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Impacts of Congressional Actions on Federal Contract Spending

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Abstract

This analysis was conducted using government-wide contract acquisition and spending data. An additional dataset was compiled identifying the timing of continuing resolutions and new appropriations legislation enacted by Congress from Fiscal Year (FY) 2007 through the second quarter of FY 2018. Contract spending data for all agencies was used for the same time period, FY 2007 through the second quarter of FY 2018.

Several models were estimated to determine if a relationship could be identified between congressional budget actions and contract spending. These models were estimated to determine if historical data supports the theory that congressional actions, and the delay or lack of a full-year budget set by new appropriations legislation, increases spending. The core model estimated was a semi-log linear model which was used to estimate the effect that continuing resolutions and new appropriations legislation had on total contract spending aggregated at the weekly level. The model included several additional predictor variables including lagged values of total weekly contract spending and total yearly government obligations, which was used to proxy the trend in overall spending over time. Due to the nature of the data, certain corrections had to be implemented to ensure the integrity of the estimates and results; this includes use of logged values for total spending and total obligations variables. Additionally, in the calculation of hypothesis test results, the Newey-West estimator was used to correct the predictor standard errors for heteroscedasticity and autocorrelation effects as needed. Additional models were also estimated to examine more closely subsets of the contracts spending data and determine if the effects of congressional budget actions differed among specific types of contract spending.

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Scope

The purpose of this analysis was to use federal data to investigate the findings published by the Government Accountability Office (GAO) in their report *Continuing Resolutions and Other Budget Uncertainties Present Management Challenges.*[1] The GAO report is a qualitative analysis of the effect of the legislative actions on agencies. In the last few years, Congress has increasingly enacted short-term continuing resolutions throughout the fiscal year, moving away from new appropriations legislation that spans a full-year. Historically, new appropriations legislation was passed prior to the start of the fiscal year to allow agencies time to prepare their respective budgets and the ability to work with Congress and the Executive Office of the President to address agency priorities and plan acquisitions efficiently. However, in the last few years the passage of comprehensive, full-fiscal year appropriations legislation has been rare. Instead, Congress has repeatedly enacted short-term continuing resolutions that allow agencies to maintain operations while appropriations legislation is negotiated often after the start of the fiscal year.

This analysis uses detailed contracts data reported to Federal Procurement Data System - Next Generation (FPDS-NG) to evaluate the relationship between congressional actions and acquisitions. The data includes new contracts, and any modifications, adjustments, or options exercised on existing contracts reported by agencies across the federal government. Congressional actions data consists of a compiled dataset of congressional budget actions, defined here as either passage of new appropriations legislation or a continuing resolution. A series of models were estimated to examine whether the data showed a significant relationship between spending across government and the budget actions enacted by Congress.

In addition to evaluating the short-term effect of congressional budget actions on total contract spending, further research was conducted to determine if budget actions affected specific types of contracting. The analysis of the effect of congressional actions on overall contract spending is followed by a series of models that classify spending by contract types and by the goods and services purchased. The goal of these models is to further disaggregate the relationship between budget actions and spending, evaluating how these actions affect the types of contracts agencies issue and the goods and services purchased. This analysis does not address the long-term impact of congressional actions on the overall rate of yearly purchasing or on total government expenditures. Further analysis should be pursued to address these questions.

Data

Contract spending data was collected from USAspending.gov. Congressional legislation data was compiled from new appropriations and budget legislative history data available at Congress.gov.[2] New appropriations legislation includes legislation in which Congress appropriated budget authority to all federal agencies across government such as in the case where an Omnibus Appropriation is passed. Continuing resolutions were identified by the

[1] **Continuing Resolutions and Other Budget Uncertainties Present Management Challenges**
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[2] See https://www.congress.gov/resources/display/content/Appropriations+and+Budget.

content of the legislation enacted, these are typically defined by a issuance of budget authority for federal agencies at or below the existing funding levels and is typically issued with short-term expiration date[3]. All actions are defined by the effective date specified in the legislation. Additionally, in cases where Congress issued legislation that affected the new appropriations of only specific agencies or excluded some agencies, the legislation was documented as a continuing resolution or new appropriations legislation if it covered the majority of government. Therefore in cases where only the military or one agency was issued funding authority using either type of congressional action these were not included in the dataset.

