Why country-dummies (sometimes) do not do the job: Getting the within estimator of cross-level interactions in multilevel models with pooled cross-sections

Online Appendix A: Systematic Literature Review

This part of the online appendix contains the full results of our literature review of articles published in the *Journal of European Social Policy* (JESP) and the *American Sociological Review* (ASR).

We performed keyword searches for the term "multilevel" in both Journals' search engines. The search was done on March, 21st, 11:35 a.m., 2016 for JESP and on April, 27th, 10:02 a.m., 2016 for ASR. Table OA1 contains all articles returned from JESP's search engine and our coding of them. Table OA2 lists the results from ASR's search engine and our coding of them.

Explanation of the columns and the coding procedure:

- **ID** is an internal ID that we assigned to each article returned from the search engine.
- **Author(s), Title, Year, Vol, No and Pages** provide the author(s) name(s), the articles title, the year of publication, the journal volume and issues number as well as the page numbers.
- **ML Structure** is equal to 1 if the article uses data where units are nested in multiple geographical clusters and 0 otherwise. All remaining columns have been coded only if *ML Structure* was equal to 1. (Comments and replications of previous analyses are coded 0 even if they use multilevel modeling).
- **Country as Context** is equal to 1 if the higher-level clusters are countries and 0 otherwise
- **Multiple Years** is equal to 1 if the article is based on data from multiple time-points and 0 otherwise.
- **Interest in Main Effect** is 1 if the author(s) had a substantial interest in the direct/main effect of a cluster-level variable and 0 otherwise.
- **Interest in Interaction Effect** is 1 if the author(s) had a substantial interest in a cross-level interaction effect and 0 otherwise.
- **Context Variable Time-constant in Data** is equal to 1 if the contextual-level variable did not vary in the data used for the analysis and 0 otherwise. The column does not contain a value if the article did not use any contextual-level variables or if we were not able to determine from the text what the correct value is.
- **Context Variable Time-constant by Nature** is equal to 1 if the contextual-level variable is time-invariant by its nature and 0 otherwise. The column does not contain a value if the article did not use any contextual-level variables or if we were not able to determine from the text what the correct value is.
- **Using CFE** equals 1 if the article employs a (Context-level) Fixed Effects model and 0 otherwise. The remaining column (*Longitudinal Within-context Effect*) has been coded only if *Using CFE* was equal to 1.
- **Longitudinal Within-context Effect** is only coded if *Using CFE* was 1. This column is equal to 1 if the Fixed Effects model has been used to get a context effect which is identified by within-context variation over time. This column is necessary as not all Fixed Effects models necessarily do so.

Table OA1: Literature Review of Articles published in JESP

ID	Author(s)	Year	Title	Vol	No	Pages	ML Structure	Country Context	Multiple Years	Interest in Main Effects	Interest in Interaction Effects	Context Variable Time-constant in Data	Context Variable Time-Constant by Nature	Using CFE	Longitudinal Within-Context Effect
1	Flavia Fossati	2011	The effect of integration and social democratic welfare states on immigrants' educational attainment: a multilevel estimate	21	5	391-412	1	1	0	1	1	0	1	0	
2	Mikael Rostila	2007	Social capital and health in European welfare regimes: a multilevel approach	17	3	223-239	1	1	0	1	0	0	1	0	
3	Ola Sjöberg	2004	The Role of Family Policy Institutions in Explaining Gender-Role Attitudes: A Comparative Multilevel Analysis of Thirteen Industrialized Countries	14	2	107-123	1	1	0	1	1	0	1	0	
4	Sarah Missinne;Bart Meuleman;Piet Bracke	2013	The popular legitimacy of European healthcare systems: A multilevel analysis of 24 countries	23	3	231-247	1	1	0	1	0	0	1	0	
5	Wim van Oorschot;Tim Reeskens;Bart Meuleman	2012	Popular perceptions of welfare state consequences: A multilevel, cross-national analysis of 25 European countries	22	2	181-197	1	1	0	1	0	0	1	0	
6	Stefan Angel;Karin Heitzmann	2015	Over-indebtedness in Europe: The relevance of country-level variables for the over-indebtedness of private households	25	3	331-351	1	1	0	1	0	0	1	1	
7	Owen Corrigan	2014	Migrant deprivation, conditionality of legal status and the welfare	24	3	223-239	1	1	1	1	0	0	1	0	0

state

#	Authors	Year	Title	Vol	Issue	Pages									
8	Christiane Lübke;Marcel Erlinghagen	2014	Self-perceived job insecurity across Europe over time: Does changing context matter?	24	4	319-336	1	1	1	1	1	1	1	0	0
9	Katharina Böhm;Claudia Landwehr;Nils Steiner	2014	What explains 'generosity' in the public financing of high-tech drugs? An empirical investigation of 25 OECD countries and 11 controversial drugs	24	1	39-55	0								
10	Julian L Garritzmann	2015	Attitudes towards student support: How positive feedback-effects prevent change in the Four Worlds of Student Finance	25	2	139-158	1	1	1	1	0	1	1	1	0
11	Nadine M Schöneck;Steffen Mau	2015	Coming together or growing apart? Globalization, class and redistributive preferences	25	5	454-472	1	1	0	1	1	0	1	0	
12	Antonio M. Jaime-Castillo	2013	Public opinion and the reform of the pension systems in Europe: the influence of solidarity principles	23	4	390-405	1	1	0	1	0	0	1	0	
13	Tobias Troger;Roland Verwiebe	2015	The role of education for poverty risks revisited: Couples, employment and profits from work–family policies	25	3	286-302	1	1	1	1	1	1	1	0	0
14	Ellen Verbakel	2014	Informal caregiving and well-being in Europe: What can ease the negative consequences for caregivers?	24	5	424-441	1	1	0	1	1	0	1	0	
15	Melike Wulfgramm	2014	Life satisfaction effects of unemployment in Europe: The moderating influence	24	3	258-272	1	1	1	1	1	1	1	1	1

of labour market policy

No	Authors	Year	Title	Vol	Issue	Pages								
16	Corinne Igel;Marc Szydlik	2011	Grandchild care and welfare state arrangements in Europe	21	3	210-224	1	1	0	1	0	0	1	0
17	Johannes Siegrist;Morten Wahrendorf	2009	Participation in socially productive activities and quality of life in early old age: findings from SHARE	19	4	317-326	1	1	1	0	0			0
18	Ursula Dallinger	2010	Public support for redistribution: what explains cross-national differences?	20	4	333-349	1	1	0	1	0	0	1	0
19	Martin Heidenreich	2003	Regional Inequalities in the Enlarged Europe	13	4	313-333	0							
20	Ewan Carr;Heejung Chung	2014	Employment insecurity and life satisfaction: The moderating influence of labour market policies across Europe	24	4	383-399	1	1	0	1	1	0	1	0
21	Marius R. Busemeyer	2012	Inequality and the political economy of education: An analysis of individual preferences in OECD countries	22	3	219-240	1	1	0	1	1	0	1	0
22	Kenneth Nelson	2012	Counteracting material deprivation: The role of social assistance in Europe	22	2	148-163	1	1	0	1	1	0	1	0
23	Steffen Mau;Christoph Burkhardt	2009	Migration and welfare state solidarity in Western Europe	19	3	213-229	1	1	0	1	0	0	1	0
24	Tim Lang;Geof Rayner	2005	Obesity: a growing issue for European policy?	15	4	301-327	0							
25	Mads Meier Jæger	2013	The effect of macroeconomic and social conditions on the demand for redistribution: A	23	2	149-163	1	1	1	1	0	1	1	1

