

Gender Equality in US Think Tank Leadership

Data from Tax Records

Charles Kenny and Julian Duggan

Existing analysis of US think tanks suggests that women are underrepresented among senior staff, leadership, and board members. Chantal de Jonge Oudraat and Soraya Kamali-Nafar at Women In International Security [examined](#) 22 Washington, DC-based think tanks working on foreign policy and national and international security, and they found that 68 percent of the heads of the think tanks were men, along with 73 percent of the experts and 78 percent of those on governing boards. In 2018, a [random sampling](#) of 10 leading US think tanks working on development by Charles Kenny and Tanvi Jaluka suggested that women made up 30 percent of high-paid employees and 10 percent of highest-paid employees, and that higher-paid women earned only 75 percent that of higher-paid men.

This note updates the 2018 analysis with a larger sample of think tanks covering a longer period and includes measures of think tank reach to examine if more established think tanks perform better or worse on gender equality within their senior ranks. Across the 71 think tanks for which we have data, we find that the average share of trustees and directors that were women was 23 percent, the average share of highly compensated employees that were women was 30 percent, and highly compensated women were paid 92 percent of what highly compensated men were paid. Conservative-leaning think tanks performed notably worse than the average on the share of high-paid employees who were women, as did think tanks that worked on global development. Older think tanks saw worse gender pay ratios. Having a woman as CEO was not associated with greater pay equality. Analysis of the gender pay ratio suggest that it may be driven in part by a few very highly compensated men in senior positions, but also that, conditional on job title and think tank of employment, highly paid women are paid \$30,000 less per year than highly paid men.

DATA COLLECTION

We selected think tanks for analysis based on their presence in the Top Think Tanks in the US as listed in [2017 Global Go To Think Tank Index Report](#). This selection encompasses all US development think tanks [ranked](#) in a separate exercise by CGD's Alan Gelb and colleagues in 2015 using a methodology initially developed by Julia Clark and David Roodman. We scraped think tank IRS Form 990s from [ProPublica's Non-profit Explorer](#) using a suite of R functions made available on [Github](#) by Jesse Lecy and Nathan Grasse. The

Form 990 is a public document filed with the IRS to provide tax information for charities and other non-profits. It includes information on financial details, like revenues and payments, as well as information about trustees, directors, and highly compensated employees (HCEs), among other things.

For every available year, we collected data on each organization's revenues and expenditures in addition to the name, pay, hours, and title of their most highly compensated employees, trustees, and directors.¹ Note the resulting list of employees is not a complete listing because it covers only those individuals categorized as key/high-paid employees. To quote IRS [guidance](#) on reporting:

The organization must also list up to 20 current employees who satisfy the definition of key employee (persons with certain responsibilities and reportable compensation greater than \$150,000 from the organization and related organizations), and its five current highest compensated employees with reportable compensation greater than \$100,000 from the organization and related organizations who are not officers, directors, trustees or key employees of the organization.

In order to assign a gender to employees, trustees, and directors, we used a [dataset](#) built from the Social Security Administration's application records. Each name ("John") is matched to a gender ("Man") with some probability that equals the fraction of social security number applicants with that name ("John") who were of that gender ("Man"). In cases where the database provided less than a 99 percent certainty that a name was associated with men or women, we manually checked names against think tank websites for gendered pronouns in bios. (Note: unfortunately, we are likely to have misidentified any people who identify as nonbinary).

To measure reputation and reach, we included data both from the Global Go To Think Tank Index and the CGD think tank ranking initially developed by Julia Clark and David Roodman. The two rankings differ in that the Go To Index [uses](#) survey responses from "scholars, public and private donors, policy-makers, and journalists" to create scores. The CGD ranking uses independently measured indicators of social media reach, academic citations, and media citations. One version of the CGD ranking also adjusts this raw score based on operating budget to create an efficiency score.

We created a measure of partisanship based on think tank descriptions on Wikipedia. If the introductory paragraph classified the think tank as conservative or liberal, this was recorded.² If the description classified the think tank as nonpartisan or bipartisan, or did not suggest any ideological alignment, this was recorded as nonpartisan/none. We also took year of founding data from Wikipedia, supplemented by organizations' websites when necessary.

