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Special Commentary

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Does Economic Activity Slow in Election Years?

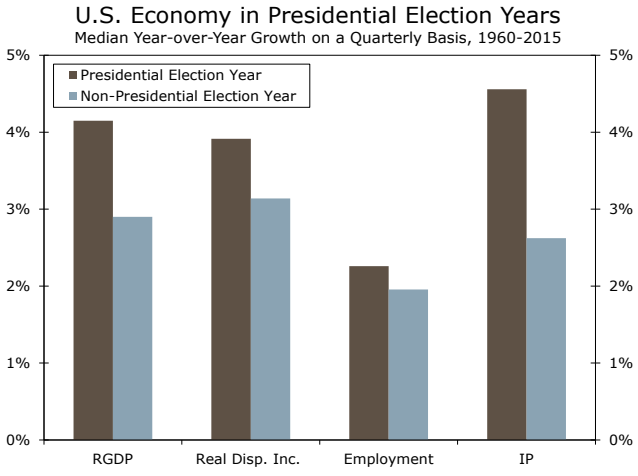
Executive Summary

Now that we are nearly halfway through the current presidential election year, commentators have drawn attention to the potential link between the heightened uncertainty experienced in a presidential election year and the impact this uncertainty may have on the economy. While equity market trends in election years have been well documented, less work has been done looking at the performance of real economic variables during presidential election years. In this report, we look at some of the key economic variables typically used by the National Bureau of Economic Research (NBER) to date business cycles and compare the performance of these economic indicators between presidential election and non-election years since 1960.

Our results suggest that the general argument that uncertainty during presidential election years results in slower economic activity does not hold water. In fact, based on our analysis, we find that real GDP growth, real consumer spending growth, real business fixed investment growth, real disposable income growth and industrial production growth are actually stronger during presidential election years compared to non-election years. We find that there are no statistically significant differences in total real government spending growth, real federal government spending growth or job growth between presidential election and non-election years. In short, we do not find any evidence of adverse effects on economic activity in presidential election years. We conclude by exploring several possible explanations for stronger real economic growth in election years, including party control of the White House, the share of quarters spent in recession during election and non-election years and structural economic differences between periods within our sample.

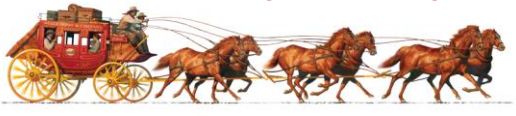
We do not find any evidence of adverse effects on economic activity in presidential election years.

Figure 1



Source: U.S. Depts. of Commerce & Labor, Federal Reserve Board and Wells Fargo Securities, LLC

Together we'll go far



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Presidential Election Years and Uncertainty

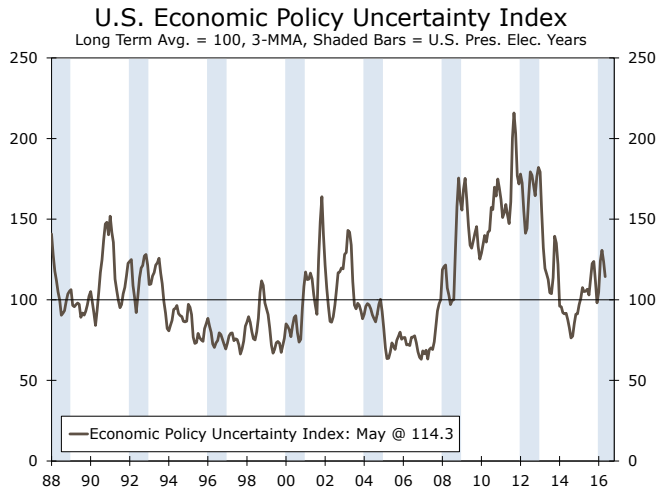
One commonly cited concern is that the uncertainty associated with a presidential election can be an obstacle to growth.

The twists and turns of the 2016 U.S. presidential election have raised the question: how will the election year affect the U.S. economy? Economic theory suggests that presidential elections could be either stimulative or contractionary. One commonly cited concern is that the uncertainty associated with a presidential election can be an obstacle to growth.[1] During the course of a presidential election year, various forms of political uncertainty emerge, from who will occupy the White House to the potential composition of Congress. A national election has the potential to be a major source of change, as newly elected policymakers pursue changes to existing law. A new president and Congress can alter fiscal policy, regulatory policy, trade policy and other policy areas that affect households' finances and firms' profitability prospects.