pseudo panel approach

#	Author	Year	Title	Vol	Iss	Pages								
26	Henning Finseraas	2012	Poverty, ethnic minorities among the poor, and preferences for redistribution in European regions	22	2	164-180	1	1	0	1	1	0	1	1
27	Staffan Kumlin	2009	Blaming Europe? Exploring the variable impact of national public service dissatisfaction on EU trust	19	5	408-420	1	1	0	1	1	0	1	0
28	Marii Paskov;Ferry Koster	2014	Institutions, employment insecurity and polarization in support for unemployment benefits	24	4	367-382	1	1	0	1	1	0	1	0
29	Patrizia Aurich-Beerheide;Serida L. Catalano;Paolo R. Graziano;Katharina Zimmermann	2015	Stakeholder participation and policy integration in local social and employment policies: Germany and Italy compared	25	4	379-392	0							
30	Allison E Rovny	2014	The capacity of social policies to combat poverty among new social risk groups	24	5	405-423	1	1	0	1	1	0	1	0
31	Heejung Chung;Steffen Mau	2014	Subjective insecurity and the role of institutions	24	4	303-318	0							
32	Christopher T Whelan;Brian Nolan;Bertrand Maître	2014	Multidimensional poverty measurement in Europe: An application of the adjusted headcount approach	24	2	183-197	1	1	0	1	1	0	1	0
33	Helena Blomberg;Christian Kroll;Johanna Kallio;Jani Erola	2013	Social workers' perceptions of the causes of poverty in the Nordic countries	23	1	68-82	1	0	0	1	0	0	1	0
34	Erik van Ingen;Tom van der	2011	Welfare state expenditure and inequalities in	21	4	302-322	1	1	0	1	1	0	1	0

#	Author	Year	Title	Vol	Issue	Pages									
	Meer		voluntary association participation												
35	Nam K. Jo	2011	Between the cultural foundations of welfare and welfare attitudes: The possibility of an in-between level conception of culture for the cultural analysis of welfare	21	1	5-19	0								
36	Yekaterina Chzhen;Jonathan Bradshaw	2012	Lone parents, poverty and policy in the European Union	22	5	487-506	1	1	0	1	0	0	1	0	
37	Anne Grönlund;Ida Öun	2010	Rethinking work-family conflict: dual-earner policies, role conflict and role expansion in Western Europe	20	3	179-195	1	1	0	1	0	0	0	0	
38	Martin Heidenreich	2015	The end of the honeymoon: The increasing differentiation of (long-term) unemployment risks in Europe	25	4	393-413	1	1	1	1	1	1	1	0	0
39	Varvara Lalioti	2016	The curious case of the guaranteed minimum income (GMI): Highlighting Greek 'exceptionalism' in a Southern European context	26	1	80-93	0								
40	Dennis Spies;Alexander Schmidt-Catran	2016	Migration, migrant integration and support for social spending: The case of Switzerland	26	1	32-47	1	0	0	1	0	0	1	0	
41	Anna Diop-Christensen	2015	Is 'making work pay' effective for the 'unemployable'? The impact of benefit sanctions on social assistance recipients in	25	2	210-224	1	0	1	1	1	1	1	0	

Denmark

No	Author	Year	Title	Vol	Iss	Pages									
42	Jason Jordan	2013	Policy feedback and support for the welfare state	23	2	134-148	1	1	0	1	0	0	1	0	
43	Dorottya Szikra	2014	Democracy and welfare in hard times: The social policy of the Orbán Government in Hungary between 2010 and 2014	24	5	486-500	0								
44	Liz Gosme	2014	Key steps towards a European Union homelessness policy	24	3	289-299	0								
45	Christopher T. Whelan;Bertrand Maître	2009	Europeanization of inequality and European reference groups	19	2	117-130	1	1	0	0	0			1	
46	Hanna Kleider	2015	Paid and unpaid work: The impact of social policies on the gender division of labour	25	5	505-520	1	1	0	1	0	0	1	0	
47	Björn Halleröd;Hans Ekbrand;Mattias Bengtsson	2015	In-work poverty and labour market trajectories: Poverty risks among the working population in 22 European countries	25	5	473-488	1	1	1	0	0				0
48	Ingalill Montanari;Kenneth Nelson	2013	Social service decline and convergence: How does healthcare fare?	23	1	102-116	0							0	
49	Brian Burgoon;Ferry Koster;Marcel van Egmond	2012	Support for redistribution and the paradox of immigration	22	3	288-304	1	1	1	1	0	1	1	1	0
50	Akvile Motiejunaite;Zhanna Kravchenko	2008	Family policy, employment and gender-role attitudes: a comparative analysis of Russia and Sweden	18	1	38-49	0								

#	Authors	Year	Title	Vol	No	Pages									
51	Gunnar Andersson;Ann-Zofie Duvander;Karsten Hank	2004	Do child-care characteristics influence continued child bearing in Sweden? An investigation of the quantity, quality, and price dimension	14	4	407-418	1	0	1	1	0	1	1	1	
52	Costanzo Ranci;Emmanuele Pavolini	2015	Not all that glitters is gold: Long-term care reforms in the last two decades in Europe	25	3	270-285	0								
53	Sebastian Künzel	2012	The local dimension of active inclusion policy	22	1	3-16	0								
54	Cyrielle Champion;Guiliano Bonoli	2011	Institutional fragmentation and coordination initiatives in western European welfare states	21	4	323-334	0								
55	Heejung Chung;Wim van Oorschot	2011	Institutions versus market forces: Explaining the employment insecurity of European individuals during (the beginning of) the financial crisis	21	4	287-301	1	1	0	1	1	0	1	0	
56	John Gal	2010	Is there an extended family of Mediterranean welfare states?	20	4	283-300	0								
57	Claus Wendt	2009	Mapping European healthcare systems: a comparative analysis of financing, service provision and access to healthcare	19	5	432-445	0								
58	Mauricio Avendano;Hendrik Jürges;Johan P. Mackenbach	2009	Educational level and changes in health across Europe: longitudinal results from SHARE	19	4	301-316	1	1	0	1	1			0	0
59	Olli Kangas;Tine Rostgaard	2007	Preferences or institutions? Work—family life opportunities in seven European countries	17	3	240-256	1	1	0	1	0	0	1	0	

	Author	Year	Title	Vol	Issue	Pages							
60	Graham Room	2006	Local players in European games	16	2	167-172	0						
61	Adalbert Evers;Jane Lewis;Birgit Riedel	2005	Developing child-care provision in England and Germany: problems of governance	15	3	195-209	0						
62	Fabrizio Bernardi	2005	Public policies and low fertility: rationales for public intervention and a diagnosis for the Spanish case	15	2	123-138	0						
63	Tanja Van der Lippe;Anne Graumans;Selma Sevenhuijsen	2004	Gender policies and the position of women in the police force in European countries	14	4	391-405	0						
64	Patrick Emmenegger;Robert Klemmensen	2013	Immigration and redistribution revisited: how different motivations can offset each other	23	4	406-422	1	1	0	0	0		1
65	Torben Krings	2012	Book Review: Europe 2020: Towards a More Social EU?	22	3	331-332	0						
66	Derya Ozkul	2012	Book Review: The Politics of European Citizenship: Deepening Contradictions in Social Rights & Migration Policy	22	3	332-333	0						
67	Stephan Leibfried	1994	The Social Dimension of the European Union: En Route To Positively Joint Sovereignty?	4	4	239-262	0						
68	Gert Verschraegen;Bart Vanhercke;Rika Verpoorten	2011	The European Social Fund and domestic activation policies: Europeanization mechanisms	21	3	55-72	0						
69	Bodil Damgaard;Jacob Torfing	2010	Network governance of active employment policy: the Danish experience	20	3	248-262	0						