The resulting database covers 71 think tanks (for an average of 6 years between 2009 and 2017), about 1,100 highly compensated employees (an average of 15 per institution) and about 2,400 trustees and directors (an average of 35 per institution). Note that some employees will also be directors.³ We report what proportion of highly compensated employees and trustees/directors were women, and the

1 Throughout this document, we use the terms "high-paid," "highly compensated," "highly paid," and similar variants, interchangeably. They always denote individuals who met the definition provided here and who were included in Schedule J of the IRS990 Form.

2 Keywords "conservative," "libertarian," and "free-market" were used to identify conservative organizations. Keywords "liberal," "progressive," "left," "center-left," and "left-leaning" were used to identify liberal organizations.

3 These two figures (1,100 and 2,400) rely on deduplicating names by string matching. We dropped all nonstandard characters, middle initials, and titles in addition to putting all names in lowercase. Then we dropped duplicate names to arrive at these figures. They will be skewed upward by idiosyncratic spellings (including or excluding a middle name, typos, etc.) and skewed downwards by different individuals with the same name. Additionally, a person who is affiliated with multiple organizations will likely only be recorded once.

average pay of highly compensated women expressed as a proportion of the average pay of highly compensated men.

ANALYSIS

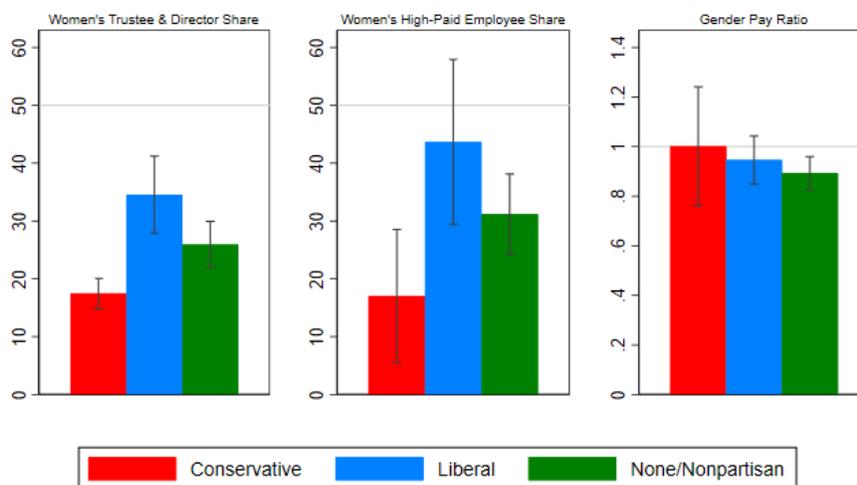
The average share of think tank trustees and directors that were women was 23 percent, and the average share of highly compensated employees that were women was 30 percent. Among think tanks that had at least one high-paid man and one high-paid woman, highly compensated women were on average paid 92 percent of what highly compensated men were paid. (Twelve think tanks reported no high-paid women, one reported no high-paid men). And as of 2016, just 29 percent of all pay to highly compensated employees went to women.

In terms of representation, conservative think tanks performed notably worse than the average, with women composing just 16 percent of their trustees/directors and 17 percent of their highly compensated employees. Liberal think tanks performed better than average on these measures but still only saw women in 30 percent of trustee/director positions and 44 percent of highly compensated positions. On the other hand, the compensation ratio was higher (if insignificantly so) at conservative think tanks (1.00, suggesting pay parity) than at liberal ones (.95).

Table 1. Equality by political leaning

	Trustee & director share	HCE share	Gender pay ratio
Conservative	16.37	17.01	1.00
Liberal	30.39	43.65	0.95
Nonpartisan/none	24.12	31.19	0.89
Total	23.46	29.64	0.92

Figure 1. Equality by political leaning



Only two organizations in the database (Demos, Institute for Women’s Policy Research) had a 50 percent or more share of women among their trustees and directors throughout the period. And only 12 out of the 65 think tanks that reported highly compensated employees had a 50 percent or more share of women.

