Bureau of Economic Analysis (bea.gov) adjusted to a four-year growth rate) was 14.13%. The inflation rate of 2.7% was below the 4.5% cutoff for the inflation predictor, the misery index of 8.1% represented a 0.7% increase over 2000, and the four-year growth in real personal consumption of 14.13% was above the 11.75% cutoff for the consumption variable. Inflation predicted a Republican victory in 2004, the misery index narrowly predicted a Republican defeat, and consumption growth predicted a Republican victory. Thus, the model prediction in 2004 was for a Republican victory and the reelection of George W. Bush.

#### 7. Summary and Conclusion

We examine several questions related to tactical asset allocation (TAA) around a major calendar event—namely, U.S. presidential elections. Contrary to earlier findings, we find no statistical evidence in recent decades of return patterns for major asset classes around presidential elections. We also find little evidence of political party differences in U.S. post-election returns, except for T-bills. The fading variation in large- and small-company stock returns around election cycle and around political parties over the past two decades should be of interest to investors making TAA decisions on the basis of past relationships in asset prices.

While several prior studies have examined returns on large stocks and other asset classes around presidential elections, none have utilized a mean-variance efficient frontier framework. We utilize a mean-variance framework and find that the efficient frontier is sensitive to the time period, with Democrats providing the best long-term portfolio opportunities and Republicans providing better risk-reward opportunities over the past quarter century. Moreover, active investors relying on past studies that emphasize the stock-only or bond-only mix might consider



adjusting their models to focus on equity style considerations, as value stocks (especially during Republican administrations) have largely outperformed growth stocks regardless of the political party in office. When segmenting the value stock (style) premium over the past quarter century by political party, we find that Republicans provide a better risk-reward tradeoff over Democrats when looking at portfolio combinations of value stocks, bonds, and bills. The results should be of interest to active investors relying on past relations between U.S. presidential elections and asset prices to make TAA decisions.

As with most studies of past performance and relations in capital markets, these results and their implications to investors should be taken with some caveats. It should first be noted that while the results presented in Tables 1 and 2 update prior literature using comparable methodology, these results are presented for relatively short sub-periods and may be driven by a small-sample bias. Our results on efficient frontiers, shown in Figures 1, 2, and 3, span different time periods and suggest shifting frontiers over different periods. The data in Figures 2 and 3 spans the past quarter-century, covering two Democratic administrations (Carter-Clinton) and two Republican administrations (Reagan-Bush I). The efficient portfolio opportunities under Republican presidents seem largely due to the relatively high average returns on bonds and bills, giving the Republican frontier a higher starting point in return versus risk space. Asset return correlations (large-company stocks and Government bonds and Government bonds and T-Bills) are generally lower under Democratic administrations, suggesting better diversification opportunities under Democratic presidents. Given the differences between the longer-term and the more recent results, investors should be cautious when interpreting these results and projecting future results. Finally, the model presented for forecasting election outcomes is an ad



hoc model. While the cutoff points in the model appear to be fairly stable over time, and properly forecasted the 2004 election, these cutoffs may not be stable in the future.

Going forward, investors should keep in mind the familiar the adage that past performance is not necessarily an indicator of future results—ex post efficient frontier analyses need not imply similarly-positioned ex ante return and risk management opportunities. The future is, after all, the future. This research points to some potential shifts in investment and risk management opportunities surrounding a well-followed and important calendar event—U.S. Presidential elections. Future research opportunities include monitoring these return and portfolio effects over time and exploring further intricacies of TAA opportunities around presidential elections. It may also be interesting to extend this analysis to other economies.



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#### Endnotes

<sup>1</sup> Tactical asset allocation (TAA) is generally viewed as a temporary departure from a long-term or strategic asset allocation (SAA) mix of assets to take advantage of perceived market inefficiencies. Since presidential elections, the focus of our study, are largely independent of investors' long-term planning horizons, we employ TAA terminology when describing the asset allocation implications of the four-year presidential election calendar. For a more institutional view of tactical versus strategic asset allocation, see Anson (2004). He argues that strategic asset allocation is the domain of investment committees (pension funds, endowments, foundations) and is beta generating, while tactical asset allocation is the domain of investment managers and is alpha generating.