70	Niklas Jakobsson;Andreas Kotsadam	2010	Do attitudes toward gender equality really differ between Norway and Sweden?	20	2	142-159	0								
71	Axel Börsch-Supan;Karsten Hank;Hendrik Jürges;Mathis Schröder	2009	Introduction: empirical research on health, ageing and retirement in Europe	19	4	293-300	0								
72	Ian Gough;James Meadowcroft;John Dryzek;Jürgen Gerhards;Holger Lengfeld;Anil Markandya;Ramon Ortiz	2008	JESP symposium: Climate change and social policy	18	4	325-344	1	1	0	1	0	0	1	0
73	David J. Bailey	2008	Explaining the underdevelopment of `Social Europe': a critical realization	18	3	232-245	0								
74	Georg Vobruba;Maurizio Bach;Martin Rhodes;Julia Szalai	2004	Debate on the enlargement of the European Union: The enlargement crisis of the European Union: limits of the dialectics of integration and expansion	14	4	447-448	0								
75	Christine Quittkat	2002	Book Reviews: Ester B. Neunreither Die Interessenvertretung der Regionen bei der Europäischen Union. Deutsche Länder, spanische Autonome Gemeinschaften und französische Regionen	12	2	171-172	0								
76	Caroline de la Porte;Philippe Pochet;Belgium Graham Room	2001	Social Benchmarking, Policy Making and New Governance in the Eu	11	4	291-307	0								

#	Author	Year	Title	Vol	Issue	Pages							
77	Francisco José León	2012	Reciprocity and public support for the redistributive role of the State	22	2	198-215	1	1	0	0	0		0
78	Philippe Pochet	1999	The New Employment Chapter of the Amsterdam Treaty	9	3	271-278	0						

Table OA2: Literature Review of Articles published in ASR

ID	Author(s)	Year	Title	Vol	No	Pages	ML Structure	Country as Context	Multiple Years	Interest in Main Effects	Interest in Interaction Effects	Context Variable Time-constant in Data	Context Variable Time-Constant by Nature	Using CFE	Longitudinal Within-Context Effect
1	Abrutyn, Seth; Mueller, Anna S.	2014	Are Suicidal Behaviors Contagious in Adolescence? Using Longitudinal Data to Examine Suicide Suggestion	79	2	211–227	0								
2	Adamczyk, Amy; Hayes, Brittany E.	2012	Religion and Sexual Behaviors: Understanding the Influence of Islamic Cultures and Religious Affiliation for Explaining Sex Outside of Marriage	77	5	723–746	1	1	1	1	1	1	1	0	0
3	Baggetta, Matthew; Han, Hahrie; Andrews, Kenneth T.	2013	Leading Associations: How Individual Characteristics and Team Dynamics Generate Committed Leaders	78	4	544–573	1	0	0	1	0	0	1	0	
4	Bail, Christopher A.	2008	The Configuration of Symbolic Boundaries against Immigrants in Europe	73	1	37–59	0								
5	Bail, Christopher A.	2012	The Fringe Effect: Civil Society Organizations and the Evolution of Media Discourse about Islam since the September 11th Attacks	77	6	855–879	1	0	1	1	1	1	1	0	
6	Balbo, Nicoletta; Barban, Nicola	2014	Does Fertility Behavior Spread among Friends?	79	3	412–431	0								

#	Author	Year	Title	Vol	Issue	Pages									
7	Best, Rachel Kahn	2012	Disease Politics and Medical Research Funding: Three Ways Advocacy Shapes Policy	77	5	780–803	0								
8	Biggs, Michael; Andrews, Kenneth T.	2015	Protest Campaigns and Movement Success: Desegregating the U.S. South in the Early 1960s	80	2	416–443	0								
9	Borgonovi, Francesca	2008	Divided We Stand, United We Fall: Religious Pluralism, Giving, and Volunteering	73	1	105–128	1	0	0	1	0	0	1	0	
10	Brady, David; Baker, Regina S.; Finnigan, Ryan	2013	When Unionization Disappears: State-Level Unionization and Working Poverty in the United States	78	5	872–896	1	0	1	1	0	1	1	1	1
11	Brady, David; Biradavolu, Monica; Blankenship, Kim M.	2015	Brokers and the Earnings of Female Sex Workers in India	80	6	1123–1149	0								
12	Brady, David; Bostic, Amie	2015	Paradoxes of Social Policy: Welfare Transfers, Relative Poverty, and Redistribution Preferences	80	2	268–298	1	1	0	1	0	0	1	0	0
13	Brady, David; Finnigan, Ryan	2014	Does Immigration Undermine Public Support for Social Policy?	79	1	17–42	1	1	1	1	0	1	1	1	1
14	Brown, Hana E.	2013	Race, Legality, and the Social Policy Consequences of Anti-Immigration Mobilization	78	2	290–314	0								

#	Author	Year	Title	Vol	Issue	Pages									
15	Browning, Christopher R.; Leventhal, Tama; Brooks-Gunn, Jeanne	2005	Sexual Initiation in Early Adolescence: The Nexus of Parental and Community Control	70	5	758–778	1	0	1	1	1	0	1	0	0
16	Browning, Christopher R.; Wallace, Danielle; Feinberg, Seth L.; Cagney, Kathleen A.	2006	Neighborhood Social Processes, Physical Conditions, and Disaster-Related Mortality: The Case of the 1995 Chicago Heat Wave	71	4	661–678	1	0	1	1	0	1	1	0	0
17	Bruch, Sarah K.; Ferree, Myra Marx; Soss, Joe	2010	From Policy to Polity: Democracy, Paternalism, and the Incorporation of Disadvantaged Citizens	75	2	205–226	1	0	1	0	0		1	0	0
18	Burt, Callie Harbin; Simons, Ronald L.; Gibbons, Frederick X.	2012	Racial Discrimination, Ethnic-Racial Socialization, and Crime: A Micro-sociological Model of Risk and Resilience	77	4	648–677	0								
19	Cha, Youngjoo	2010	Reinforcing Separate Spheres: The Effect of Spousal Overwork on Men's and Women's Employment in Dual-Earner Households	75	2	303–329	0								
20	Childress, C. Clayton; Friedkin, Noah E.	2012	Cultural Reception and Production: The Social Construction of Meaning in Book Clubs	77	1	45–68	1	0	0	1	1				
21	Cohen, Philip N.; Huffman, Matt L.	2007	Working for the Woman? Female Managers and the Gender Wage Gap	72	5	681–704	1	0	0	1	0	0	1	0	
22	Condron, Dennis J.	2009	Social Class, School and Non-School Environments, and Black/White	74	5	685–708	1	0	0	1	0				

#	Authors	Year	Title	Vol	Iss	Pages									
			Inequalities in Children's Learning												
23	Cornwell, Benjamin; Laumann, Edward O.; Schumm, L. Philip	2008	The Social Connectedness of Older Adults: A National Profile	73	2	185–203	0								
24	Crowder, Kyle; Pais, Jeremy; South, Scott J.	2012	Neighborhood Diversity, Metropolitan Constraints, and Household Migration	77	3	325–353	1	0	1	1	0	1	1	0	0
25	Crowder, Kyle; South, Scott J.	2008	Spatial Dynamics of White Flight: The Effects of Local and Extralocal Racial Conditions on Neighborhood Out-Migration	73	5	792–812	1	0	1	1	0	1	1	0	0
26	Davenport, Christian; Soule, Sarah A.; Armstrong, David A.	2011	Protesting While Black?: The Differential Policing of American Activism, 1960 to 1990	76	1	152–178	0								
27	Delhey, Jan; Newton, Kenneth; Welzel, Christian	2011	How General Is Trust in "Most People"? Solving the Radius of Trust Problem	76	5	786–807	0								
28	Desmond, Matthew; Valdez, Nicol	2013	Unpolicing the Urban Poor: Consequences of Third-Party Policing for Inner-City Women	78	1	117–141	1	0	1	1	1			0	0
29	Dinesen, Peter Thisted; Sonderskov, Kim Mannemar	2015	Ethnic Diversity and Social Trust: Evidence from the Micro-Context	80	3	550–573	1	0	1	1	0	1	1	0	0