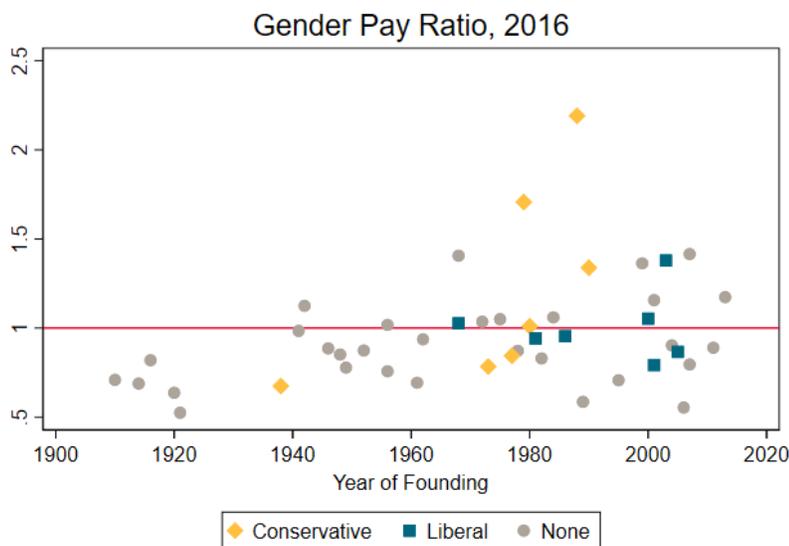
Among the 43 think tanks with information available in 2011 and 2016, women’s share of trustees and directors increased marginally from 23.5 percent to 26.2 percent. Their share of highest compensated employees increased from 29.3 to 32.7 percent. Meanwhile, the gender pay ratio (women’s pay as a share of men’s pay) moved from 0.87 to 0.93. On those (linear) rates of progress, parity in the number of trustees and directors would occur around 2060, in the number of high-compensated employees around 2041, and in pay of high-paid employees around 2022.

Table 2. Equality over time

	Trustee & director share	HCE share	Gender pay ratio
2011	23.50	29.30	0.87
2016	26.17	32.69	0.93

Think tanks with greater recognition perform worse in terms of pay equality. Both the 2017 Global Go To Think Tank Index and the unadjusted 2014 CGD rankings correlate positively with the gender pay ratio, indicating that the best ranked think tanks have less equitable pay.⁴ Moreover, a significant, positive correlation holds between the year of founding and average gender pay ratios, demonstrating that older, more established think tanks are less equal. This correlation does not appear to be a function of wealth, as no significant relationship holds between assets or revenues and pay ratios. We also examined whether woman-led think tanks see greater pay equality among senior staff (excluding the president/CEO herself). The result was insignificant.

Figure 2. Pay ratio by age of think tank



4 To be clear, a “higher” rank (e.g. 80th) is a worse rank. Therefore, a positive correlation between rank and pay equity implies that the higher (i.e. worse) the, the higher (i.e. more equitable) the pay ratio. Additionally, the budget-adjusted 2014 CGD rankings correlate positively and, in the case of highly compensated employee shares, significantly, with our measures of women’s representation.

