

EFFECTS OF FISCAL SHOCKS IN A GLOBALIZED WORLD

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MOTIVATION

Key policy questions

- What is the size of the government spending multiplier?
 - Previous work: multiplier ≈ 1 (wide “confidence” bands)
- Does the size vary with the state of the economy?
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Evidence:

Government spending $\uparrow \Rightarrow$ the domestic currency **DEPRECIATES**

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OUR SOLUTION: USE DAILY INNOVATIONS IN GOVERNMENT SPENDING.

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- Daily Statements of the U.S. Treasury
- Daily announcements of the U.S. Department of Defense about new contracts.

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- Large domestic component of spending
- Long time series (start in 1994)
- Smaller predictable component (e.g., seasonality) at daily frequency
- Major source of variation



DAILY TREASURY STATEMENT

Cash and debt operations of the United States Treasury
 Friday, November 7, 2014
 (Detail, rounded in millions, may not add to totals)

TABLE I - Operating Cash Balance				
Type of account	Closing balance today	Opening balance		
		Today	This month	This fiscal year
Federal Reserve Account	\$ 107,194	\$ 110,284	\$ 117,403	\$ 158,302
Supplementary Financing Program Account	0	0	0	0
Short-Term Cash Investments (Table V)	0	0	0	0
Total Operating Balance	\$ 107,194	\$ 110,284	\$ 117,403	\$ 158,302

TABLE II - Deposits and Withdrawals of Operating Cash							
Deposits	Today	This month to date	Fiscal year to date	Withdrawals	Today	This month to date	Fiscal year to date
Federal Reserve Account:				Federal Reserve Account:			
Agriculture Loan Repayments (misc)	\$ 24	\$ 151	\$ 934	Commodity Credit Corporation programs	\$ 115	\$ 596	\$ 4,477
Air Transport Security Fees	1	4	329	Defense Vendor Payments (EFT)	897	4,740	29,548
Cash FTD's Received (Table IV)	6,257	47,481	229,586	Education Department programs	561	2,557	17,630
Commodity Credit Corporation programs	13	38	229	Energy Department programs	121	611	3,571
Customs and Certain Excise Taxes	78	388	4,560	Federal Employees Insurance Payments	188	1,075	7,809
Deposits by States:				Fed. Highway Administration programs	134	752	5,127
Supplemental Security Income	2	17	334	Federal Salaries (EFT)	3,083	3,889	17,791
Unemployment	283	3,157	5,796	Food and Nutrition Service (misc)	141	537	2,947
Education Department programs	188	910	4,806	GSA programs	24	695	2,328
Energy Department programs	10	38	566	Health and Human Services Grants (misc)	383	1,748	9,652
Estate and Gift Taxes	78	302	1,830	Housing and Urban Development programs	192	3,575	10,615