<sup>2</sup> In this paper, we employ traditional equity style labels for value and growth stocks. However, we recognize that equity style is, in more fundamental terms, a reflection of sector and industry characteristics. We are also aware of other equity style interpretations such as the economic profit (EVA) approach (Abate and Grant (2004)), which defines the "style" of a company by its fundamental ability to create wealth.

<sup>3</sup> Note that this twenty-year period includes the "Reagan Revolution" from 1981 to 1988 and the Clinton growth years from 1992 to 2000. The abnormal growth in stock prices during the Reagan (Republican) and Clinton (Democrat) years is consistent with the robust economic profit (EVA) findings observed by Grant (2003). He finds that during the Reagan and Clinton presidencies, the U.S. return on capital was largely higher than the U.S. cost of capital. These economic-based stock market findings suggest that the past few decades (albeit, absent the stock



market "bubble" years of 1998-1999 followed by the downturn in 2000) were a "golden era" of investing, spanning both Republican and Democratic presidents.

<sup>4</sup> Johnson and Chittenden (1999) examine the 1929-1996 period, but do not examine any sub periods within this time.

<sup>5</sup> Since stock returns in Table 2 under Democratic presidents are generally higher than under Republican administrations, investors may prefer to distinguish between economic (or practical) significance and statistical significance when interpreting our findings; however, the lack of statistical significance suggests that these results may be due to chance. That being said, Santa-Clara and Valkanov (2003) examine the behavior of monthly returns from 1927 to 1998 and argue that the observed stock market premium under Democratic administrations cannot be explained by a business cycle risk premium or equity risk differential, thus resulting in a "presidential puzzle" as to why such an effect might occur.

<sup>6</sup> While our discussion proceeds as if the direction of causality runs from presidential election cycles (or the party in office) to asset returns, we note that returns around presidential elections may be impacted by other economic and monetary influences along the lines suggested by Beyer, Jensen, and Johnson (2004). We cannot be certain of the direction of causality, i.e., are higher T-Bill returns in Republican administrations a result of the new administration, or is the administration in power because of low interest rates (recession) before the previous election? We examine T-Bill returns under Democratic and Republican administrations (similar to Table 2) but by lagged party, i.e., which party was in power prior to the election. The results (available upon request) are generally consistent and weaker than the results reported in Table 2.



Additionally, we examine the differences in T-Bill returns segmented by whether or not the incumbent party was reelected, for both years subsequent to the election and lagged years. The results (available upon request) again are generally weaker than the results reported in Table 2. T-Bill returns are slightly higher subsequent to elections when the incumbent party is not reelected for the 1929-2000 period, and are not significantly different for any sub-periods. Lagged returns are significantly higher when the incumbent party is not reelected for the 1929-1960 and 1961-1980 periods and not significantly different for the other periods. Taken together, the strongest differences in T-Bill returns are for Republicans over Democrats in the four years following elections, suggesting that Republican administrations generate higher returns on T-Bills. We thank an anonymous referee for suggesting these additional tests.

<sup>7</sup> It is interesting to note that in the 2004 presidential election, futures traders on the IOWA electronic market were largely anticipating a Bush II re-election victory. The probability (futures price of \$1 contract) of a Republican victory was noticeably higher than the probability of a Democratic victory, commencing in late August up to the November election, although the probability of a Kerry victory was increasing, but not by enough, before the November election (see <u>www.biz.uiowa.edu/iem</u>). While too recent and anecdotal, political futures prices on the IOWA electronic market (or like markets) may be a possible means of forecasting presidential election outcomes.

<sup>8</sup> As a more historical example, the Reagan Revolution (1981-1988) heralded a period of deregulation of industries, falling inflation, and rising business and consumer confidence. The abnormal rise in stock prices that occurred during the Reagan tenure was joined with the



downsizing/restructuring of large industrial companies that constitute "Corporate America." In turn, the above-average return on stocks that occurred during the Clinton years (1992-2000) was associated with companies that benefited from deregulation of the financial services and telecommunications industries, along with new-age growth opportunities in the technology sector.

<sup>9</sup> This model was developed by Renshaw and Trahan (1990, 1991) and utilized by He, Renshaw, and Szelest (1998). See also Fair (1996) for a review of utilizing economic models to forecast presidential elections.