Table 3. Equality by year of founding

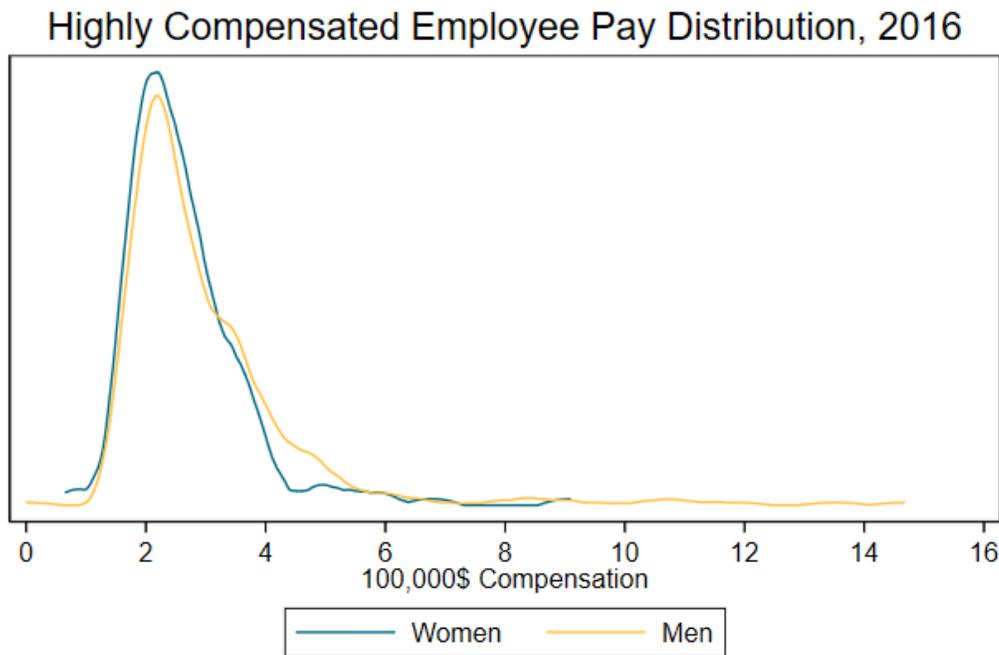
	Trustee & director share	HCE share	Gender pay ratio
Pre-1970 (inclusive)	23.93	27.5	0.87
Post-1970	23.23	30.74	0.95

Think tanks that conduct research in international development according to the 2017 Global Go To Think Tank perform similarly to nondevelopment think tanks in terms of board representation. However, nondevelopment think tanks fare relatively better in terms of representation of women among highly compensated employees and in terms of pay ratios.

Table 4. Equality by development work

	Trustee & director share	HCE share	Gender pay ratio
Development	23.75	21.73	0.85
Nondevelopment	23.37	31.81	0.94

Figure 3. Highly compensated employee pay distribution, 2016



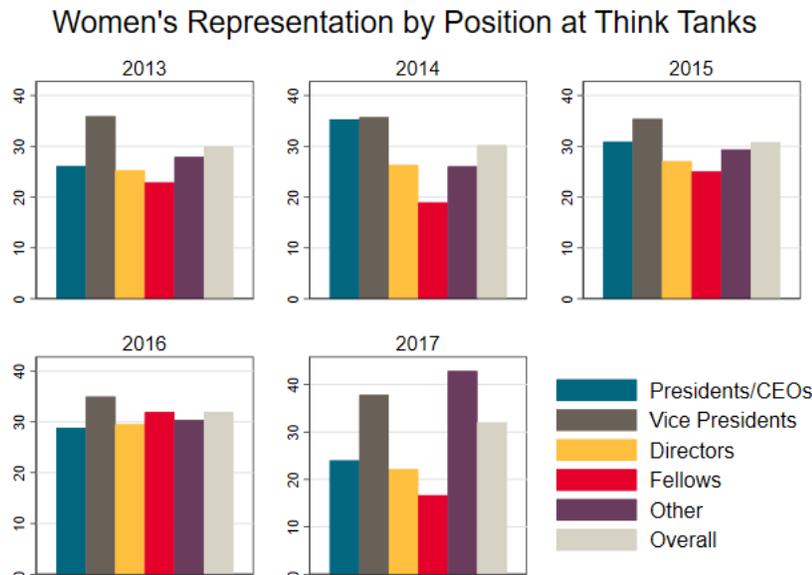
Graphic includes data from 523 employees (356 men, 167 women) at 61 think tanks.