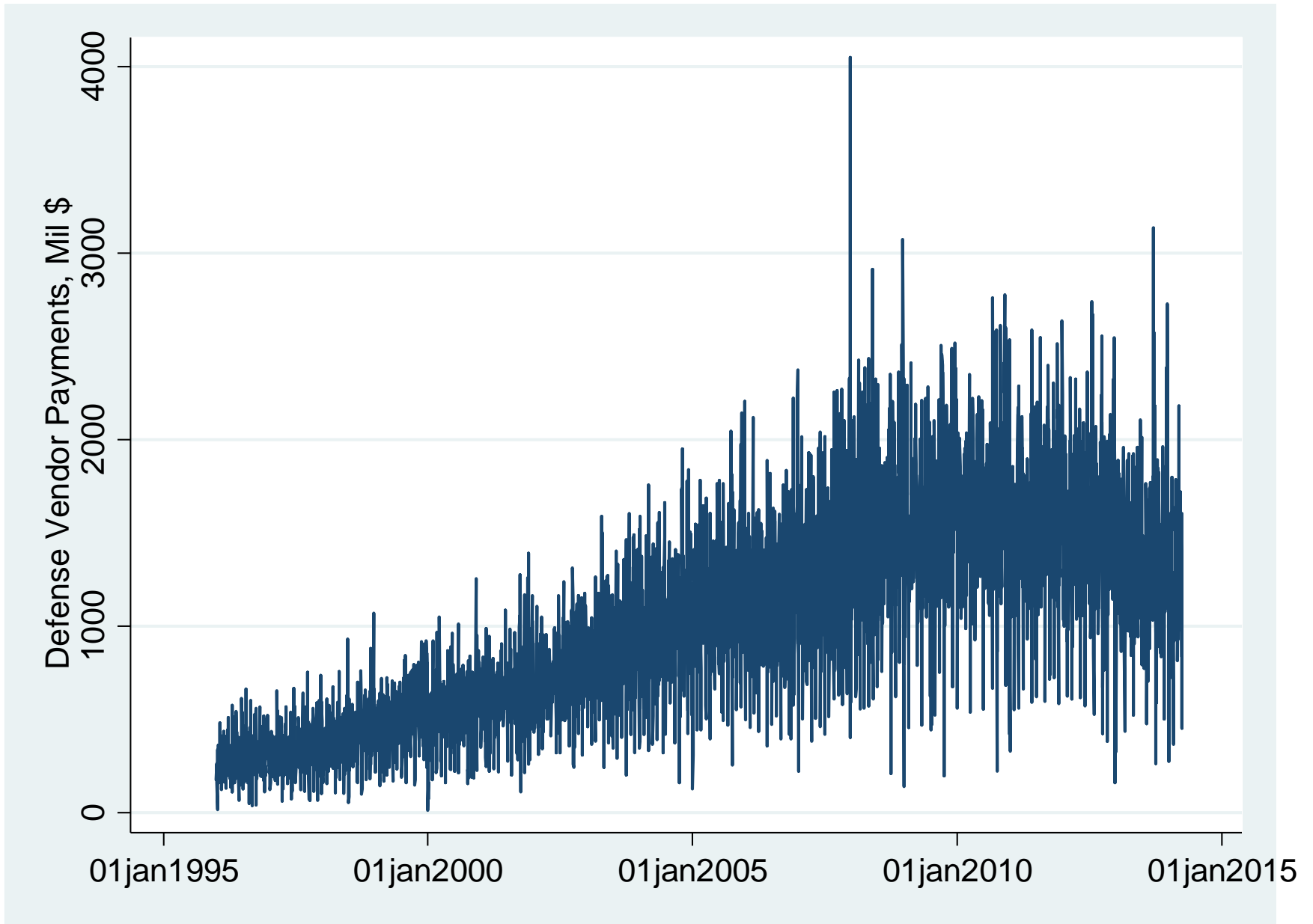
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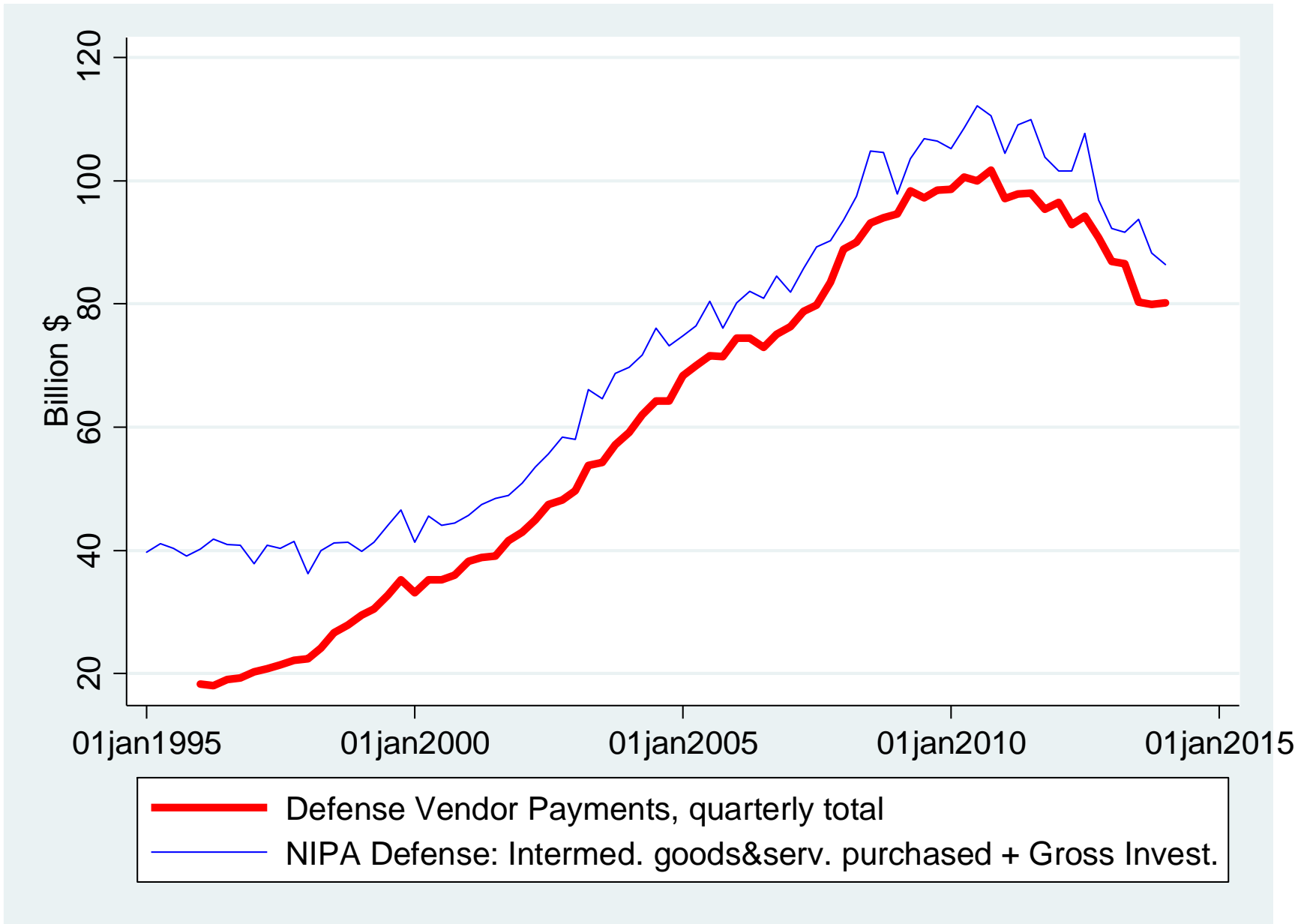
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DAILY DEFENSE VENDOR PAYMENTS



QUARTERLY TOTALS OF DAILY DEFENSE VENDOR PAYMENTS



DEPARTMENT OF DEFENSE (DoD) ANNOUNCEMENTS

Almost every day at 5pm, DoD announces new contract awards greater than \$6.5 mil.

<http://www.defense.gov/contracts/>

U.S. DEPARTMENT OF DEFENSE

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No: CR-216-14
November 10, 2014

CONTRACTS

ARMY

Great Lakes Dredge & Dock Co., Oak Brook, Illinois, was awarded a \$57,609,736 firm-fixed-price contract, with options, for initial construction and beach nourishment at Great Egg Harbor Inlet to Townsends Inlet, Ocean City and Sea Isle City, Cape May County, New Jersey. Work will be performed in Sea Isle City, New Jersey, with an estimated completion date of Jan. 18, 2016. Bids were solicited via the Internet, with two received. Fiscal 2015 operations and maintenance (Army) funds in the amount of \$57,609,736 are being obligated at the time of the award. U.S. Army Corps of Engineers, Philadelphia District, Philadelphia, Pennsylvania, is the contracting activity (W912BU-15-C-0003).

Walsh Group Ventures, Chicago, Illinois, was awarded a \$50,930,542 firm-fixed-price contract, with options, to construct a new high school on Fort Campbell, Kentucky, with an estimated completion date of Dec. 31, 2016. Bids were solicited via the Internet, with four received. Fiscal 2015 military construction funds in the amount of \$50,930,542 are being obligated at the time of the award. U.S. Army Corps of Engineers, Louisville District, Louisville, Kentucky, is the contracting activity (W912QR-15-C-0001).