Historical contract spending data spans from fiscal year 2007 through the second quarter of fiscal year 2018, and includes all data labeled as a contract. For each fiscal year the number of observations was between 2.5 million and 4.9 million contracts, contract modifications, or adjustments reported. Contract data was reported by agencies across the federal government to FPDS-NG and includes all contract related actions; values reported as the contract dollars obligated were used to determine the value of each observation. This includes all new contracts issued in that time frame as well as the extension, modification, cancellation, or use of an option year on an existing contract. Any contract that was not reported as a modification of an existing contract was considered a new contract for the purposes of the new contract spending model. All other observations were considered contract modifications in this analysis.

Additionally, the contracts data used includes a label that identifies the Product and Service Code (PSC) for the contract issued. The PSCs are a comprehensive list of hundreds of codes that are used to categorize government contract purchases and acquisitions.[4] In case where there were more than one product or service is purchased, contracts are categorized according to the predominant product or service that is being purchased.[5] These codes were further condensed into seven related categories to facilitate the interpretation and processing of data. Related parent PSCs or Level 1 Categories[6] were collapsed into the following parent categories for this analysis:

- Facilities, Equipment, and Construction;
- Information Technology and Electronics;
- Miscellaneous Supplies and Equipment, Clothing and Textiles;
- Professional Services, Education and Training;
- Research and Development;
- Transportation and Logistics Services; and
- Weapons and Ammunition.

The PSC data was used to estimate a series of models to determine if congressional actions had significant effects on the types of products and services purchased by the government.

Due to the high variance in the value and volume of contracts issues across the federal government, a very conservative approach was employed to address the detection and

[3] Continuing Resolutions can be issued for any length of time including cases in which the legislation spans the remainder of the fiscal year, these are all categorized as Continuing Resolutions for the purposes of this analysis.

[4] The complete list of product and service codes can be found here: https://www.acquisition.gov/PSC_Manual.

[5] See Federal Procurement Data System: *Product and Service Codes Manual*, August 2015.

[6] These categories were based on the Level 1 Categories provided by General Services Administration, found at acquisition.gov Federal Procurement Data System: *Final PSC Category Alignment*, March 2018.

treatment of outliers within the dataset. Outliers were evaluated by fiscal year; individual contracts that exceeded fifty thousand times the global interquartile range, for that year, were excluded from the dataset.[7] The broad criteria for identification of outliers was used to ensure that the valid extreme values found in this type of data were not excluded given the high variation in the type and value of contract issued across government. The value of contracts issued across government have a large variance, with contracts issued ranging from contracts issues to purchase office supplies to the purchase of spacecraft.

Methodology

Total Contract Spending Model

The hypothesis tested in this analysis is whether the passage of continuing resolutions as opposed to the traditional full-year new appropriations legislation causes spending to rise or the type of spending to change in the short-term, as a result of the budget uncertainty caused by short-term congressional budget actions. To test this hypothesis we developed a model that tested whether the issuance of continuing resolutions caused an increase in contract spending in the short-term. The models developed included variables used to estimate the impact of new appropriations legislation and continuing resolutions. Additionally, in order to account for the changes in spending over time, the models included data for total obligations over each fiscal year. This variable is used as a proxy for overall government spending changes over time. Each model also included a vector of lagged values of contract spending in prior time periods, to control of autocorrelation which is characteristic for time series data.

The core model developed was a semi-log linear model, specified as follows:

$$log(y_t) = \alpha + \beta cr_t + \beta budget_t + \beta lags_{t-x} + log(obligations) + \epsilon$$

Where:

y_t is equal to contract dollars for a given week;
cr_t is equal to binary variable, 1 denoting passage of a continuing resolution in that week, and zero otherwise;
$budget_t$ is equal to a binary variable, 1 denoting the passage of new appropriations legislation in that week and zero otherwise;
$lags_{t-x}$ is a vector of lagged values of log(y_t) and
$obligations$ is equal to the total value of government spending obligated in a given fiscal year.

Following the estimation of each model, residuals were tested for stationarity, heteroscedasticity, and autocorrelation. According to the results of these tests, standard errors and hypothesis test statistics were evaluated using White-Huber (robust) standard errors, or using the Newey-West correction.

[7] In most cases the number of contracts that were identified as outliers that were subsequently dropped from each year's dataset was between 10-25 observations.

Additional Models

A series of additional models were estimated. These models focused on estimation of specific subsets of contract spending, including models for which y_t was equal to new contract spending by week, contract modifications by week, as well as models estimating spending by the category of product and services acquired. The variable definitions are discussed in more detail in the corresponding model analysis sections. Following the estimation of each model, residuals were tested for stationarity, heteroscedasticity, and autocorrelation following the methodology of the total spending model.