We have found the gender pay ratio at think tanks averages .92. Women are paid less than men relative to their representation. A graph of the highly compensated employee pay distribution across think tanks (Figure 3) illustrates a long right tail on the pay distribution for men that outstrips that of women by a significant margin. Therefore, it seems likely that these few highest-paid men are at least partially responsible for the skewed pay ratios. A closer look at the data reveals that these men occupy

very high-ranking positions at their respective organizations. Thus, part of the cause for pay inequality may be that women are (even more) underrepresented among the highest-ranked positions at think tanks. Additionally, we observe that, even before reaching the right tail, a higher fraction of men are paid salaries in the \$375,000-500,000 range. This observation is consistent with the idea that, even conditional on advancing to high-ranking positions, women still earn less than men.⁵

To address the first theory, we can look at gender representation in different senior positions. Each position is defined using the “title” field included in IRS Form 990 Schedule J, which is widely available from 2013 on. It is not evident that women are dramatically underrepresented in the highest-ranking positions—president/CEO and vice president—compared to their representation in all highly compensated positions (2017 data is limited and so should be treated with caution). Figure 4 demonstrates that women appear to be relatively overrepresented among vice presidents, and their relative representation among presidents fluctuates year to year. Generally speaking, they are relatively underrepresented among directors and fellows.

Figure 4. Women’s representation by position at think tanks

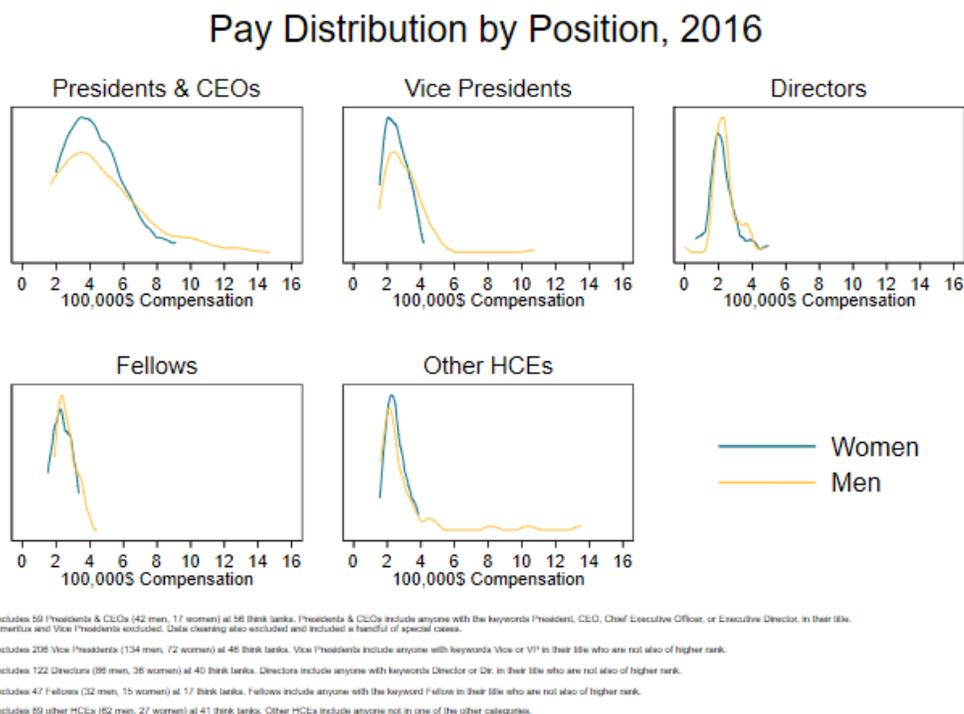


Even though women remain underrepresented across all senior positions, there is no clear relationship between their share in a position and the seniority of that position. That suggests representation at the very highest levels is not an immediately obvious driver of pay inequality among highly compensated employees.

⁵ Related to this is the question as to whether the differences observed in individual HCE pay are driven primarily by differences across or within organizations. To answer this, we use the decomposition method of one-way ANOVA, where each group is a think tank: individual compensation = overall average compensation + (group average compensation – overall average compensation) + (individual compensation – group average compensation). Theoretically, the second term accounts for variation at the individual level due to organizational differences. And the third term accounts for variation at the individual level due to individual differences. To calculate the fraction of variation not attributable to organizational differences, we take $(\text{individual compensation} - \text{group average compensation})^2 / [(\text{group average compensation} - \text{overall average compensation})^2 + (\text{individual compensation} - \text{group average compensation})^2]$. We arrive at a within variation that has oscillated between 77 percent and 85 of total variation 2009-2017.