Most Recent Contracts

- Contracts for November 10, 2014
- Contracts for November 07, 2014
- Contracts for November 06, 2014
- Contracts for November 05, 2014
- Contracts for November 04, 2014
- Contracts for November 03, 2014
- Contracts for October 31, 2014
- Contracts for October 30, 2014
- Contracts for October 29, 2014
- Contracts for October 28, 2014

DEPARTMENT OF DEFENSE (DoD) ANNOUNCEMENTS

Almost every day at 5pm, DoD announces new contract awards greater than \$6.5 mil.

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This is an example of a contract awarded on July 28, 2014:

SAIC, McLean, Virginia, was awarded an \$89,526,485 cost-plus-incentive fee, incrementally-funded contract with options, for management and technical support for high performance computing services, capabilities, infrastructure, and technologies. Work will be performed at Wright-Patterson Air Force Base, Ohio; Aberdeen Proving Ground, Maryland; Stennis Space Center, Mississippi; Vicksburg, Mississippi; Kihei, Hawaii; Lorton, Virginia; and McLean, Virginia, with an estimated completion date of July 28, 2019. Bids were solicited via the Internet with four received. Research, development, testing and evaluation fiscal 2013 (\$18,230,430) and fiscal 2014 (\$5,770,000) funds are being obligated at the time of the award. U.S. Army Corps of Engineers, Huntsville, Alabama, is the contracting activity (W912DY-14-F-0103).

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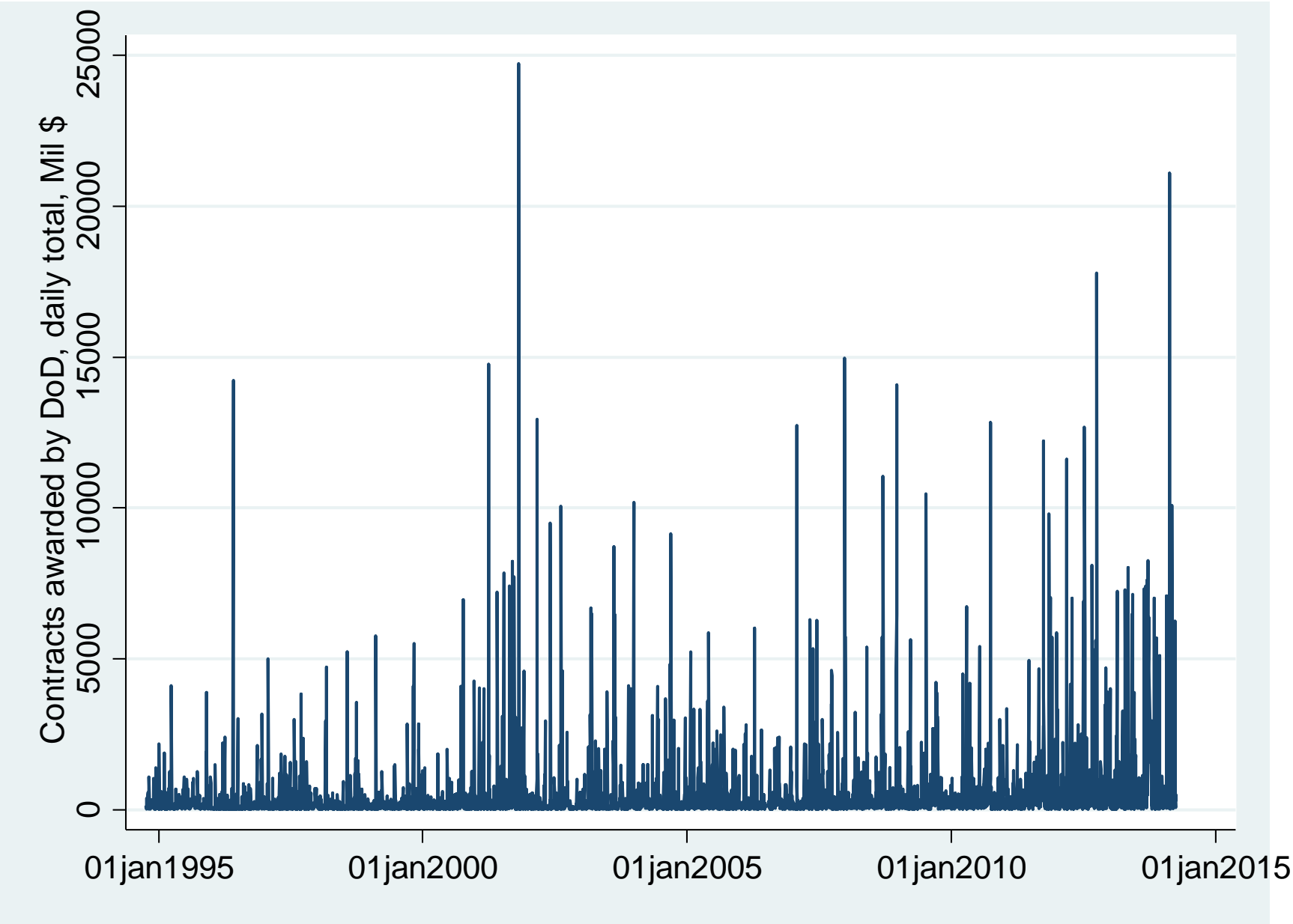
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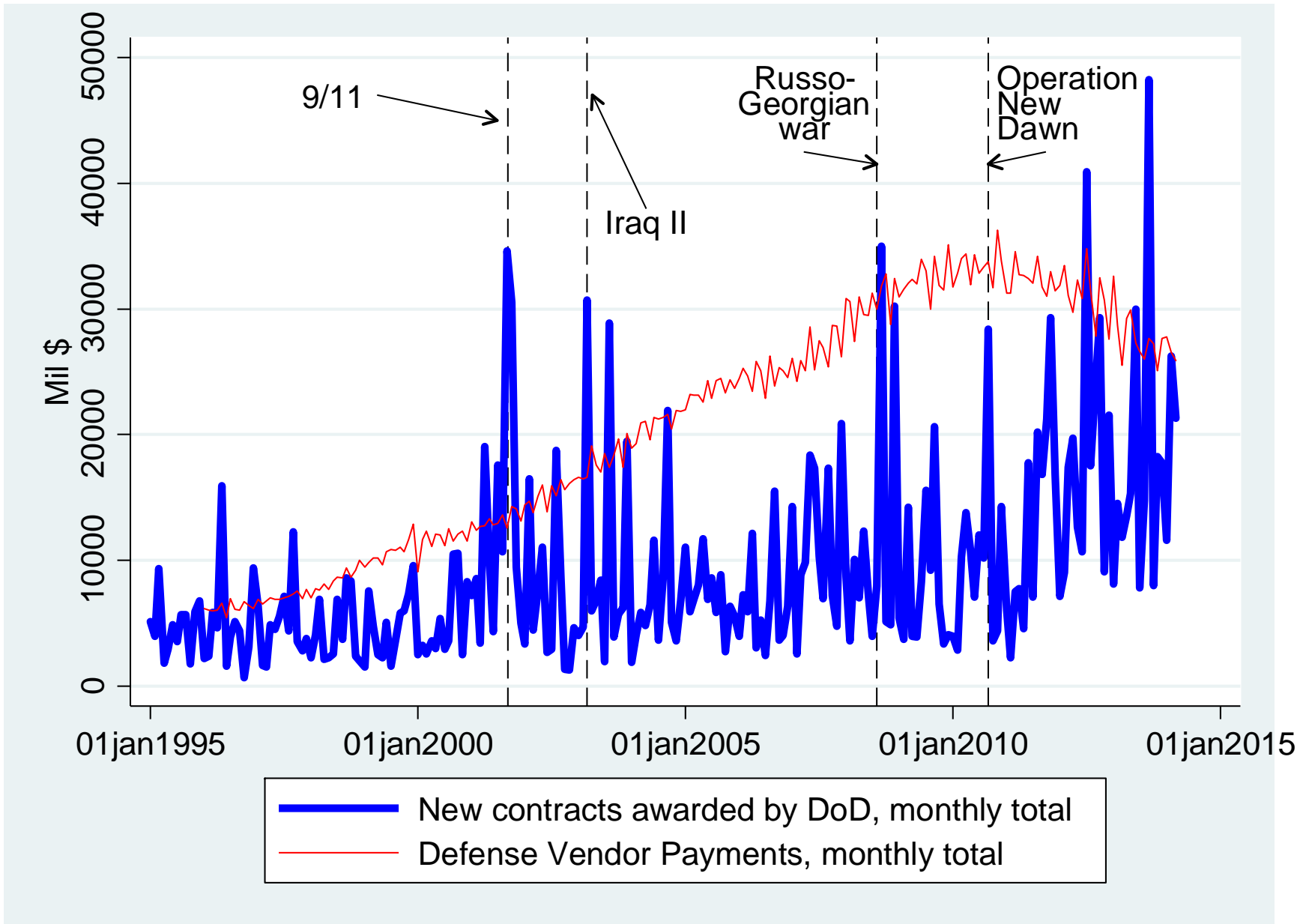
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DEPARTMENT OF DEFENSE (DoD) ANNOUNCEMENTS: DAILY TOTALS