#	Author	Year	Title	Vol	Issue	Pages									
30	Downey, Douglas B.; Hippel, Paul T. von; Broh, Beckett A.	2004	Are Schools the Great Equalizer? Cognitive Inequality during the Summer Months and the School Year	69	5	613–635	1	0	1	1	0			0	0
31	Edwards, Frank	2016	Saving Children, Controlling Families: Punishment, Redistribution, and Child Protection				0								
32	England, Paula	2016	Sometimes the Social Becomes Personal: Gender, Class, and Sexualities	81	1	4–28	0								
33	Evans, Rhonda; Kay, Tamara	2008	How Environmentalists `Greened´ Trade Policy: Strategic Action and the Architecture of Field Overlap	73	6	970–991	0								
34	Fiel, Jeremy E.	2013	Decomposing School Resegregation: Social Closure, Racial Imbalance, and Racial Isolation	78	5	828–848	0								
35	Frank, Reanne; Akresh, Ilana Redstone; Lu, Bo	2010	Latino Immigrants and the U.S. Racial Order: How and Where Do They Fit In?	75	3	378–401	0								
36	Fuller, Sylvia	2008	Job Mobility and Wage Trajectories for Men and Women in the United States	73	1	158–183	0								
37	Gangl, Markus	2006	Scar Effects of Unemployment: An Assessment of Institutional Complementarities	71	6	986–1013	1	1	1	1	0	1	1	0	0
38	Goldstein, Adam; Haveman, Heather A.	2013	Pulpit and Press: Denominational Dynamics and the Growth of Religious	78	5	797–827	0								

Magazines in Antebellum America

#	Authors	Year	Title	Vol	Issue	Pages									
39	Gross, Neil	2009	A Pragmatist Theory of Social Mechanisms	74	3	358–379	0								
40	Guo, Guang; Roettger, Michael E.; Cai, Tianji	2008	The Integration of Genetic Propensities into Social-Control Models of Delinquency and Violence among Male Youths	73	4	543–568	0								
41	Hagan, John; Kaiser, Joshua; Hanson, Anna	2016	The Theory of Legal Cynicism and Sunni Insurgent Violence in Post-Invasion Iraq	81	2	316–346	1	0	0	1	0	0	1	0	
42	Hagan, John; Rymond-Richmond, Wenona	2008	The Collective Dynamics of Racial Dehumanization and Genocidal Victimization in Darfur	73	6	875–902	1	0	0	1	1	1	1	0	0
43	Hagan, John; Shedd, Carla; Payne, Monique R.	2005	Race, Ethnicity, and Youth Perceptions of Criminal Injustice	70	3	381–407	1	0	0	1	1	0	1	0	
44	Hall, Matthew; Crowder, Kyle; Spring, Amy	2015	Neighborhood Foreclosures, Racial/Ethnic Transitions, and Residential Segregation	80	3	526–549	0								
45	Hamm, Patrick; King, Lawrence P.; Stuckler, David	2012	Mass Privatization, State Capacity, and Economic Growth in Post-Communist Countries	77	2	295–324	.								
46	Harding, David J.	2007	Cultural Context, Sexual Behavior, and Romantic Relationships in Disadvantaged Neighborhoods	72	3	341–364	1	0	0	1	1	0	1	0	0

#	Author	Year	Title	Vol	Issue	Pages									
47	Harding, David J.	2009	Violence, Older Peers, and the Socialization of Adolescent Boys in Disadvantaged Neighborhoods	74	3	445–464	0								
48	Harris, Alexes; Evans, Heather; Beckett, Katherine	2011	Courtesy Stigma and Monetary Sanctions: Toward a Socio-Cultural Theory of Punishment	76	2	234–264	1	0	0	1	1	0	1	0	0
49	Healy, Kieran	2004	Altruism as an Organizational Problem: The Case of Organ Procurement	69	3	387–404	0								
50	Heisig, Jan Paul	2011	Who Does More Housework: Rich or Poor?: A Comparison of 33 Countries	76	1	74–99	1	1	0	1	1	0	1	0	0
51	Hipp, John R.	2007	Block, Tract, and Levels of Aggregation: Neighborhood Structure and Crime and Disorder as a Case in Point	72	5	659–680	1	0	1	1	0	1	1	0	0
52	Hook, Jennifer L.	2006	Care in Context: Men's Unpaid Work in 20 Countries, 1965–2003	71	4	639–660	1	1	1	1	1	1	1	0	0
53	Hsu, Greta; Grodal, Stine	2015	Category Taken-for-Grantedness as a Strategic Opportunity: The Case of Light Cigarettes, 1964 to 1993	80	1	28–62	.								
54	Hughes, Melanie M.; Brush, Lisa D.	2015	The Price of Protection: A Trajectory Analysis of Civil Remedies for Abuse and Women's Earnings	80	1	140–165	0								

#	Authors	Year	Title	Vol	No	Pages							
55	Jacobs, David; Qian, Zhenchao; Carmichael, Jason T.; Kent, Stephanie L.	2007	Who Survives on Death Row? An Individual and Contextual Analysis	72	4	610–632	.						
56	Jennings, Elyse A.; Axinn, William G.; Ghimire, Dirgha J.	2012	The Effect of Parents' Attitudes on Sons' Marriage Timing	77	6	923–945	1	0	1	0	0	0	0
57	Jæger, Mads Meier	2012	The Extended Family and Children's Educational Success	77	6	903–922	0						
58	Joyner, Kara; Kao, Grace	2005	Interracial Relationships and the Transition to Adulthood	70	4	563–581	1	0	1	0	0	0	0
59	Kalleberg, Arne L.	2009	Precarious Work, Insecure Workers: Employment Relations in Transition	74	1	1–22	0						
60	Kelly, Erin L.; Moen, Phyllis; Oakes, J. Michael; Fan, Wen; Okechukwu, Cassandra; Davis, Kelly D.; Hammer, Leslie B.; Kossek, Ellen Ernst; King, Rosalind Berkowitz; Hanson, Ginger C.; Mierzwa, Frank; Casper, Lynne M.	2014	Changing Work and Work-Family Conflict: Evidence from the Work, Family, and Health Network	79	3	485–516	1	0	0	1	0		

No.	Author	Year	Title	Vol	Iss	Pages									
61	Kelly, Erin L.; Moen, Phyllis; Tranby, Eric	2011	Changing Workplaces to Reduce Work-Family Conflict: Schedule Control in a White-Collar Organization	76	2	265–290	0								
62	Kennedy, Mark Thomas	2008	Getting Counted: Markets, Media, and Reality	73	6	1021	0								
63	Kerrissey, Jasmine	2015	Collective Labor Rights and Income Inequality	80	3	626–653	0								
64	Kim, ChangHwan; Sakamoto, Arthur	2008	The Rise of Intra-Occupational Wage Inequality in the United States, 1983 to 2002	73	1	129–157	0								
65	Kim, ChangHwan; Sakamoto, Arthur	2010	Have Asian American Men Achieved Labor Market Parity with White Men?	75	6	934–957	0								
66	King, Marissa D.; Bearman, Peter S.	2011	Socioeconomic Status and the Increased Prevalence of Autism in California	76	2	320–346	1	0	1	1	1	1	1	0	0
67	Kirk, David S.	2009	A Natural Experiment on Residential Change and Recidivism: Lessons from Hurricane Katrina	74	3	484–505	0								
68	Knigge, Antonie; Maas, Ineke; van Leeuwen, Marco H. D.; Mandemakers, Kees	2014	Status Attainment of Siblings during Modernization	79	3	549–574	1	0	1	1	1	1	1	0	0
69	Kravdal, Øystein; Rindfuss, Ronald R.	2008	Changing Relationships between Education and Fertility: A Study of Women and Men Born 1940 to 1964	73	5	854–873	0								

