Duke University Human Capital Project John de Figueiredo NBER Presentation Data, Feb 2018 Set 2, Early/Late Agency Comparison

## E-mail from John:

Tom: Thanks ... Can you create the following pictures for me:

- 1. Occupations: Create a table with CPFB, CPSC 2011-16, CFTC 2011-2016, SEC 2011-2016 listing the top three occupations for each agency. Please use the five year averages for each agency. List the occupation and the percent of employees in that occupation. Then create a second table with CPFB, CPSC 1975-1980, CFTC 1974-1979 with the same information.
- 2. Ages: Create two tables with the same comparison sets except this time include the 25/50/75 percentile ages.
- 3. Education Distribution: Create two graphs with the same two reference sets on the percentage of workforce distribution by education level. This is a density plot. See below for a rough example of what I have in mind from my grade inflation paper with Alex.
- 4. Grade Distribution: This is harder, but I would like you to try to create two graphs that look like the education distribution, but for grades. You can normalize grades so that you can put them on the same graph as CFPB. I think that will work. If it is hard to do, then skip it. #1 #3 are the most important right now.

image of comparative grade distributions from Grade Inflation paper

I think with that information, I will have 80% of what I need. Could I get this by Monday?

I would like to show something about how young agencies evolve. So that would mean taking the three agencies: CPFB, CPSC 1975-1980, CFTC 1974-1979, and then showing how occupations evolve. At the CPFB they seem to stay the same, whereas at CFTC-early and CPSC-early, they seem to evolve..let me think about this more. I may have some ideas tomorrow or Monday.

Thanks, Tom! John Data source: Buzzfeed (2017 version), full-time employees

Note that records exist for agency AG04 (Commodity Exchange Authority) in years 1974-1978 and for CT00 (Commodity Futures Trading Commission) in 1979. These were combined and used for the CFTC observations.

## Top three occupations

Table 1: Occupation legend

Occupation	Description
110	ECONOMIST
301	MISCELLANEOUS ADMINISTRATION AND PROGRAM
318	SECRETARY
343	MANAGEMENT AND PROGRAM ANALYSIS
510	ACCOUNTING
570	FINANCIAL INSTITUTION EXAMINING
696	CONSUMER SAFETY
905	GENERAL ATTORNEY
1146	AGRICULTURAL MARKETING
1801	GENERAL INSPECTION, INVESTIGATON, & COMP
2210	INFORMATION TECHNOLOGY MANAGEMENT

Table 2: Top three occupations, late period, 2011-2016

CFPB	pct	CPSC	pct	CFTC	pct	SEC	pct
570	27.53	1801	31.09	905	38.60	905	42.20
301	20.37	343	8.80	1801	10.39	510	25.64
905	18.97	301	6.93	110	9.61	2210	5.25
		905	6.93				

Table 3: Top three occupations, CFPB with early period CPSC and CFTC

CFPB 2011-2016	pct	CPSC 1975-1980	pct	CFTC 1974-1979	pct
570	27.53	696	12.51	1146	19.34
301	20.37	301	12.51	510	18.78
905	18.97	318	9.84	301	11.05

Table 4: Age percentiles, late period, 2011-2016

	CFPB	CPSC	CFTC	SEC
25%	32.00	37.00	37.00	37.00
50%	37.00	47.00	47.00	42.00
75%	47.00	52.00	52.00	52.00

Table 5: Age percentiles, CFPB with early period CPSC and CFTC

	CFPB 2011-2016	CPSC 1975-1980	CFTC 1974-1979
25%	32.00	27.00	27.00
$\frac{50\%}{75\%}$	37.00 47.00	37.00 47.00	$32.00 \\ 47.00$

Note that the early period distribution (solid line) combines CFPB with early CPSC and CFTC based on an interpretation of e-mail item 2 requesting data sub-sets as outlined in item 1 (CFPB, CPSC 2011-16, CFTC 2011-2016, SEC 2011-2016 in one set; CFPB, CPSC 1975-1980, CFTC 1974-1979 in the other).

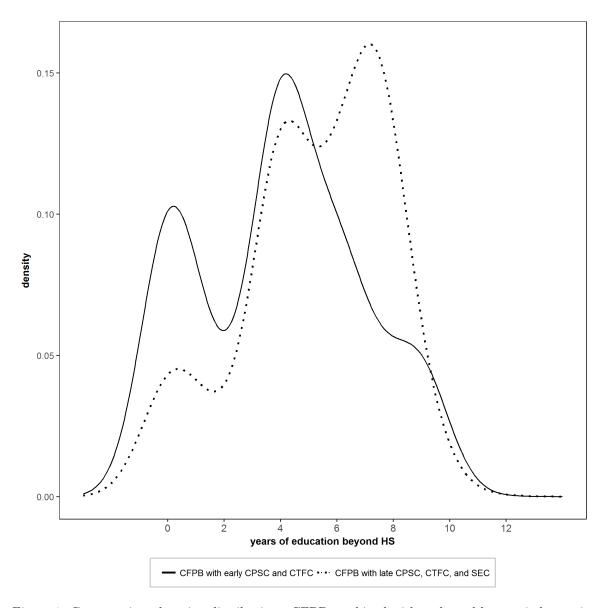


Figure 1: Comparative education distributions, CFPB combined with early and late period agencies