DEPARTMENT OF DEFENSE (DoD) ANNOUNCEMENTS: MONTHLY TOTALS



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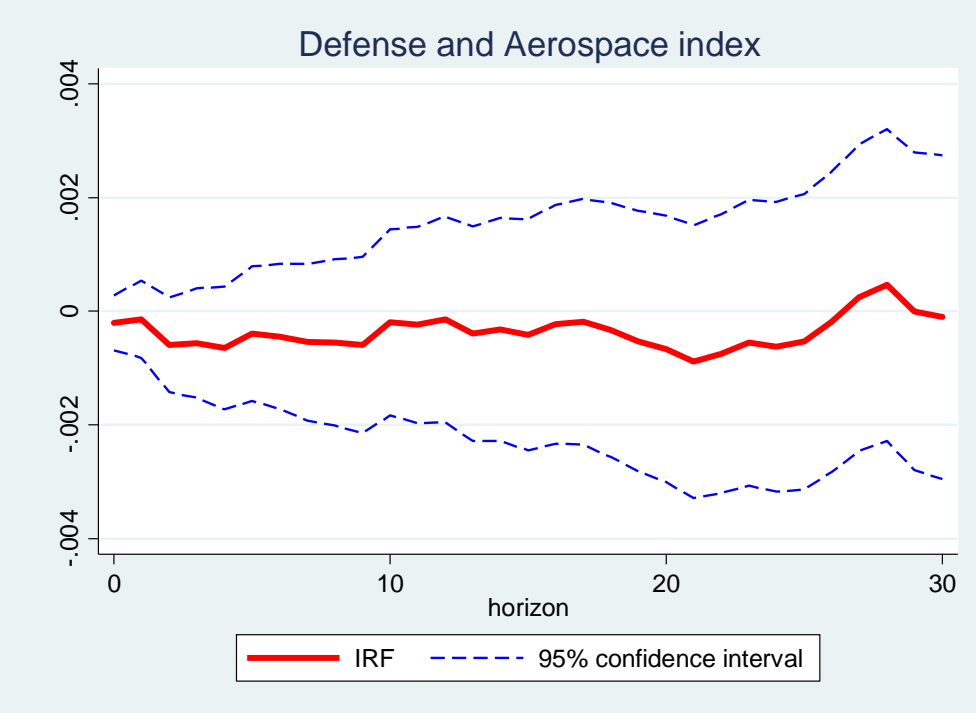
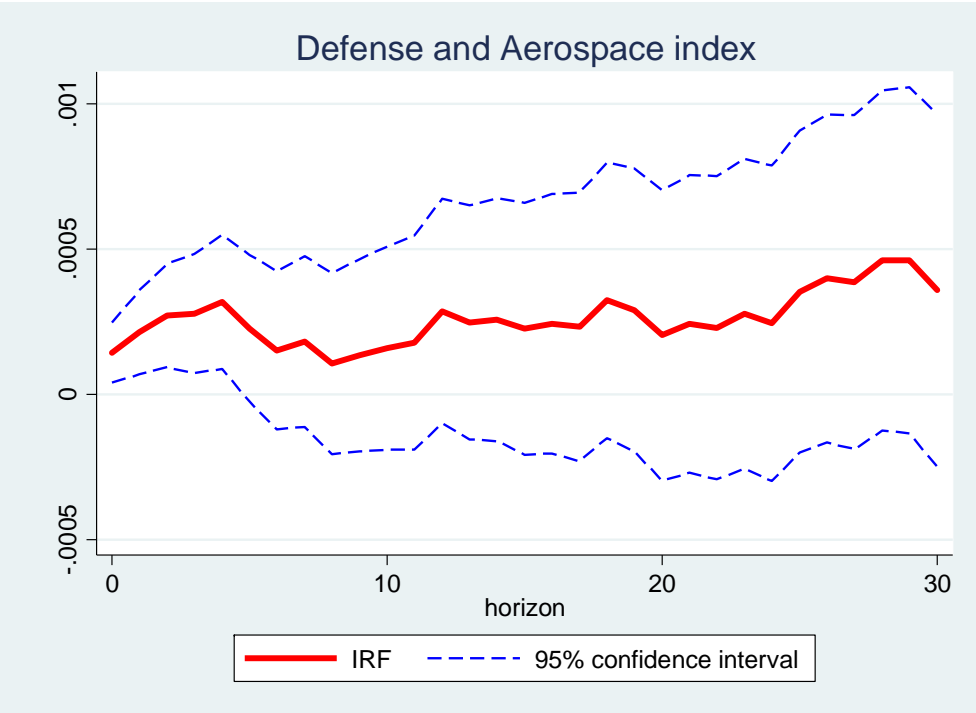
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Strategy: Examine responses of stock prices of defense contractors to these innovations.