#	Author	Year	Title	Vol	Iss	Pages									
70	Kreager, Derek A.; Haynie, Dana L.	2011	Dangerous Liaisons? Dating and Drinking Diffusion in Adolescent Peer Networks	76	5	737–763	1	0	0	1	0	0	0	0	0
71	Kuipers, Giselinde	2015	How National Institutions Mediate the Global: Screen Translation, Institutional Interdependencies, and the Production of National Difference in Four European Countries	80	5	985–1013	0								
72	Kunovich, Robert M.	2009	The Sources and Consequences of National Identification	74	4	573–593	1	1	0	1	0	0	1	0	0
73	Kwon, Seok-Woo; Heflin, Colleen; Ruef, Martin	2013	Community Social Capital and Entrepreneurship	78	6	980–1008	1	0	0	1	1	0	1	0	
74	LaFree, Gary; Baumer, Eric P.; O'Brien, Robert	2010	Still Separate and Unequal?: A City-Level Analysis of the Black-White Gap in Homicide Arrests since 1960	75	1	75–100	0								
75	Lee, Barrett A.; Farrell, Chad R.; Link, Bruce G.	2004	Revisiting the Contact Hypothesis: The Case of Public Exposure to Homelessness	69	1	40–63	1	0	0	1	0	0	1	0	
76	Lee, Barrett A.; Reardon, Sean F.; Firebaugh, Glenn; Farrell, Chad R.; Matthews, Stephen A.; O'Sullivan, David	2008	Beyond the Census Tract: Patterns and Determinants of Racial Segregation at Multiple Geographic Scales	73	5	766–791	0								
77	Legewie, Joscha; DiPrete,	2012	School Context and the Gender Gap in	77	3	463–485	1	0	1	1	1	1	1	1	0

#	Authors	Year	Title	Vol	Iss	Pages										
	Thomas A.		Educational Achievement													
78	Levels, Mark; Dronkers, Jaap; Kraaykamp, Gerbert	2008	Immigrant Children's Educational Achievement in Western Countries: Origin, Destination, and Community Effects on Mathematical Performance	73	5	835–853	1	1	0	1	0	0	1	0	0
79	Light, Michael T.; Massoglia, Michael; King, Ryan D.	2014	Citizenship and Punishment: The Salience of National Membership in U.S. Criminal Courts	79	5	825–847	1	0	0	0	0	0	0	1	0
80	Lim, Chaeyoon; MacGregor, Carol Ann	2012	Religion and Volunteering in Context: Disentangling the Contextual Effects of Religion on Voluntary Behavior	77	5	747–779	1	0	1	1	1	1	1	0	0
81	Link, Bruce G.; Carpiano, Richard M.; Weden, Margaret M.	2013	Can Honorific Awards Give Us Clues about the Connection between Socioeconomic Status and Mortality?	78	2	192–212	0								
82	Liu, Hexuan; Guo, Guang	2015	Lifetime Socioeconomic Status, Historical Context, and Genetic Inheritance in Shaping Body Mass in Middle and Late Adulthood	80	4	705–737	0								
83	Longhofer, Wesley; Schofer, Evan	2010	National and Global Origins of Environmental Association	75	4	505–533	0								

#	Author	Year	Title	Vol	Issue	Pages									
84	Lutter, Mark	2015	Do Women Suffer from Network Closure? The Moderating Effect of Social Capital on Gender Inequality in a Project-Based Labor Market, 1929 to 2010	80	2	329–358	0								
85	Lyness, Karen S.; Gornick, Janet C.; Stone, Pamela; Grotto, Angela R.	2012	It's All about Control: Worker Control over Schedule and Hours in Cross-National Context	77	6	1023–1049	1	1	0	1	1	0	1	0	
86	Lyons, Christopher J.; Vélez, María B.; Santoro, Wayne A.	2013	Neighborhood Immigration, Violence, and City-Level Immigrant Political Opportunities	78	4	604–632	0								
87	MacLean, Alair	2010	The Things They Carry: Combat, Disability, and Unemployment among U.S. Men	75	4	563–585	0								
88	Maimon, David; Kuhl, Danielle C.	2008	Social Control and Youth Suicidality: Situating Durkheim's Ideas in a Multilevel Framework	73	6	921–943	1	0	1	1	0	1	1	0	0
89	Marks, Gary; Mbaye, Heather A. D.; Kim, Hyung Min	2009	Radicalism or Reformism? Socialist Parties before World War I	74	4	615–635	0								
90	Martin, Nathan D.; Brady, David	2007	Workers of the Less Developed World Unite? A Multilevel Analysis of Unionization in Less Developed Countries	72	4	562–584	1	1	0	1	0	0	1	0	0
91	Massoglia, Michael; Firebaugh, Glenn; Warner,	2013	Racial Variation in the Effect of Incarceration on Neighborhood Attainment	78	1	142–165	0								

Cody

#	Authors	Year	Title	Vol	Iss	Pages									
92	Matsueda, Ross L.; Kreager, Derek A.; Huizinga, David	2006	Deterring Delinquents: A Rational Choice Model of Theft and Violence	71	1	95–122	0								
93	McFarland, Daniel A.; Moody, James; Diehl, David; Smith, Jeffrey A.; Thomas, Reuben J.	2014	Network Ecology and Adolescent Social Structure	79	6	1088–1121	0								
94	McFarland, Daniel A.; Thomas, Reuben J.	2006	Bowling Young: How Youth Voluntary Associations Influence Adult Political Participation	71	3	401–425	1	0	1	1	0	1	1	0	0
95	McPherson, Miller; Smith-Lovin, Lynn; Brashears, Matthew E.	2008	Social Isolation in America: Changes in Core Discussion Networks over Two Decades	73	6	1022	.								
96	McPherson, Miller; Smith-Lovin, Lynn; Brashears, Matthew E.	2009	Models and Marginals: Using Survey Evidence to Study Social Networks	74	4	670–681	0								
97	Messner, Steven F.; Baumer, Eric P.; Rosenfeld, Richard	2004	Dimensions of Social Capital and Rates of Criminal Homicide	69	6	882–903	0								
98	Michelson, Ethan	2007	Climbing the Dispute Pagoda: Grievances and Appeals to the Official Justice System in Rural China	72	3	459–485	0								

	Authors	Year	Title	Vol	Iss	Pages									
99	Moen, Phyllis; Kelly, Erin L.; Fan, Wen; Lee, Shi-Rong; Almeida, David; Kossek, Ellen Ernst; Buxton, Orfeu M.	2016	Does a Flexibility/Support Organizational Initiative Improve High-Tech Employees' Well-Being? Evidence from the Work, Family, and Health Network	81	1	134–164	0								
100	Mora, G. Cristina	2014	Cross-Field Effects and Ethnic Classification: The Institutionalization of Hispanic Panethnicity, 1965 to 1990	79	2	183–210	0								
101	Offer, Shira; Schneider, Barbara	2011	Revisiting the Gender Gap in Time-Use Patterns: Multitasking and Well-Being among Mothers and Fathers in Dual-Earner Families	76	6	809–833	0								
102	Paik, Anthony; Sanchagrin, Kenneth	2013	Social Isolation in America: An Artifact	78	3	339–360	1	0	1	1	0	0	0	0	0
103	Papachristos, Andrew V.; Hureau, David M.; Braga, Anthony A.	2013	The Corner and the Crew: The Influence of Geography and Social Networks on Gang Violence	78	3	417–447	0								
104	Perry, Brea L.; Morris, Edward W.	2014	Suspending Progress: Collateral Consequences of Exclusionary Punishment in Public Schools	79	6	1067–1087	1	0	1	1	1	1	1	0	0
105	Peterson, David	2015	All That Is Solid: Bench-Building at the Frontiers of Two Experimental Sciences	80	6	1201–1225	0								
106	Phillips, Scott; Cooney, Mark	2005	Aiding Peace, Abetting Violence: Third Parties and the Management of	70	2	334–354	0								