Analysis

Total Weekly Contract Spending Model

The following model was used to estimate whether there is a statistically significant relationship between the passage of new appropriations legislation (budget) and continuing resolutions (cr) on government-wide contract spending. Total contract spending was calculated as a total of all contracts obligated by week across all agencies reporting data via the Data Act.

Table 1: Total Contract Spending Model Results

Model_Predictors	Estimates	StandardError	T-Statistic	P-Value
(Intercept)	0.90	3.35	0.27	0.79
budget	-0.36	0.13	-2.79	0.01
cr	0.22	0.06	3.59	0.00
L(log(dollars), 1)	0.24	0.02	9.72	0.00
L(log(dollars), 4)	0.09	0.03	3.09	0.00
L(log(dollars), 9)	0.09	0.04	2.46	0.01
L(log(dollars), 10)	-0.13	0.03	-4.15	0.00
L(log(dollars), 40)	0.12	0.03	4.32	0.00
L(log(dollars), 53)	0.58	0.05	12.23	0.00
log(obligation)	-0.02	0.11	-0.22	0.82

R_Squared	Adjusted_R_Squared	P_Value	Degrees_Freedom	LogLikelihood	NA
0.56	0.55	0.34	77	0	10

Interpreting the results of a semi-log model require transformation of the variable coefficients; in the case of binary variables such as $budget_t$ and cr_t, the change in the

dependent outcome is equal to the exponentiated coefficient estimated by the model. Therefore:

$$\%\Delta y_t = e^{\beta};$$

Where $\beta$is the estimated coefficient of the binary variable of interest; and

y_t is equal to contract dollars for a given week.

The model developed shows that there is a statistically significant relationship between continuing resolutions and an increase in total contract spending. Using the formula above, total contract spending is estimated to rise by 25 percent in the short-term if Congress passes a continuing resolution, all else held equal.

New appropriations legislation also had a notable statistically significant relationship with total contract spending, with the passage of new appropriations legislation leading to a decrease in spending of 30 percent in the short-run, all else held equal. The inverse relationship between this type of legislation and overall contract spending emphasizes how dramatically congressional actions impact government total contract spending in the short-run, leading to a significant reduction in spending in the short-term.

Hypothesis testing was conducted using the Newey-west correction, to correct for the remaining effect of serial correlation, which is typical of this type of time series data and heteroscedasticity in the distribution of spending data which was not captured entirely in the use of logged values of total spending and total obligations. The model also captured weekly lagged values for spending. The lagged values capture the impact past spending trends have on the total value of spending in a given week. The largest impact on total spending is spending in the week prior, therefore we can also infer that the immediate effect of a congressional action has a large and significant effect on spending in the following week. To estimate the complete effect any action has on total spending would include the total spending in estimated time period and any residual effects on future time periods.

New Contracts and Contract Modifications Models

Models were estimated for two subsets of contracts data. The first model estimated the effect of new appropriations legislation versus continuing resolutions on government spending for total spending on new contracts. The second model estimated the effects of the same predictors - new appropriations legislation and continuing resolutions passage - for contract modification spending, including contract modifications, extensions, and spending for the engagement during option years exercised. Contract spending values are aggregated by week across all government agencies reporting Data Act data.

Table 2: Model Results for New Contracts and Contract Modification Models

	Log New Contract Spending				Log Contract Modification Spending			
Model_Predictors	Estimates	StandardError	T-Statistic	P-Value	Estimates	StandardError	T-Statistic	P-Value
(Intercept)	0.66	2.95	0.22	0.82	1.27	4.20	0.30	0.76
budget	-0.27	0.20	-1.36	0.17	-0.21	0.13	-1.57	0.12
cr	0.25	0.09	2.90	0.00	0.20	0.07	2.71	0.01
L(log(dollars), 1)	0.24	0.03	9.60	0.00	0.22	0.03	8.39	0.00
L(log(dollars), 10)	-0.10	0.03	-3.10	0.00	-0.12	0.04	-3.13	0.00
L(log(dollars), 13)	0.08	0.04	2.10	0.04	NA	NA	NA	NA
L(log(dollars), 4)	0.07	0.03	2.56	0.01	0.07	0.03	2.03	0.04
L(log(dollars), 40)	0.06	0.03	2.14	0.03	0.10	0.03	3.39	0.00
L(log(dollars), 52)	0.08	0.03	2.95	0.00	NA	NA	NA	NA
L(log(dollars), 53)	0.53	0.05	10.29	0.00	0.44	0.08	5.69	0.00
L(log(dollars), 9)	0.09	0.03	3.13	0.00	0.08	0.04	1.74	0.08
logobligations	-0.08	0.09	-0.84	0.40	0.12	0.14	0.82	0.41