RESPONSES OF DEFENSE/AEROSPACE INDEX TO A SHOCK IN SPENDING

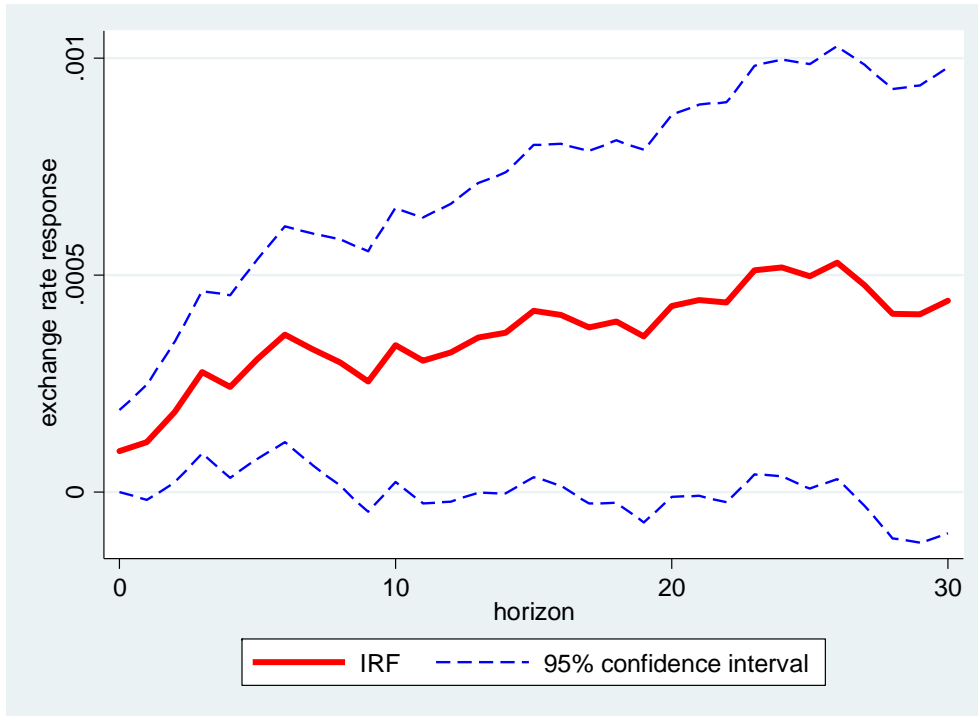
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DAILY PAYMENTS TO DEFENSE CONTRACTORS

