SOCIOECONOMIC DISPARITIES IN PARENTAL SPENDING AFTER UNIVERSAL CASH TRANSFERS: THE CASE OF THE ALASKA DIVIDEND

Online Appendix

Robustness Checks

Alternative Model Specifications. Results presented in this paper follow the literature by adding a small value to the observations and taking the natural log of the outcome variables to account for its skewed distribution (see for instance, Hsieh 2003; Kueng 2018; Michelmore and Jones 2019). Given potential concerns about the addition of this small constant and/or zero-inflation, I also estimated Poisson models that handle outcomes that are zero, linear models using an Inverse Hyperbolic Sine transformation instead of a log transformation of the outcome variable, and logistic regression models on binary outcomes that indicate whether families incurred any expenses in a given month. Appendices B, C, and D reproduce Figure 2 using each alternative specification described above. Alternative specifications generally corroborate the results from the main specification, although increases in spending on electronics are large but not significant in Appendix B, and increases in the probability of purchasing electronics are small and insignificant in Appendix D.

Reproducing Table 2 using each of the three alternative specifications (available upon request) also corroborate main results, finding significant increases in spending on clothes among higher-income parents, and increases in spending on clothing and electronics among middle and lower-income parents. Notably, in Poisson models, increases in spending on education are significant among lower-income parents but not middle-income parents. In logistic models, I find that the probability of spending on clothing increases for parents across the

income spectrum and the probability of spending on electronics does not; The probability of spending on education, once again, only increases significantly for lower-income parents.

A final set of robustness checks (available upon request) reproduces Figures 3 and 4 either with a dependent variable transformed using Hyperbolic Sine transformation or not transformed. Both alternative specifications yield the same conclusions as the specification presented in the main manuscript, except that when the dependent variable is not transformed, low-income families' spending in clothing is no longer impacted by the size of payouts.

Sample Restrictions. A key threat to my identification strategy is that factors other than the payouts in October may differentially shape expenses for Alaskan households. Although previous studies investigating the effects of the Alaska Dividend on consumption have found the whole continental U.S. to be an appropriate comparison group (Hsieh 2003; Kueng 2018), one could argue that spending on clothes or recreation may be shaped by the colder climate of Alaska. In a robustness check presented in Appendix E, I compare Alaskan households to households in northwestern U.S. states with colder climates, i.e. Washington, Idaho, and Montana. Results presented in Appendix E corroborate the main findings presented in this paper both in terms of substance and statistical significance and also have the benefit of making the sizes of treatment and control groups more similar, facilitating the identification of an effect. Notably, expenses in recreation around the disbursement period are not significant in the main results (see Figure 2) but become significant when Alaska is only compared to northwestern states. This suggests that, compared to other states with colder climates, Alaskans indeed increase their recreation-related spending around the disbursement period. Increases in spending on recreation around the time of disbursement, however, are not significant in models that estimate income-rank disparities using a restricted sample (results available upon request). I also

reproduced Figures 3 and 4 and reached the similar substantive conclusions using a control group restricted to northwestern states or to households who provided 12 months of information with or without post-stratification weights (results available upon request). Descriptions of these restricted samples are included in Appendix F.

Finally, results could be influenced by the age of resident children. For instance, expenses with clothing and education are greater when parents have young children. Results from models in which the sample is restricted to households with and without young children (under the age of 6), however, are similar and corroborate the main findings [results available upon request].

Estimating Marginal Propensity to Consume. So far, this paper highlighted models that estimate *relative* increases in spending due to a *relative* increase in income. Alternatively, marginal propensity to consume (MPC) estimates calculate the *absolute* increase in spending in relation to the *absolute* amount received by a family. MPCs are often expressed as a ratio of amount spent over amount received and calculated using models that include levels of spending and payouts as dependent and independent variables, respectively. As a sensitivity analysis, I reproduced Figure 2 (see Appendices G) to estimate MPCs. The short-term elasticity models presented in Figure 2 suggest that an increase of about $600 in annual permanent income due to the Dividend (about one percentage point of average family's income) leads to an increase in spending on clothes of $2 per child (8.5% of baseline monthly spending $25 per child) in October – or a marginal propensity to consume of 0.33% (2/600). This marginal propensity to consume is substantively similar to the one found in the short-term MPC models presented in Appendix G (0.3%). Notably, whereas models presented in the main manuscript suggest that Alaskans spend more than non-Alaskans in electronics the months after the payouts, models estimating MPC suggest Alaskan spend similarly to non-Alaskans in the months following the