Conflict

#	Author	Year	Title	Vol	Iss	Pages									
107	Polavieja, Javier G.	2015	Capturing Culture: A New Method to Estimate Exogenous Cultural Effects Using Migrant Populations	80	1	166–191	1	1	1	1	0	0	0	0	.
108	Rich, Peter M.; Jennings, Jennifer L.	2015	Choice, Information, and Constrained Options: School Transfers in a Stratified Educational System	80	5	1069–1098	0								
109	Rippeyoung, Phyllis L. F.; Noonan, Mary C.	2012	Is Breastfeeding Truly Cost Free? Income Consequences of Breastfeeding for Women	77	2	244–267	0								
110	Rosenfeld, Jake; Denice, Patrick	2015	The Power of Transparency: Evidence from a British Workplace Survey	80	5	1045–1068	1	0	1	1	0	0	0	0	0
111	Rossman, Gabriel; Esparza, Nicole; Bonacich, Phillip	2010	I'd Like to Thank the Academy, Team Spillovers, and Network Centrality	75	1	31–51	0								
112	Ruiter, Stijn; Graaf, Nan Dirk de	2006	National Context, Religiosity, and Volunteering: Results from 53 Countries	71	2	191–210	1	1	1	1	1	1	0	0	
113	Ruiter, Stijn; Graaf, Nan Dirk de	2010	National Religious Context and Volunteering: More Rigorous Tests Supporting the Association	75	1	179–184	.								
114	Ryo, Emily	2013	Deciding to Cross: Norms and Economics of Unauthorized Migration	78	4	574–603	0								

#	Authors	Year	Title	Vol	Iss	Pages									
115	Sandberg, John	2006	Infant Mortality, Social Networks, and Subsequent Fertility	71	2	288–309	0								
116	Schaefer, David R.; Kornienko, Olga; Fox, Andrew M.	2011	Misery Does Not Love Company: Network Selection Mechanisms and Depression Homophily	76	5	764–785	0								
117	Schmidt-Catran, Alexander W.; Spies, Dennis C.	2016	Immigration and Welfare Support in Germany	81	2	242–261	1	0	1	1	0	1	1	1	1
118	Schneiberg, Marc; King, Marissa; Smith, Thomas	2008	Social Movements and Organizational Form: Cooperative Alternatives to Corporations in the American Insurance, Dairy, and Grain Industries	73	4	635–667	0								
119	Semyonov, Moshe; Raijman, Rebeca; Gorodzeisky, Anastasia	2006	The Rise of Anti-foreigner Sentiment in European Societies, 1988-2000	71	3	426–449	1	1	1	1	0	1	1	0	0
120	Semyonov, Moshe; Raijman, Rebeca; Gorodzeisky, Anastasia	2007	On the Relations Between Right-Wing Parties and Anti-foreigner Sentiment	72	5	841–849	1	1	1	1	0	1	1	0	0
121	Sharkey, Patrick T.	2006	Navigating Dangerous Streets: The Sources and Consequences of Street Efficacy	71	5	826–846	1	0	1	1	0	1	1	0	0
122	Shor, Eran; van de Rijt, Arnout; Miltsov, Alex; Kulkarni, Vivek; Skiena, Steven	2015	A Paper Ceiling: Explaining the Persistent Underrepresentation of Women in Printed News	80	5	960–984	0								

#	Authors	Year	Title	Vol	Iss	Pages									
123	Simons, Ronald L.; Lei, Man Kit; Beach, Steven R. H.; Brody, Gene H.; Philibert, Robert A.; Gibbons, Frederick X.	2011	Social Environment, Genes, and Aggression: Evidence Supporting the Differential Susceptibility Perspective	76	6	883–912	1	0	1	1	1	1	1	.	.
124	Smith, Jeffrey A.; McPherson, Miller; Smith-Lovin, Lynn	2014	Social Distance in the United States: Sex, Race, Religion, Age, and Education Homophily among Confidants, 1985 to 2004	79	3	432–456	0								
125	Steffensmeier, Darrell J.; Schwartz, Jennifer; Roche, Michael	2013	Gender and Twenty-First-Century Corporate Crime: Female Involvement and the Gender Gap in Enron-Era Corporate Frauds	78	3	448–476	0								
126	Torche, Florencia; Villarreal, Andrés	2014	Prenatal Exposure to Violence and Birth Weight in Mexico: Selectivity, Exposure, and Behavioral Responses	79	5	966–992	0								
127	Turco, Catherine J.	2010	Cultural Foundations of Tokenism: Evidence from the Leveraged Buyout Industry	75	6	894–913	0								
128	van der Meer, Tom; Te Grotenhuis, Manfred; Pelzer, Ben	2010	Influential Cases in Multilevel Modeling: A Methodological Comment	75	1	173–178	0								
129	van Tubergen, Frank; Maas, Ineke; Flap, Henk	2004	The Economic Incorporation of Immigrants in 18 Western Societies: Origin, Destination,	69	5	704–727	1	1	1	1	0	0	1	0	0

and Community Effects

#	Author	Year	Title	Vol	Issue	Pages									
130	Villarreal, Andrés	2014	Ethnic Identification and Its Consequences for Measuring Inequality in Mexico	79	4	775–806	1	0	0	1	1	1	1	1	0
131	Villarreal, Andrés	2010	Stratification by Skin Color in Contemporary Mexico	75	5	652–678	0								
132	Walder, Andrew G.; Isaacson, Andrew; Lu, Qinglian	2015	After State Socialism: The Political Origins of Transitional Recessions	80	2	444–468	0								
133	Walder, Andrew G.; Nguyen, Giang Hoang	2008	Ownership, Organization, and Income Inequality: Market Transition in Rural Vietnam	73	2	251–269	1	0	0	1	1	0	1	0	
134	Wejnert, Barbara	2005	Diffusion, Development, and Democracy, 1800-1999	70	1	53–81	0								
135	Wilkes, Rima; Guppy, Neil; Farris, Lily	2007	Right-Wing Parties and Anti-foreigner Sentiment in Europe	72	5	831–840	.								
136	Wimmer, Andreas; Cederman, Lars-Erik; Min, Brian	2009	Ethnic Politics and Armed Conflict: A Configurational Analysis of a New Global Data Set	74	2	316–337	0								
137	Yang, Yang	2008	Social Inequalities in Happiness in the United States, 1972 to 2004: An Age-Period-Cohort Analysis	73	2	204–226	0								
138	Yue, Lori Qingyuan	2016	The Great and the Small: The Impact of Collective Action on the Evolution of Board Interlocks after the	81	2	374–395	0								

Panic of 1907

139	Zheng, Hui; Yang, Yang; Land, Kenneth C.	2011	Variance Function Regression in Hierarchical Age-Period-Cohort Models: Applications to the Study of Self-Reported Health	76	6	955–983	0										
140	Zimmerman, Gregory M.; Messner, Steven F.	2010	Neighborhood Context and the Gender Gap in Adolescent Violent Crime	75	6	958–980	1	0	1	1	1	1	1	0	0		