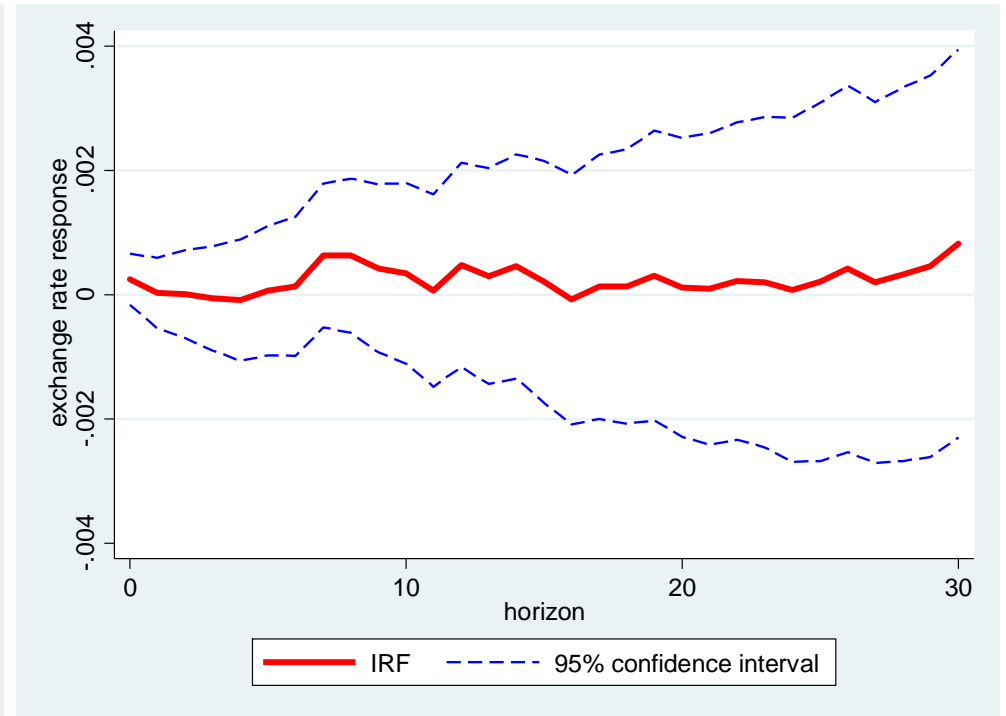


RESPONSE OF TRADE-WEIGHTED EXCHANGE RATE

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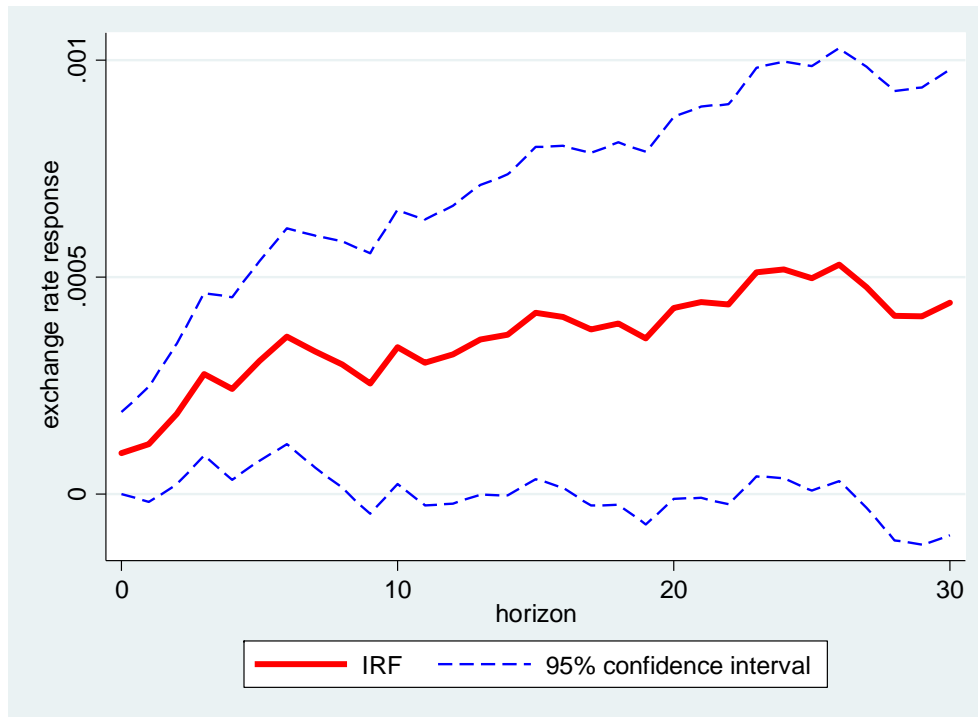


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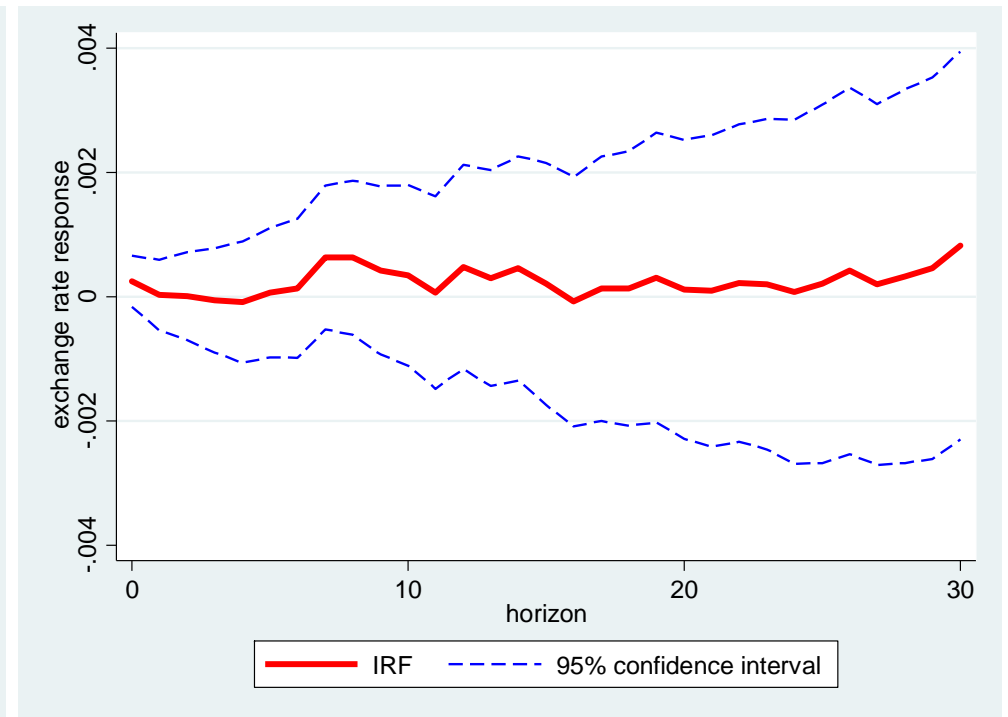


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DAILY PAYMENTS TO DEFENSE CONTRACTORS



Economic magnitude:

Double defense contracts (+2% of GDP) \Rightarrow the dollar appreciates by 12%.