payouts but *less* in the first semester of the year. Models estimating MPCs by income-rank corroborate main conclusions, however, once again, increases in spending on electronics are insignificant, and increases in spending on education are only significant among lower-income parent (results available upon request).
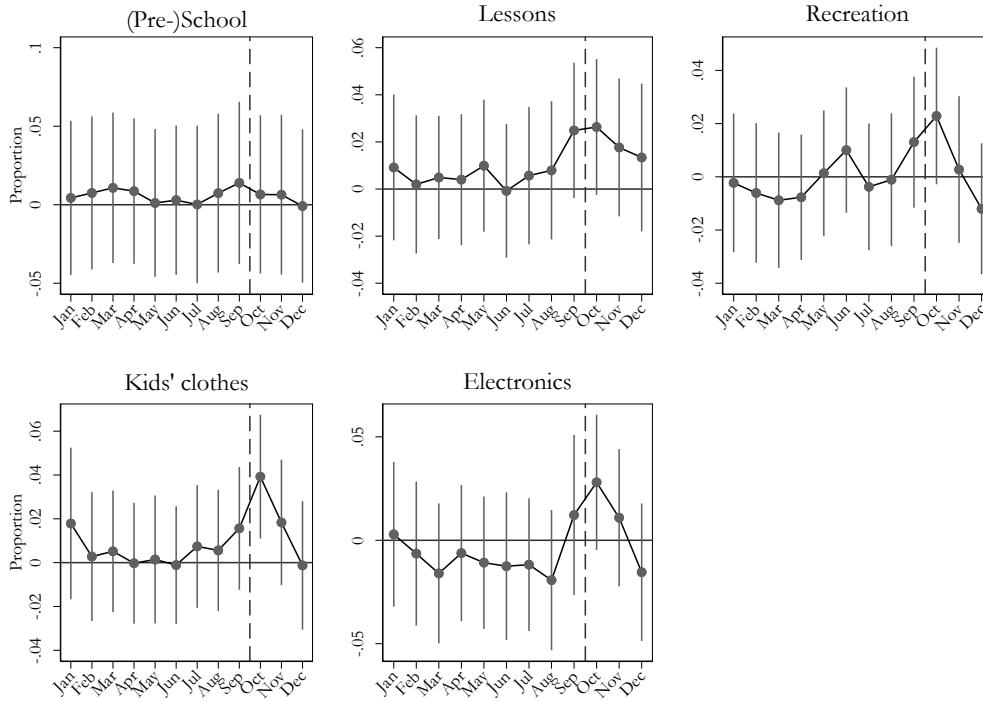
TABLES & FIGURES

APPENDIX A. *Differences in Average Monthly Spending Between Alaskan and Non-Alaskan Households Adjusted by Cost of Living by State of Residence*
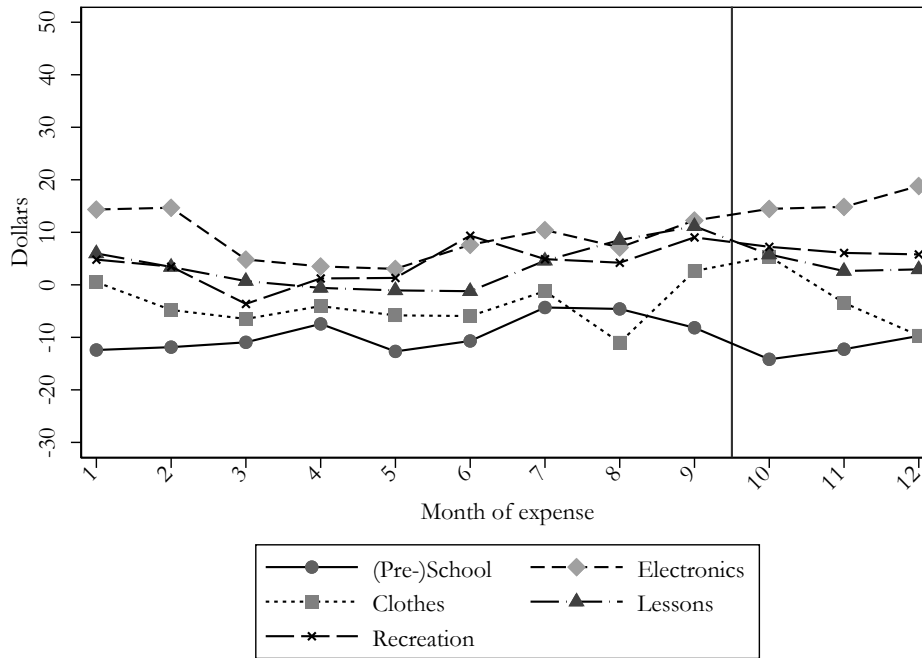