Model	R_Squared	Adjusted_R_Squared	P_Value	Degrees_Freedom
New Contract Spending Model	0.6	0.59	0	12
Contract Modification Model	0.3	0.29	0	10

The model for new contract spending showed that there is a statistically significant relationship between the passage of a continuing resolution and short-term spending increases. The model estimates that a continuing resolution will increase spending on new contracts by 29 percent, all else held equal.

The model estimated for spending on contract modifications showed that continuing resolutions also had a positive statistically significant relationship. The model estimates that a continuing resolution will increase spending on contract modifications 22 percent, all else held equal.

Across both models the passage of new appropriations legislation did not have a statistically significant effect on spending. The estimates suggest that the passage of new appropriations legislation is correlated with a decrease in spending in the short-run, but the relationship is not significant.

Contract Spending by Product and Services Purchased

To better understand whether the types of products and services purchased across government are affected by budget uncertainty, we separated contract spending into seven distinct categories of products and services. Government contracts identify the primary purpose for the purchase using a Product and Service Code. Using these PSCs, each

observation was separated into seven categories which grouped together related PSCs, as follows:

- Facilities, Equipment, and Construction (Facilities);
- Information Technology and Electronics (IT);
- Professional Services, Education and Training (Professional Services);
- Miscellaneous Supplies and Equipment, Clothing and Textiles (Supplies);
- Research and Development (Research);
- Transportation and Logistics Services (Transportation); and
- Weapons and Ammunition (Weapons).

By estimating models for each of these specific subsets, we are able to see in more detail how congressional budget actions, defined here as either passage of new appropriations legislation or a continuing resolution, may affect the types of products and services that are purchased. The product and service category regression models followed the same structure as the core model, using a log-semi log model to estimate the effect that the passage of new appropriations legislation and continuing resolutions had on the volume of contract spending for each group.

Overall the models indicated a similar relationship between continuing resolutions, new appropriations, and the given product and service category. Of the seven models estimated, all showed a statistically significant relationship between continuing resolutions and spending by category. One model also estimated a significant relationship between new appropriations legislation and spending for the category. Professional Services, Education and Training model was the only model to show a statistically significant relationship between new appropriations legislation and total products and services spending in this category.

The results for each model estimated are discussed in more detail below.

Table 3: Model Results for Facilities, IT, and Professional Services Models

	Log Facilities		Log IT		Log Professional Services	
Model_Predictors	Estimate	P-Value	Estimate	P-Value	Estimate	P-Value
(Intercept)	2.53	0.52	-0.08	0.98	3.22	0.22
budget	-0.24	0.13	-0.05	0.69	-0.25	0.06
cr	0.22	0.01	0.20	0.04	0.26	0.00
L(log(dollars), 1)	0.22	0.00	0.27	0.00	0.21	0.00
L(log(dollars), 10)	-0.12	0.00	-0.07	0.02	-0.15	0.00
L(log(dollars), 4)	0.12	0.00	0.07	0.01	0.08	0.02
L(log(dollars), 40)	0.12	0.00	0.12	0.00	0.00	0.99
L(log(dollars), 53)	0.49	0.00	0.55	0.00	0.46	0.00
L(log(dollars), 9)	0.08	0.11	0.07	0.03	0.14	0.00
log(obligation)	-0.01	0.96	0.00	0.96	0.08	0.34

Model	R_Squared	Adjusted_R_Squared	P_Value	Degrees_Freedom
Facilities	0.38	0.37	0	10
IT	0.50	0.49	0	10
Professional Services	0.42	0.41	0	10

Facilities, Equipment, and Construction

This model included all contracts identified with the purchasing of facilities, equipment, construction, maintenance, utilities, leases, and rentals. This also includes professional services required for maintenance and operation of facilities such as engineering, housekeeping, and architecture. The model estimated that facilities, equipment, and construction contract spending rose by 25 percent in the short-term when Congress issued a continuing resolution, all else held equal. In contrast to the rise in spending estimated for continuing resolutions, the passage of new appropriations legislation did not have a statistically significant impact on spending. Although the relationship was not significant, the model did indicate an inverse correlation between new appropriations legislation and spending on facilities, equipment, and construction.