Are highly compensated women paid less than highly compensated men with the same job title? Figure 5 displays kernel density estimates of pay distributions for each title. At the highest levels (president, vice president, and miscellaneous high-ranking “other HCEs”), men have a much longer right tail in their pay distribution, and a higher fraction of them are making salaries above the mean.

Figure 5. Pay distribution by position, 2016



To further examine the role of different representation at senior levels as opposed to different pay within those levels on pay inequality, we regress individual compensation on organization, position, and gender fixed effects. We do this for each year with sufficient data (dropping 2017) and report all coefficients except organization fixed effects and the constant.

Table 5. Fixed effects regression

	2013	2014	2015	2016
Man	34882** (10581)	34448** (10458)	33556*** (9538)	32720** (9690)
President/CEO	295565*** (82407)	252500*** (37567)	261473*** (36090)	249681*** (36457)
Vice president	-3812 (36534)	21663 (14007)	16696 (16071)	4552 (14816)

Director	-12615	-9327	-17155	-30191
	(29838)	(15101)	(17551)	(18224)
Fellow	-100331	-27588	-12954	-40693
	(62676)	(23297)	(17516)	(22082)
<i>Other women's mean</i>	226600	231303	244957	249096
N	446	475	484	517

This regression is not well identified, but it still permits us to make descriptive statements. Specifically, we can see that men are paid on average over \$30,000 more per year even conditional on position and institution. The income distribution graphics and the regressions lend credence to the idea that pay inequality at the same job title in the same institution is responsible for at least some considerable portion of skewed pay ratio.

CONCLUSION

Top US think tanks as measured by reputation remain considerably imbalanced in terms of gender representation both on boards and at all levels of senior leadership positions. And even among senior leadership, women are paid less than men. Given that think tanks are set up to provide leadership in terms of public policy, this imbalance is especially problematic, potentially spilling over into the focus and content of policy recommendations and advocacy. Greater gender equality should be a priority for the sector as a whole.

APPENDIX. HCE REPRESENTATION AND AVERAGE PAY

Organization	Avg. women representation highest compensated employees	Avg. women's pay among highest compensated employees	Avg. men's pay among highest compensated employees	Years of data
Institute For Women's Policy Research	1.00	190679.55	.	2010-2017
Pacific Research Institute For Public Policy	0.80	247943.31	162000.00	2012-2017
Berggruen Institute On Governance	0.80	279576.00	404449.00	2014-2017
Middle East Institute	0.76	187602.61	206028.00	2010-2012, 2014-2017
Demos A Network For Ideas And Action Ltd	0.74	184522.03	205853.11	2009-2017
Franklin & Eleanor Roosevelt Institute	0.58	217036.28	204932.41	2010-2014
Strategies For The Global Environment Inc	0.58	249235.64	262804.41	2012-2014, 2016-2017
Migration Policy Institute	0.57	174554.00	243651.59	2011-2012, 2014-2016
Bipartisan Policy Center Inc	0.57	227601.50	303239.69	2011-2016
Center On Budget And Policy Priorities	0.52	197574.92	206702.86	2010-2016
Henry L Stimson Center	0.50	197954.50	149332.80	2010, 2013-2016
Washington Center For Equitable Growth	0.50	187054.00	178347.67	2016-2017
Urban Institute	0.49	274406.34	277810.91	2010-2016
Council On Foreign Relations Inc	0.46	261698.12	415114.88	2010-2016
New America Foundation	0.44	269045.12	221742.53	2010-2016