## Notes:

- The early period distribution (solid line) combines CFPB with early CPSC and CFTC based on an interpretation of e-mail item 2 requesting data sub-sets as outlined in item 1 (CFPB, CPSC 2011-16, CFTC 2011-2016, SEC 2011-2016 in one set; CFPB, CPSC 1975-1980, CFTC 1974-1979 in the other).
- The CFPB pay plan is CN, with grades 02 through 09 in 2011 and grades 21 through 90 afterward. CPSC, CFTC, and SEC use different pay plans, but grades consistently range from 01 through 18. For comparison, CN grades are scaled and shifted to an origin of 01 and range of 01 to 18. The 2011 CN shift and scale transformation is

$$grade_{scaled} = (grade_{CN} - 2) \times \frac{17}{7} + 1 \tag{1}$$

For 2012 through 2016 the transformation is

$$grade_{scaled} = (grade_{CN} - 21) \times \frac{17}{69} + 1 \tag{2}$$

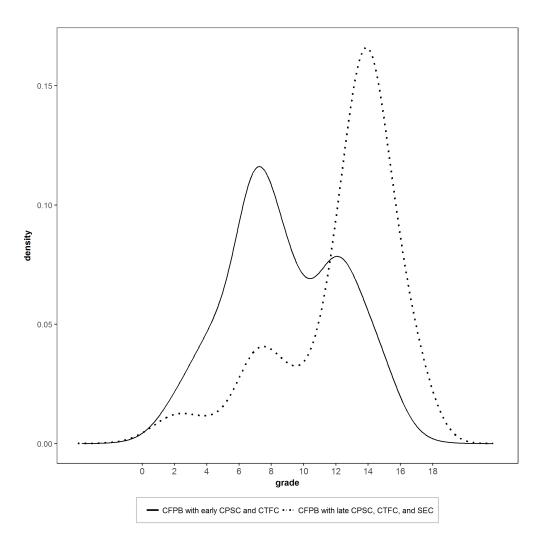


Figure 2: Comparative grade distributions, CFPB combined with early and late period agencies

Table 6: Occupational category codes

- P Professional
- A Administrative
- T Technical
- C Clerical
- O Other white collar
- na Missing

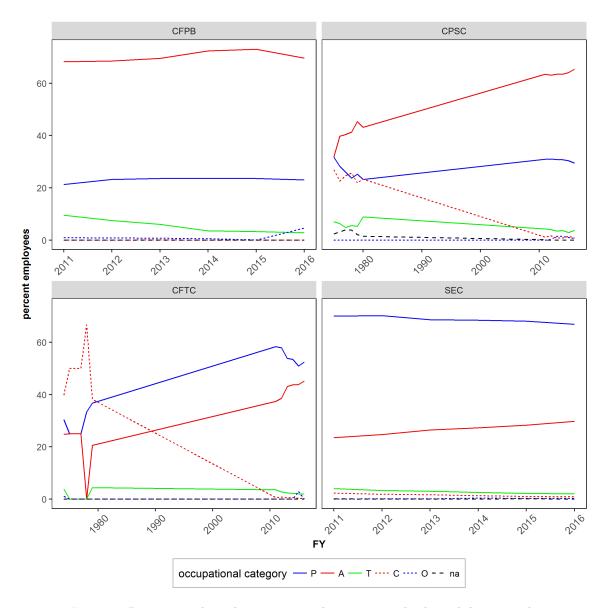


Figure 3: Percent employee by occupational category, early through late periods

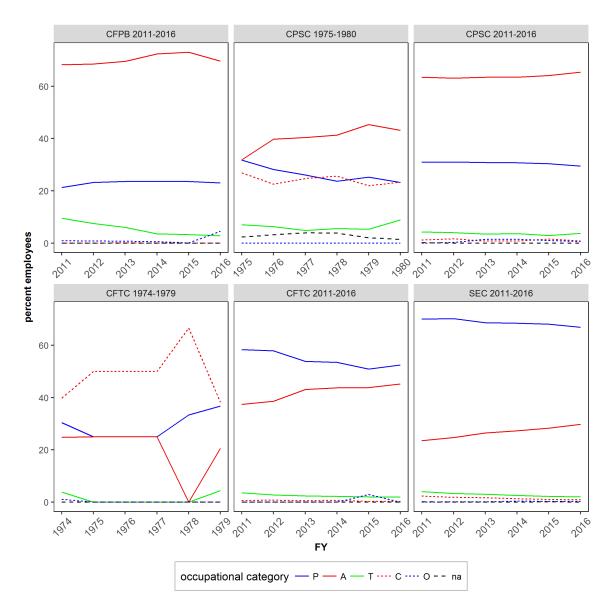


Figure 4: Percent employee by occupational category, agency and period contrasts