This political uncertainty could be observed in the real economy if economic agents (consumers and businesses) perceive a higher level of economic policy uncertainty. The index of economic policy uncertainty (EPU) developed by Baker, Bloom and Davis attempts to measure economic policy uncertainty and its role in influencing economic growth.[2] They find that growth in economic activity does in fact slow during periods of heightened economic policy uncertainty. In addition, the EPU does seem to increase in close presidential elections, although the sharpest spikes in the index are associated with events other than presidential elections, such as the collapse of Lehman Brothers in 2008 or the 2011 debt ceiling dispute (Figure 2). Thus, the potential exists for political uncertainty to adversely affect real economic activity.

The uncertainty surrounding the outcome of the presidential race could prompt some consumers to the sidelines leading households to delay purchases, particularly for higher-priced durable goods that consume a greater share of a household's income. On the business spending side, firms might delay or become more cautious when investing in new equipment and structures until an election outcome is more certain.[3] A heightened degree of uncertainty could also lead to postponed hiring plans or wage increases. All else equal, these decisions would lead to slower real PCE and BFI growth and thus slower real GDP growth in presidential election years.

Figure 2



Source: Baker, Bloom and Davis and Wells Fargo Securities, LLC

[1] Gulen, H. and Mihai, I. (2016). Policy Uncertainty and Corporate Investment. Review of Financial Studies.
[2] Baker, S.B., Bloom, N. and Davis, S.J. (2016). Measuring Economic Policy Uncertainty. NBER Working Paper.
[3] Julio, B. and Yook, Y. (2012). Political Uncertainty and Corporate Investment Cycles. Journal of Finance.

Conversely, the prospect of an upcoming presidential election could upwardly affect economic growth through changes to government policy. If politicians attempt to improve their electoral prospects by boosting growth through policy changes, such as greater infrastructure spending or a tax cut, the U.S. economy would likely experience a bump in real growth during election years, all else equal.[4] In addition, the heightened uncertainty outlined above could potentially result in higher growth during election years. Households or businesses may anticipate a major policy change following an election, which could cause them to pull-forward their spending plans into the election year. If businesses anticipate the elimination of a tax credit based upon the election's outcome, for example, they might pull-forward investment plans.

We examined the performance of the U.S. economy in presidential election years over the past half-century.

To determine if economic outcomes differ between presidential election and non-election years, we examined the performance of the U.S. economy in presidential election years over the past half-century. If presidential elections do not significantly affect U.S. economic performance, we would expect the performance of the economy during presidential election years to be similar to the performance of the economy in non-election years. However, if presidential election years are associated with significantly faster or slower growth, this would provide evidence that the elections have some effect on the real economy.

Presidential Election Years Appear to Have Better Economic Activity

To test whether economic activity slows during presidential election years as a result of political uncertainty, we utilized a set of key economic indicators including real GDP, real disposable income, employment and industrial production from 1960 through 2015 on a quarterly basis. We also analyzed real consumer spending and real business fixed investment across election and non-election years to determine if consumers and firms become more cautious in their spending behavior in presidential election years. Finally, we tested for the presence of higher total government spending and federal spending activity in election years since 1960 to determine if politicians become more concerned about propping up GDP growth and sending money back to their districts.

Quarterly year-over-year growth rates for the selected economic variables spanning from 1960 to 2015 are split into presidential election years covering 56 quarters and non-election years covering 168 quarters. We used a statistical test to determine if our selected economic variables differ significantly between presidential election years and non-election years.[5]

The results of our analysis are presented in Table 1 in the Appendix.[6] We find that during presidential election years, real GDP growth appears to be statistically significantly stronger, as is real consumer spending, business fixed investment, real personal income growth and industrial production over the time period of study. Median real GDP growth during presidential election years is 1.25 percentage points higher than during non-election years. Median real consumer spending and business investment were 1.0 percentage points and 0.6 percentage points higher during presidential election years, respectively. The stronger consumer and business investment results suggest that there are not adverse effects on these two sectors of the economy as a result of the political uncertainty of a presidential election year. Median real disposable income growth is 0.8 percentage points higher, while median industrial production growth is 1.9 percentage points higher in presidential election years.

Median real GDP growth during presidential election years is 1.25 percentage points higher than during non-election years.

Furthermore, we find no statistically significant differences between total real government spending, real federal government spending or employment growth between election and non-election years. Median growth for real total government and real federal government spending is actually lower in presidential election years than non-election years, although the difference is statistically insignificant. The fact that real total government and real federal government spending are not significantly different between election and non-election years suggests that

[4] Canes-Wrone, B. and Ponce de Leon, C. (2015). Electoral Cycles and Democratic Development. Princeton University.
[5] See the Appendix for the details of our analytical approach.
[6] Table 1 presents both mean and median values; however, given that our statistical tests for significance rely on median values, we cite median values in the text.

policymakers are not increasing government investment and consumption in election years to support GDP growth.[7] Taken together, these results run counter to the hypothesis that presidential election years bring about a level of uncertainty that results in reduced economic activity.