Information Technology and Electronics

The model used to estimate the relationship between congressional actions and information technology spending included all contracts identified as telecommunications, electronics, and maintenance, installation, and professional services related to these goods. The Information technology and electronic model estimated that the issuance of a continuing

resolution increased spending by 22 percent, all else held equal. The passage of new appropriations legislation did not have a statistically significant impact. Like most models, new appropriations was negatively correlated with Information Technology and Electronics spending, although the relationship was estimated to be very small and not significant.

Professional Services, Education, and Training

Professional services, education, and training contract spending includes contracts identified as special studies, specialized research and training, administrative, medical, and social services contracts. The professional services contract spending model estimated that the issuance of a continuing resolution increased spending by 30 percent, all else held equal. The passage of new appropriations legislation also had a statistically significant impact on professional services, the passage of new appropriations caused a drop in professional services contracts spending by 22 percent, all else held equal.

Table 4: Model Results for Transportation and Research Models

	Log Transportation		Log Research	
Model_Predictors	**Estimates**	**P-Value**	**Estimates**	**P-Value**
(Intercept)	-1.02	0.86	0.62	0.91
budget	-0.21	0.46	-0.08	0.65
cr	0.38	0.00	0.16	0.07
L(log(dollars), 1)	0.16	0.00	0.31	0.00
L(log(dollars), 2)	NA	NA	0.00	0.93
L(log(dollars), 22)	NA	NA	0.03	0.23
L(log(dollars), 25)	0.10	0.01	NA	NA
L(log(dollars), 26)	0.07	0.07	0.12	0.01
L(log(dollars), 4)	0.10	0.01	0.03	0.33
L(log(dollars), 40)	0.10	0.00	0.14	0.00
L(log(dollars), 42)	0.08	0.02	NA	NA
L(log(dollars), 52)	NA	NA	0.12	0.00
L(log(dollars), 53)	0.29	0.00	NA	NA
log(obligation)	0.10	0.55	0.16	0.43

Model	R_Squared	Adjusted_R_Squared	P_Value	Degrees_Freedom
Transportation	0.21	0.19	0	11
Research	0.15	0.14	0	11

Transportation and Logistics Services

Transportation and logistics service contracts includes contracts related to the purchase, maintenance, and operation of vehicles such as aircraft, ground vehicles, and submarines as well as freight services and relocation contracts. Transportation and logistics services contract spending has a large and statistically significant relationship with the issuance of a continuing resolution. Issuance of a continuing resolutions increased transportation and logistics contract spending by 46 percent, all else held equal. The issuance of new appropriations legislation did not have a statistically significant effect but did have an estimated inverse relationship with transportation and logistics services spending.

Transportation and logistics services contracts included data that included relatively small negative values - three observations - which were dropped from the analysis to allow for the estimate of the modeling using a log of total spending to account for the exponential distribution of the known population. The transformation of the data allows the model to maintain consistency with the overall analysis and due to the small and marginal changes, should not affect the integrity of the model estimates.

Research and Development

Research and development contract spending includes energy, economic development, and medical research and development contracts. The research and development model estimated a statistically significant relationship with continuing resolutions. Continuing resolutions lead to a 17 percent increase on research and development contract spending, all else held equal. New appropriations legislation did not have a statistically significant relationship with research and development contract spending. Research and development had one of the lowest changes in contract spending in response to the passage of a continuing resolution. The small magnitude of research and development contract spending coefficient could be due to many factors including the potential spending stability of research and development spending over time; longer-term contracts such as these may not be as reactive to yearly budget actions.

Table 5: Model Results for Weapons and Supplies Models

	Log Weapons		Log Supplies	
Model_Predictors	Estimates	P-Value	Estimates	P-Value
(Intercept)	-0.76	0.93	5.27	0.34
budget	-0.74	0.23	-0.21	0.28
cr	0.39	0.01	0.28	0.00
L(log(dollars + 1), 1)	0.08	0.07	0.13	0.00
L(log(dollars + 1), 10)	NA	NA	-0.03	0.34
L(log(dollars + 1), 4)	NA	NA	0.09	0.00
L(log(dollars + 1), 40)	0.13	0.00	0.16	0.01
L(log(dollars + 1), 53)	0.33	0.02	0.35	0.00
L(log(dollars + 1), 9)	NA	NA	0.16	0.00
log(obligation)	0.34	0.26	-0.10	0.54