Notes: Consumer Expenditure Survey (1996-2015). Prices are adjusted for cost of living in 2014 dollars.

APPENDIX B. *Average Marginal Effects of the Dividend Payout on Spending Elasticity by Spending Category (Poisson Regression)*
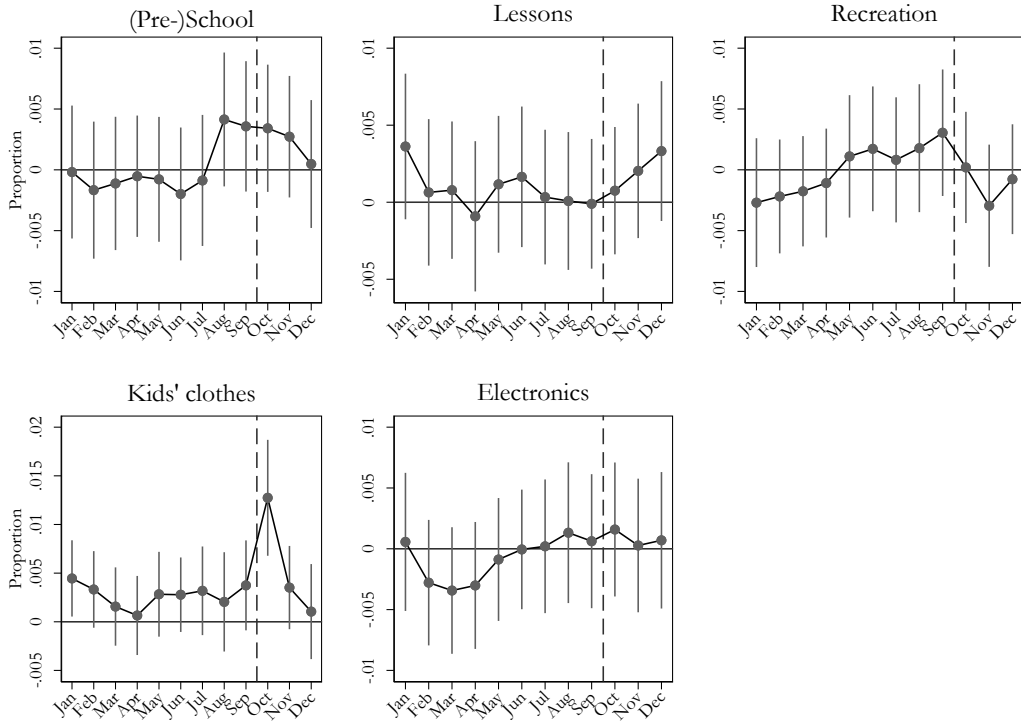

Note: These models fit Poisson regressions to reproduce Figure 2. The dependent variables (categories of expenditures per child) are not transformed and the independent variable is not normalized. The models include all controls.