Figure 3

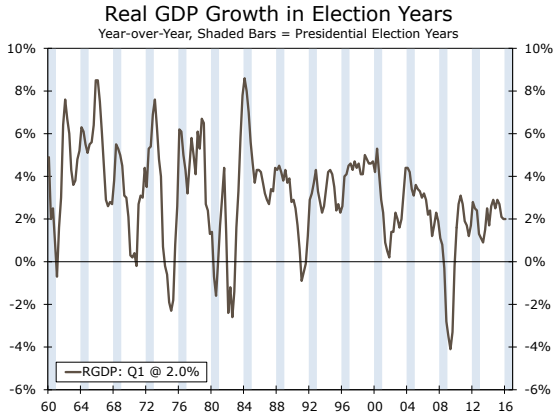
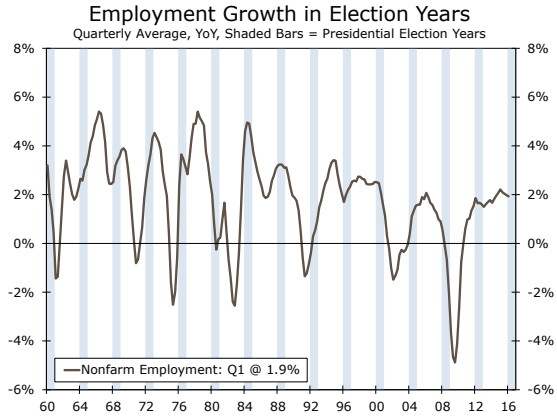


Figure 4



Source: U.S. Department of Commerce, U.S. Department of Labor and Wells Fargo Securities, LLC

In order to determine if there are outside factors affecting our results, we performed a sensitivity analysis. To begin, we adjusted the time period of study to begin in the 1980s, the period of time typically designated as the start of the "modern era." We find that the median values of our variables are quite similar over these two time periods of study. The results of stronger real GDP growth, business investment, real disposable income and industrial production during presidential election years hold for the "modern era" time period (Table 2 in the Appendix).

The share of quarters spent in recession is roughly equal across election and non-election years at 17.9 percent and 16.7 percent, respectively.

Another possibility is that there could be a disproportional number of recessions occurring in non-presidential election years over presidential election years. The share of quarters spent in recession is roughly equal across election and non-election years at 17.9 percent and 16.7 percent, respectively. Furthermore, the median rate of quarterly year-over-year GDP growth during recessions in election and non-election years is 0.85 percent and 0.20 percent, respectively, which we found to be statistically insignificant.

Finally, an additional factor that could influence our results is the party control of the White House. In other words, is economic activity in non-election years dependent upon which party controls the White House in the years before the election? The argument could also be made that it is not only the control of the White House that can influence economic activity but party control of Congress as well. Blinder and Watson found that it is the president that matters more for GDP growth rather than single-party control of Congress.[8] Importantly for our purposes, our time period of study is exactly split between seven terms of Democratic control and seven terms of Republican control in the White House. Thus, to the extent that public policy decisions by a single party affected growth in non-election years, this would theoretically be offset in our sample.

[7] It should be noted that federal policymakers have the ability to boost transfer payments, such as Social Security benefits, in election years, which would not be captured in our two measures of government spending.
[8] Blinder, A.S. and Watson, M.W. (2014). President and the U.S. Economy: An Econometric Exploration. Woodrow Wilson School and Department of Economics, Princeton University.

Conclusion: Economic Activity Does Not Slow in Election Years

We set out to determine if the performance of a wide range of economic variables suggests economic activity slows in presidential election years compared to non-election years. Our results suggest that the general argument that uncertainty during presidential election years results in slower real economic activity does not hold water. Based on our analysis, we find that real GDP growth, real consumer spending growth, real business fixed investment growth, real disposable income growth and industrial production growth are actually stronger during presidential election years compared to non-election years. We also find that there are no statistically significant differences in total real government spending growth, real federal government spending growth or job growth between presidential election and non-election years. The fact that total real government and real federal spending is not significantly different between election and non-election years suggests that policymakers are not boosting government consumption or investment to support faster GDP growth in election years.

On net, these results suggest that there is no evidence to support the argument that economic activity is slower in presidential election years.