Model	R_Squared	Adjusted_R_Squared	P_Value	Degrees_Freedom
Weapons	0.13	0.13	0	7
Supplies	0.41	0.40	0	10

Weapons and Ammunition

Weapons and ammunitions contract spending includes weapons and accessories, including nuclear weapons and guidance systems. Weapons and ammunitions contract spending had a statistically significant relationship with continuing resolutions. Continuing resolutions increased spending on weapons and ammunition by 48 percent, all else held equal. Appropriations legislation has a large but not statistically significant inverse relationship with weapons and ammunition spending.

Total value of weapons and supplies contract spending (dollars) were defined as log dollars plus one [$log(dollars) + 1$] to offset the occurrence of zero values in the dataset. Adding a small constant, such as 1, is common practice to correct for zero values as it does not introduce bias or effect the shape of the sample distribution and has an overall negligible impact on the model estimates.

Miscellaneous Supplies and Equipment, Clothing and Textiles (Supplies)

Miscellaneous supplies and equipment includes clothing and textiles, subsistence supplies, and purchase of various types of equipment such as books, hardware, engine parts and accessories. Miscellaneous supplies and equipment spending had a large and statistically significant relationship with continuing resolutions. Issuance of a continuing resolution

generated a 33 percent increase in miscellaneous supplies and equipment spending, all else held equal. The passage of new appropriations legislation did not have a statistically significant impact on miscellaneous contract spending. Total value of miscellaneous and supplies equipment, clothing and textiles contract spending (dollars) were defined as log contract dollars plus one [$log(dollars) + 1$] to offset the occurrence of zero values in the dataset.

Conclusion

The purpose of this analysis was to use data to investigate the findings published by the GAO regarding the effect that legislative actions and potential budget uncertainty have on government spending. There are several theories about how congressional actions may impact government spending. One theory is that as agencies administer their responsibilities, if a full-year of obligation authority has not been issued, there may be accruing demand or outstanding contractual needs that cannot be filled until Congress issues a continuing resolution. Once a continuing resolution is issued, federal agencies may be under pressure to execute contracts quickly to address existing needs and ensure contracts are in effect prior to the conclusion of a short-term budget action. This flurry may cause the uptick in spending immediately after a continuing resolution is issued. This would be in contrast to a full-year appropriation where the horizon for issuing contracts is much longer and affords agencies more time to plan and execute contracts.

Another theory is that, due to the short-term nature of continuing resolutions, spending may rise because funds are not available to agencies to negotiate and conduct thorough contract research for the issuance of new long-term contracts. This could require agencies to extend existing contracts and pay more for ad-hoc services rather than negotiating long-term or more efficient contracts. Continuing resolutions often have limited budgets and therefore could make negotiation of larger contracts impossible without the budget authority provided in full-year appropriations.

The series of models estimated in this analysis are used to estimate whether the data showed a significant relationship between spending across government and the budget actions enacted by Congress. Specifically, the models measure how the issuance of a continuing resolution or appropriation legislation impacts the volume of contractual spending obligated in a week. The models estimate that total spending does increase in response to continuing resolutions, and generally there is a notable decrease in spending in weeks that new appropriations legislation is passed. This is consistent with the theory that spending rises due to the short window of time available to issue contracts once a continuing resolution is passed, as well as the uncertainty about whether there will be funds available and time to issue the contracts needed.

Further analysis would be required to validate the theory that continuing resolutions result in pent-up demand. As a preliminary look into this theory, this analysis suggests that this may not be accurate since the demand theory would suggest that the issuance of either type of legislation would result in a temporary increase in spending.

Although the passage of new appropriations legislation in this analysis did not have a statistically significant effect on the volume of contract spending in most cases, the passage of new appropriations legislation was correlated with spending in interesting ways. Notably,

new appropriations legislation had inverse effects on total spending in the short-run, all else held equal. This suggests that new appropriations legislation allows the government to delay contract acquisitions and may provide more time to engage in long-term budgeting and planning, facilitating the implementation of forward-looking spending decisions.

Further Research

This analysis does not address the long-term impact of congressional actions on the overall rate of yearly purchasing or on total government expenditures. Additional analysis into the types, quantity, and pricing of contracted goods and services would need to be conducted to measure how budget uncertainty affects efficiency in government spending and is beyond the scope of this analysis.