Online Appendix B: Additional Simulation Results

Figure OA1: Simulation results for main effects

a) Estimates of the main effect of x_{1jti} (β_1)
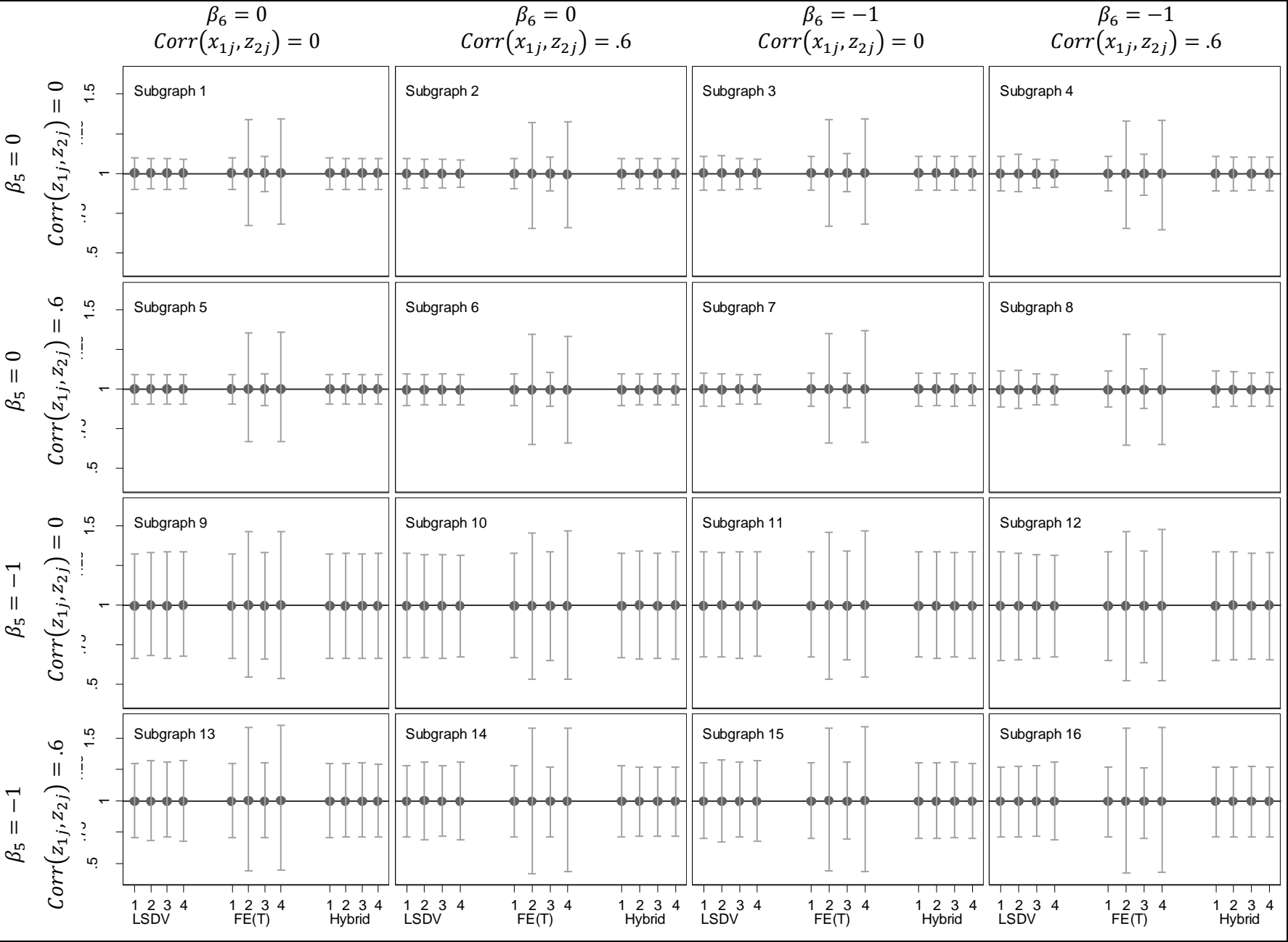
b) Estimates of the main effect of z_{1jt} (β_2)
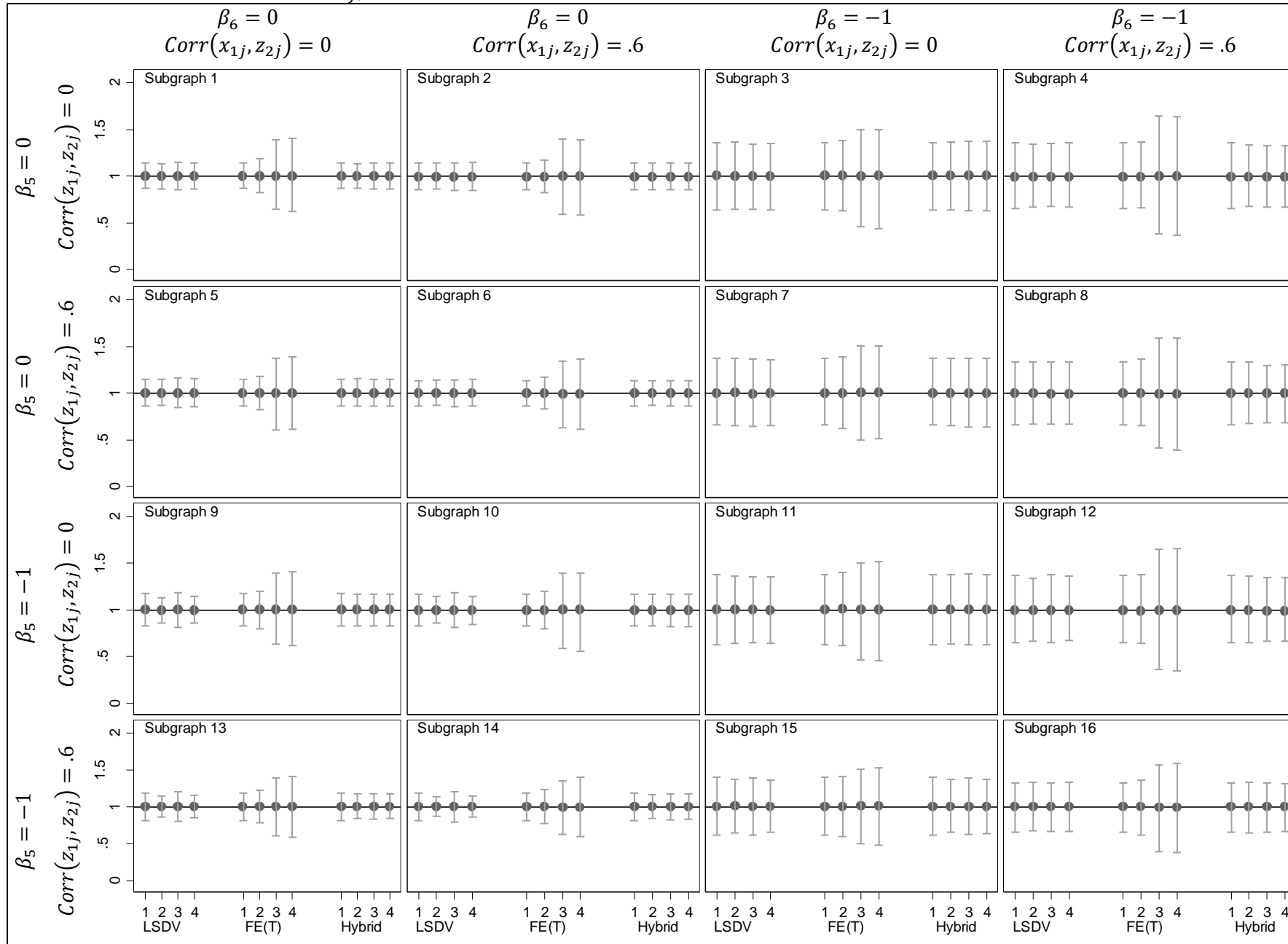
Notes: The y-axes present the estimates of the effects β_1 (a) and β_2 (b) across the 1,000 simulations. The dots give the average estimate, while the interval shown around them presents the space covered by the middle 95% of estimates. LSDV=Least Squares Dummy Variables; FE(T)=Fixed Effects with Transformations. The estimates from the cFES with the LSDV approach are average marginal effects calculated after the estimation of the model. More precisely, they are average marginal effects across the countries but independent of the other variables in the model. We do so because the estimate of β_1 and β_2 are directly conditional on the reference category of the country fixed effects and therefore not directly comparable with the approaches without dummy interactions.

Online Appendix C: Demonstrating Equivalence of all Estimators and Showing Stata Syntax

In this section, we use an example data set to demonstrate (1) that the three approaches presented in the paper (LSDV, FE with transformation, and the hybrid approach) yield exactly identical results with balanced data and (2) how these different models can be applied to data using stata syntax.