Some alternative explanations for these divergent economic outcomes, such as a disproportionate share of recessions occurring in non-election years, also do not seem to offer a full explanation. We leave it to future research to further explore this phenomenon. On net, however, these results suggest that there is no evidence to support the argument that economic activity is slower in presidential election years, a critical finding for decision makers. That said, the 2016 presidential race has been anything but a standard election year, reinforcing the notion that past performance does not guarantee future results.

Appendix

Table 1

U.S. Economy, 1960-2015						
	Pres. Election Year		Non-Election Year			
	Mean	Median	Mean	Median	P-Value	Result
RGDP	3.74%	4.15%	2.86%	2.90%	0.01	Stronger in Election Year
PCE	3.75%	4.15%	3.14%	3.15%	0.01	Stronger in Election Year
BFI	6.57%	6.10%	4.18%	5.50%	0.05	Stronger in Election Year
GOV	1.38%	1.35%	2.11%	1.90%	0.10	Not Statistically Different
FED	0.74%	0.20%	1.79%	2.00%	0.08	Not Statistically Different
YPDR	3.94%	3.91%	2.99%	3.14%	0.00	Stronger in Election Year
EMP	2.12%	2.26%	1.66%	1.95%	0.19	Not Statistically Different
IP	4.07%	4.56%	2.39%	2.62%	0.01	Stronger in Election Year

Source: U.S. Depts. of Commerce & Labor, Federal Reserve Board and Wells Fargo Securities, LLC

Table 2

U.S. Economy, 1980-2015						
	Pres. Election Year		Non-Election Year			
	Mean	Median	Mean	Median	P-Value	Result
RGDP	3.16%	3.55%	2.45%	2.70%	0.08	Stronger in Election Year
PCE	2.93%	3.55%	2.91%	3.00%	0.34	Not Statistically Different
BFI	6.28%	5.70%	3.20%	4.95%	0.06	Stronger in Election Year
GOV	1.41%	1.50%	1.77%	1.80%	0.37	Not Statistically Different
FED	1.52%	0.75%	1.84%	2.05%	0.51	Not Statistically Different
YPDR	3.67%	3.74%	2.51%	2.56%	0.00	Stronger in Election Year
EMP	1.71%	1.66%	1.15%	1.72%	0.46	Not Statistically Different
IP	2.76%	2.97%	1.71%	2.30%	0.09	Stronger in Election Year

Source: U.S. Depts. of Commerce & Labor, Federal Reserve Board and Wells Fargo Securities, LLC

Methodology:
The relatively small sample sizes along with sizable differences in the number of observations lead us to employ the Mann-Whitney-Wilcoxon nonparametric statistical test of median differences of each economic variable as opposed to using a standard independent samples t-test.[9] The Mann-Whitney-Wilcoxon tests for differences in independent sample medians by computing a test statistic (U-value) based on the rank of the target variable values across two groups, in our case election and non-election years.

First, the observations of the target variable (GDP, employment etc.) are coded for election and non-election years. The target variable is then assigned a rank with tied values are assigned a mid-rank value. To find the test statistic for the Mann-Whitney-Wilcoxon test:

$$U_1 = n_1(n_2) + [n_1(n_1+1)/2)] - \sum_{i=n_1+1}^{N_2} T_1$$

$$U_2 = n_1(n_2) + [n_1(n_1+1)/2)] - \sum_{i=n_1+1}^{N_2} T_2$$

Where n_1 and n_2 represent the sizes of the first and second samples respectively and T represents the target variable under the two conditions being compared. The test statistic used (U-value) is the lower of U_1 and U_2. The U value is then standardized and p-values are computed based on the standardized U value for a two-tailed test.[10] In our application, U_1 represents the non-election years while U_2 represents election years. The target variable under each condition (election/non-election year) are represented by T_1 and T_2.

[9] Shapiro –Wilk tests were performed for both election year and non-election year datasets to determine if normality assumptions were violated. Given the small sample size of quarters in election years, the majority of variables were found to violate the normality assumptions inherent in the application of t-tests.
The Mann-Whitney-Wilcoxon test is also commonly referred to as the Wilcoxon statistic or sum of ranks statistic. See Wilcoxon, F. (1945). Individual Comparisons by Ranking Methods. Biometrics 1: 80–83.
Mann, H. B., and D. R. Whitney. (1947). On a Test of Whether One of Two Random Variables Is Stochastically Larger Than the Other. Annals of Mathematical Statistics 18: 50–60.
Shapiro, S. S., and M. B. Wilk. (1965). An Analysis of Variance Test for Normality (Complete Samples). Biometrika 52: 591–611.
[10] Gibbons, J.D. (1997). Nonparametric Methods for Quantitative Analysis, Third Edition. American Series in Mathematical and Management Sciences. American Sciences Press, Inc. Columbus, Ohio.

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