APPENDIX C. *Average Marginal Effects of the Dividend Payout on Spending Elasticity by Spending Category (Hyperbolic Sine Transformed Dependent Variable)*
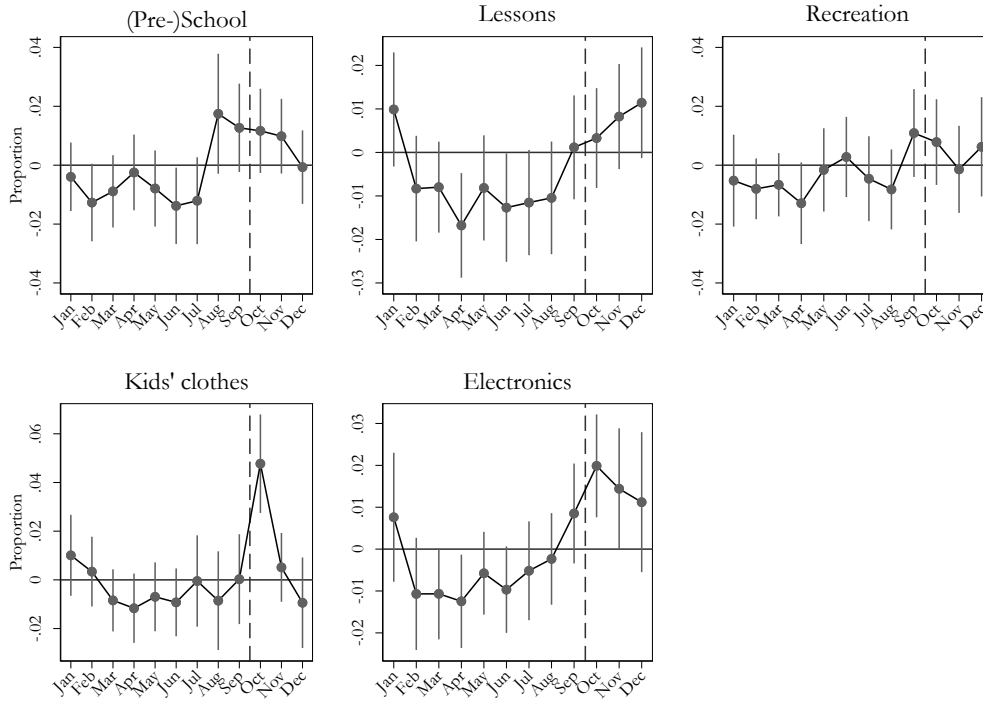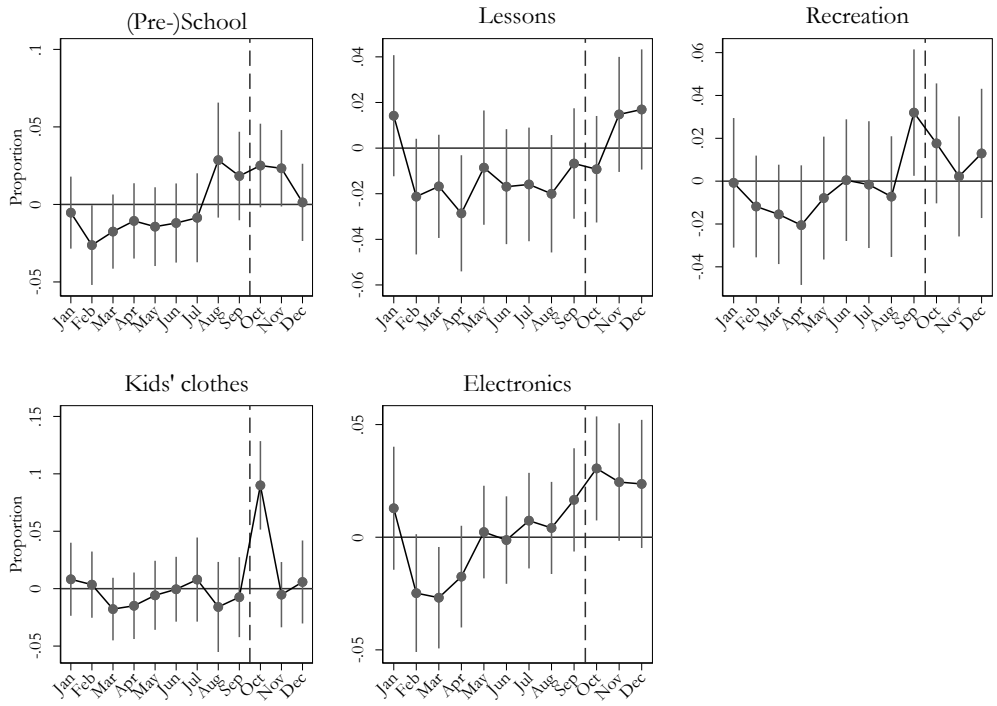

Note: These models reproduce Equation 1 and Figure 2. The dependent variables (categories of expenditures per child) is transformed using the Hyperbolic Sine Function. The models include all controls.

APPENDIX D. *Average Marginal Effects of the Dividend Payout on Spending Elasticity by Spending Category (Logistic Regression)*

Note: These models fit Logistic regressions to reproduce Figure 2. The dependent variables (categories of expenditures per child) are binary. The models include all controls.