Center For Global Development	0.43	284453.31	256731.17	2015-2017
Human Rights Watch Inc	0.43	237935.88	280356.97	2009-2016
Atlantic Council Of The United States	0.41	196973.77	276120.59	2012-2017
Asia Society	0.41	309134.75	271278.25	2009-2016
Acton Institute For The Study Of Religion and Liberty	0.40	231222.62	199333.42	2010-2017
Center For American Progress	0.39	242926.23	206398.17	2010-2017
Endowment Of The Us Institute Of Peace	0.35	217940.17	210701.19	2012-2016
Aspen Institute Inc	0.35	344449.59	443797.06	2010-2017
Carnegie Council For Ethics In International Affairs	0.33	187042.00	271630.00	2016
Economic Policy Institute	0.33	162448.09	185236.55	2010-2016
Rand Corporation	0.31	316725.34	365839.22	2009-2016
Woodrow Wilson International Center	0.31	259308.22	208838.56	2009-2016
World Resources Institute	0.31	203753.77	216819.88	2009-2016
Mercatus Center Inc	0.31	222267.92	212419.11	2011-2016
Center For A New American Security Inc	0.30	240286.36	221409.69	2010-2012, 2014-2016
Third Way	0.30	226318.50	250964.25	2010-2017
German Marshall Fund Of The United States	0.29	224193.61	270588.47	2010-2016
Carnegie Endowment For International Peace	0.29	291754.31	299598.38	2010-2016

Manhattan Institute For Policy Research Inc	0.29	259885.36	297921.31	2012-2016
Barry Goldwater Institute For Public Policy Research	0.28	324046.41	204772.00	2014-2017
International Food Policy Research Institute	0.25	229615.12	250737.52	2010-2016
Resources For The Future Inc	0.25	246574.56	264660.44	2009-2016
Cna Corporation	0.25	309976.81	315184.69	2009-2016
National Bureau Of Economic Research Inc	0.24	240904.00	365426.62	2010-2016
Center For Strategic And International Studies	0.24	187447.73	212243.20	2010-2016
Heritage Foundation	0.22	292830.03	401275.81	2010-2017
Committee For Economic Development	0.21	178639.33	271408.53	2012-2014
Brookings Institution	0.20	298980.22	362861.16	2010-2016
Freedom House	0.20	170391.50	191264.06	2010-2016
Pew Research Center	0.18	259657.20	305738.97	2009-2016
American Enterprise Institute For Public Policy Research	0.17	224818.47	343312.81	2010-2016
National Bureau Of Asian Research	0.17	175974.33	242923.41	2010-2016
Center For Strategic And Budgetary Assessments	0.14	253471.25	471898.97	2011-2017
Information Technology And Innovation Foundation	0.12	174632.67	294060.81	2011-2017
Institute For Defense Analyses	0.10	396484.09	331420.38	2009-2016

Institute For International Economics	0.05	343003.00	408842.28	2013-2016
Hudson Institute Inc	0.05	218636.50	279645.12	2009, 2015-2017
Cato Institute	0.04	185746.00	284904.22	2010-2017
Institute For Science And International Security	0.00	.	177333.83	2011-2016
Institute For Eastwest Studies Inc	0.00	.	256603.72	2017
Center For European Policy Analysis	0.00	.	181044.42	2011-2016
Institute On Religion & Democracy Inc	0.00	.	166728.00	2016
Center For The National Interest	0.00	.	322189.66	2010-2016
Competitive Enterprise Institute	0.00	.	188562.94	2012-2016
Inter-American Dialogue	0.00	.	244500.00	2015-2017
Center For International Policy Inc	0.00	.	192354.59	2011-2015
Atlas Economic Research Foundation	0.00	.	229899.78	2014-2017
Foreign Policy Research Institute	0.00	.	123127.29	2014-2016
Reason Foundation	0.00	.	219244.75	2011-2016
Foundation For Economic Education Inc	0.00	.	164332.00	2015-2016
Hispanic American Center For Economic Research	.	.	.	NO HCE DATA AVAILABLE
Center For Economic And Policy Research	.	.	.	NO HCE DATA AVAILABLE

Institute For Policy Studies	.	.	.	NO HCE DATA AVAILABLE
Independent Institute	.	.	.	NO HCE DATA AVAILABLE
Lugar Center	.	.	.	NO HCE DATA AVAILABLE
Worldwatch Institute	.	.	.	NO HCE DATA AVAILABLE



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