PROPAGATION

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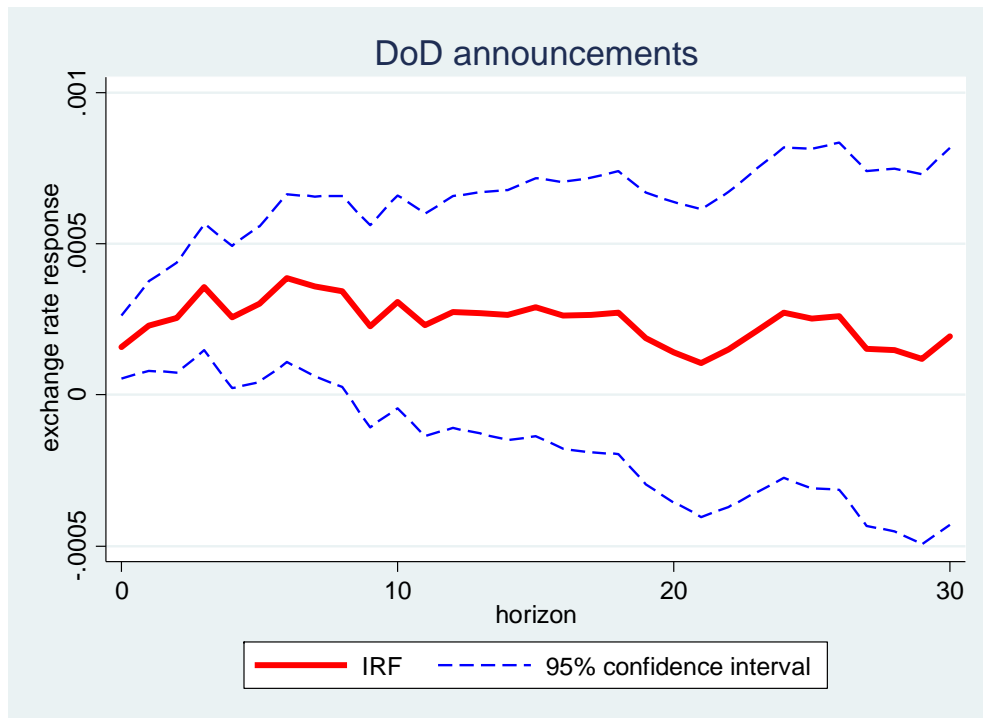
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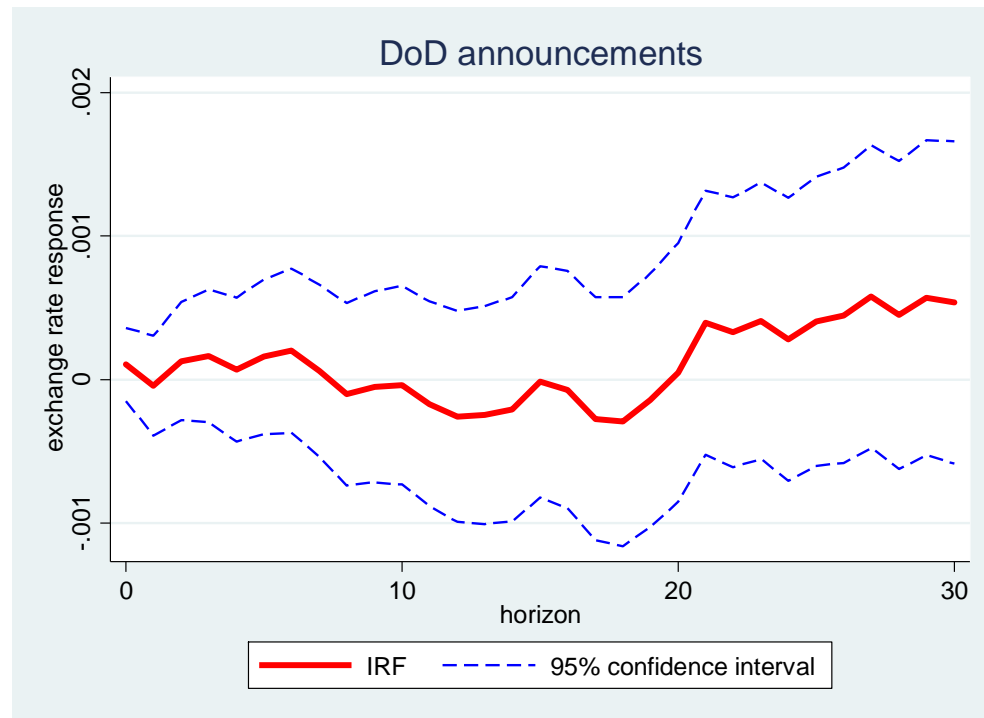
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TIME VARIATION IN THE RESPONSE OF THE EXCHANGE RATE