APPENDIX E. *Average Marginal Effects of the Dividend Payout on Spending Elasticity by Spending Category (Alaska versus Other WA, ID, MO)*
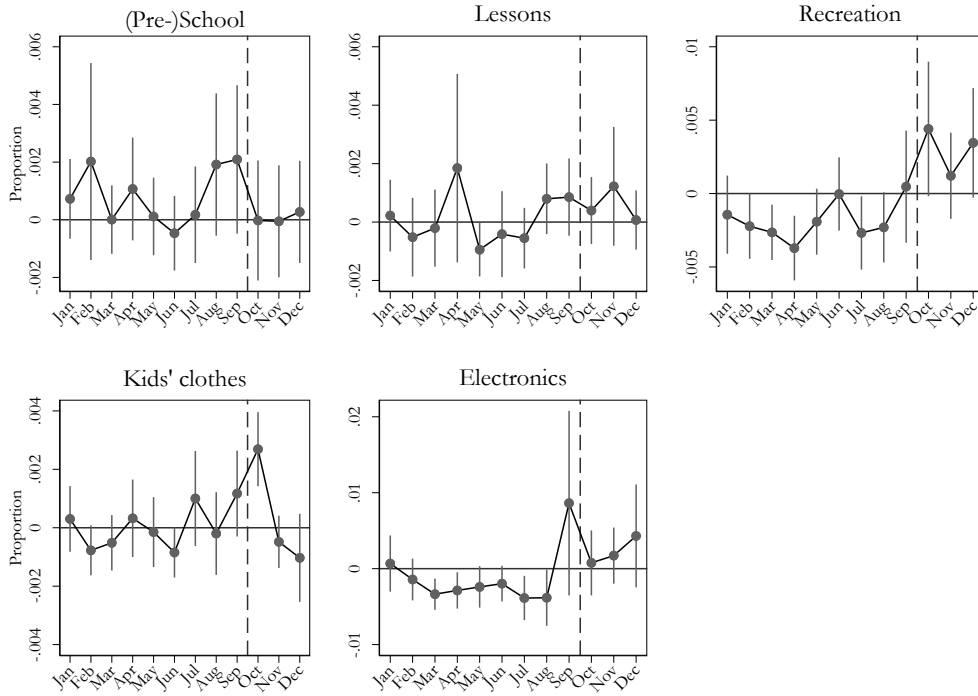

Note: These models reproduce Equation 1 and Figure 2 but rely on a restricted control group comprised of the northwestern U.S. states (Idaho, Washington, and Montana).

APPENDIX F. *Description of key sample characteristics by sample restriction and weighting*

VARIABLES	(1) AK Full	(2) AK Restricted to 12 months	(3) US Full	(4) UD Restricted to 12 months	(5) Northwestern states (ID, WA, MT)
Age of reference	39.77	40.78	39.55	40.31	38.88
Family size	3.733	3.834	3.870	3.913	3.801
Number of kids	1.713	1.783	1.802	1.823	1.762
Reference is Male	0.460	0.466	0.465	0.482	0.467
Race					
White	0.797	0.816	0.779	0.800	0.879
Black	0.044	0.0315	0.159	0.140	0.041
Other	0.158	0.152	0.062	0.060	0.079
Education					
Less than High School	0.0875	0.0741	0.137	0.122	0.099
High School	0.206	0.175	0.253	0.243	0.203
Some college	0.365	0.362	0.305	0.303	0.355
College or more	0.342	0.390	0.305	0.331	0.343
Family structure					
Husband and Wife	0.654	0.714	0.639	0.679	0.668
Single parent	0.186	0.152	0.186	0.164	0.180
Other family	0.160	0.134	0.175	0.157	0.151
Marital status of reference					
Married	0.738	0.791	0.722	0.757	0.750
Divorced/Separated	0.191	0.182	0.167	0.155	0.156
Single	0.0714	0.0273	0.111	0.0884	0.0937
Family Dividend	4,663	4,832	0	0	0
Permanent Income	59,698	60,269	59,056	61,530	59,824
N household-month	7,567		438,365		13,704

APPENDIX G. *Average Marginal Effects of the Dividend Payout on Spending Elasticity by Spending Category (Marginal Propensity to Consume)*

Note: These models reproduce Equation 1 and Figure 2. Both the dependent variable and the key independent variable of interest are measured in terms of dollars spent and dollars received. The models include all controls.