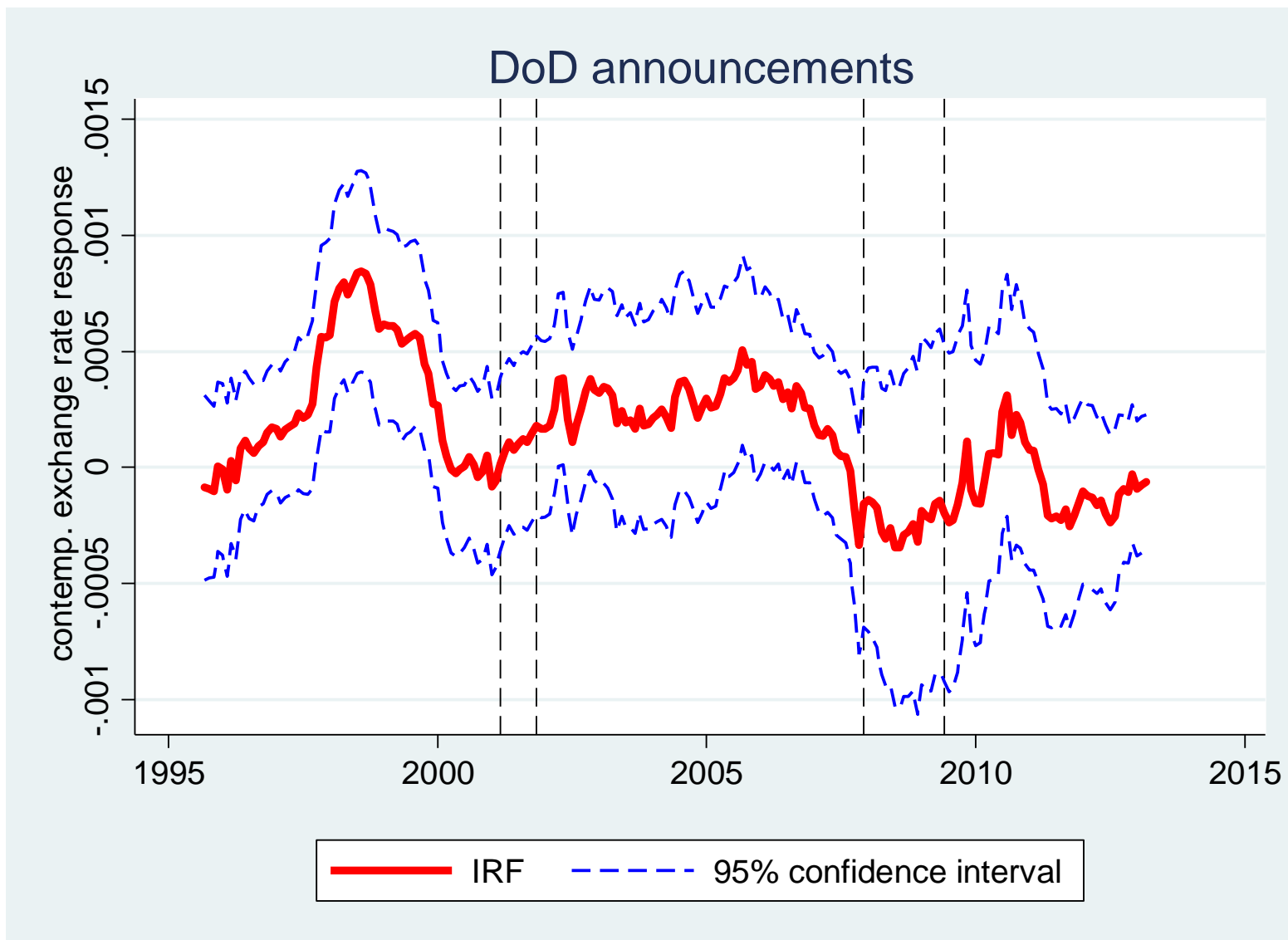
PRE-GREAT RECESSION



BINDING ZERO LOWER BOUND

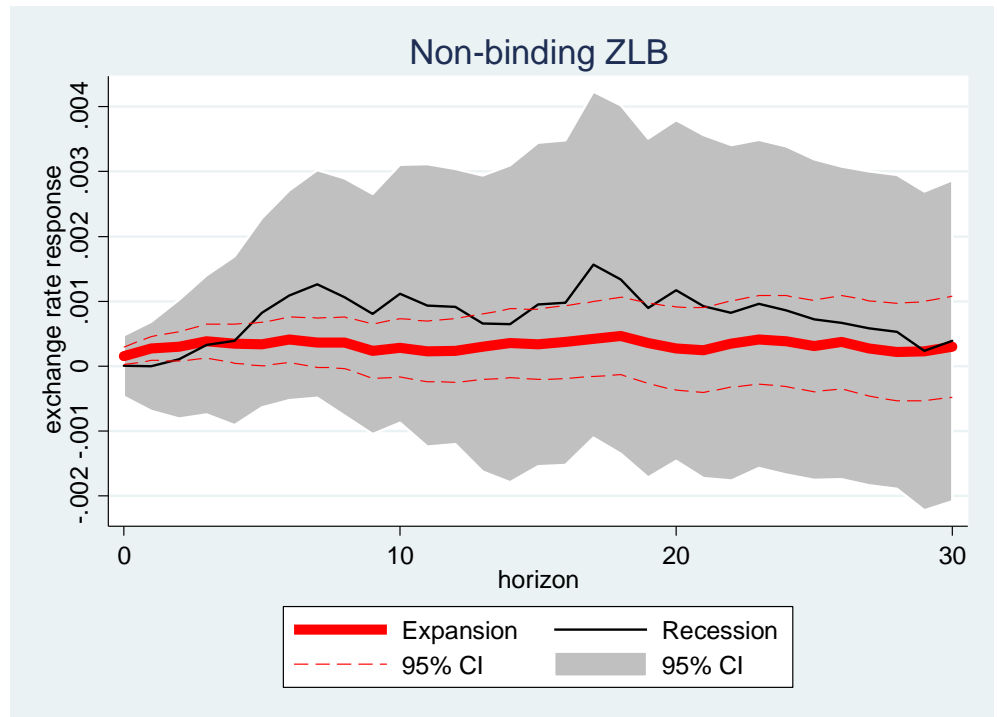
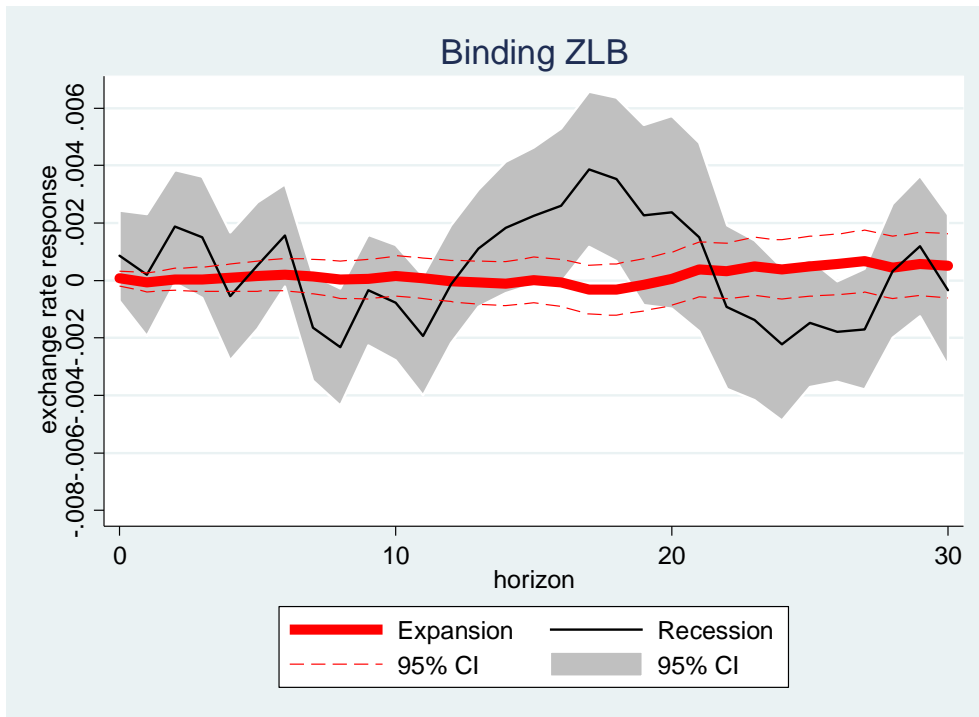


TIME VARIATION IN THE RESPONSE OF THE EXCHANGE RATE



Rolling regressions, window = 24 months (\approx 500 observations).

STATE-DEPENDENT RESPONSE OF THE EXCHANGE RATE



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- The transmission is tentatively in line with the predictions of modern and classical models.
- There is some evidence that the response of the exchange rate to government spending shocks is time-varying and state-dependent.