We analyze five waves of the European Social Survey, explaining preferences for redistribution ("The government should take measures to reduce income differences") with individual gender and income inequality (Gini Index), a country-level characteristic. We interact gender and income inequality to see whether the effect of inequality on redistributive preferences varies between men and women. In this example, the interaction effect is significant in the standard cFE specification but turns non-significant and decreases in size when controlling for effect heterogeneity in the effect of gender.

Below the following tables you will find the complete stata syntax for the presented models. The data set and do-file is also available in the online appendix.

Table OA3 presents the three different approaches applied to unbalanced data and to balanced data. The models named cFE are standard FE (or hybrid) models, which we provide as a point of reference. The models named cFES are models controlling for effect heterogeneity, where cFES1 control for effect heterogeneity in the effect of gender, CFES2 for effect heterogeneity in the effect of the Gini index and cFES3 for effect heterogeneity in the effect of both variables.

The table shows that with the original (unbalanced) data the estimated interaction effects in the cFES models are only approximately identical, while they are completely identical with balanced data. Note that in each of the different approaches, the main effect in the cFES models differ because they are each conditional in a different way. In the LSDV approach, the main effects are conditional on the moderator being zero and on the reference category of the country dummies. In the FE approach with transformations, they are conditional on the moderator being at its mean, due to the group-mean centering before building the interaction term, and in the hybrid model they are conditional on the moderator being zero. Thus, a direct comparison is only valid for the interaction effects.

Table OA3: Comparing LSDV, FE with transformation and hybrid models using balanced and unbalanced data

LSDV approach

Variable	Original data (n=119,932; 23 countries)					Balanced data (n=50,540; 23 countries)				
	cFE	cFE	cFES1	cFES2	cFES3	cFE	cFE	cFES1	cFES2	cFES3
Gender (male=1)	-0.15013 ***	-0.48300 ***	-0.33477 **	-0.48228 ***	-0.30616 **	-0.14927 ***	-0.37211 ***	-0.38506 *	-0.37211 ***	-0.38506 *
Gini	0.01744 ***	0.01172 ***	0.01449 ***	0.01806	0.02118	0.02355 ***	0.01970 ***	0.02028 ***	0.02623	0.02681
Gender X Gini		0.01149 ***	0.00586	0.01143 ***	0.00470		0.00769	0.00653	0.00769	0.00653
Country dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Country dummies X Gender			yes		yes			yes		yes
Country dummies X Gini				yes	yes				yes	yes

Notes: Country dummies and interactions not shown.

FE with transformation

Variable / Specification	cFE	cFE	cFES1	cFES2	cFES3	cFE	cFE	cFES1	cFES2	cFES3
Gender (male=1)	-0.15013 ***	-0.48300 ***	-0.15013 ***	-0.47973 ***	-0.15013 ***	-0.14927 ***	-0.37211 ***	-0.14927 ***	-0.37211 ***	-0.14927 ***
Gini	0.01744 ***	0.01172 ***	0.01450 ***	0.01747 ***	0.01744 ***	0.02355 ***	0.01970 ***	0.02028 ***	0.02355 ***	0.02355 ***
Gender X Gini		0.01149 ***	0.00587	0.01138 ***	0.00465		0.00769 ***	0.00653	0.00769 ***	0.00653
Controlling EH in Gender			yes					yes		
Controlling EH in Gini				yes					yes	
Controlling EH in Gender and Gini					yes					yes

Hybrid model

Variable / Specification	cFE	cFE	cFES1	cFES2	cFES3	cFE	cFE	cFES1	cFES2	cFES3
Gender (male=1)	-0.15013 ***	-0.48300 ***	-0.49976 ***	-0.48035 ***	-0.50002 ***	-0.14927 ***	-0.37211 ***	-0.37549 ***	-0.37211 ***	-0.37549 ***
Gini	0.01744 ***	0.01172 ***	0.01454 ***	-0.22017 ***	-0.21980 ***	0.02355 ***	0.01970 ***	0.02028 ***	0.01970 ***	0.02028 ***
Gender X Gini		0.01149 ***	0.00587	0.01140 ***	0.00472		0.00769 ***	0.00653	0.00769 ***	0.00653
Controlling EH in Gender			yes					yes		
Controlling EH in Gini				yes					yes	
Controlling EH in Gender and Gini					yes					yes

Notes: Between effects and interactions not shown.

Notes: * p<.05, ** p<.01, *** p<.001.

Stata Syntax for above examples:

```
use example_data_crosslevel.dta, clear


***********************************************************************************************************************
* Exammple data: 5 rounds of ESS combined with country-level data on Inequality (Gini Index)                        *
* DV = attitudes towards income redistribution ("The government should take measures to reduce differences in income levels") *
* UVs = gender (gndr), inequality (gini_d)                                                                           *
* Research question: Does the effect of inequality on redistributive preferences vary between men and women?         *
***********************************************************************************************************************


* Drop countries which have no within variation of macro variable of interest
drop if Country == 196 | Country == 246 | Country == 376 | Country == 442


* LSDV approach
reg gincdif c.gndr  c.gini_d  i.Country                         // standard cFE model, main effect only
est store lsdv1
reg gincdif c.gndr##c.gini_d  i.Country                         // standard cFE model with added interaction
est store lsdv2
reg gincdif c.gndr##c.gini_d  i.Country##c.gndr                 // CFES model controlling for effect heterogeneity in gndr
est store lsdv3
reg gincdif c.gndr##c.gini_d  i.Country##c.gini_d               // CFES model controlling for effect heterogeneity in gini_d
est store lsdv4
reg gincdif c.gndr##c.gini_d  i.Country##c.gini_d i.Country#c.gndr        // CFES model controlling for effect heterogeneity in gini_d and gndr
est store lsdv5


est tab lsdv1 lsdv2 lsdv3 lsdv4 lsdv5, star                     // show complete models

est tab lsdv1 lsdv2 lsdv3 lsdv4 lsdv5, star keep(gndr gini_d c.gndr#c.gini_d )   // omit country fixed effects and slopes




* Generate some new variables for FE with transformation and hybrid approach

* generate country-specific means of all variables
foreach var of varlist gndr gini_d  {
       bys Country: egen `var'_m = mean(`var')
       }

* generate demeaned versions of the two interacting variables
gen gndr_dm = gndr-gndr_m
gen gini_dm = gini_d-gini_d_m

* generate various versions of the interaction term
gen ia_gndrgini_oo=gndr*gini_d                         // for standard cFE and hybrid approach
gen ia_gndrgini_dd=gndr_dm*gini_dm                     // for cFES with (extended) FE transformations
gen ia_gndrgini_do=gndr_dm*gini_d                      // for cFES with (extended) FE trsnsformations
gen ia_gndrgini_od=gndr*gini_dm                        // for cFES with (extended) FE transformations
gen ia_gndrgini_om=gndr*gini_d_m                       // for cFES hybrid models
gen ia_gndrgini_mo=gndr_m*gini_d                       // for cFES hybrid models
```

```
bys Country: egen ia_gndrgini_oo_m = mean(ia_gndrgini_oo)   // for standard hybrid approach


* cFES model with (extended) FE transformations
xtreg gincdif c.gndr  c.gini_d , fe i(Country)                          // standard cFE approach
est store fet1
xtreg gincdif c.gndr  c.gini_d  ia_gndrgini_oo, fe i(Country)           // standard cFE approach with additional interaction
est store fet2
xtreg gincdif c.gndr  c.gini_d  ia_gndrgini_od, fe i(Country)           // cFES model controlling for effect heterogeneity in gndr
est store fet3
xtreg gincdif c.gndr  c.gini_d  ia_gndrgini_do, fe i(Country)           // cFES model controlling for effect heterogeneity in gini
est store fet4
xtreg gincdif c.gndr  c.gini_d  ia_gndrgini_dd, fe i(Country)           // cFES model controlling for effect heterogeneity in both
est store fet5

est tab fet1 fet2 fet3 fet4 fet5,    star                               // show models


* cFES hybrid models
mixed gincdif c.gndr c.gini_d  gndr_m gini_d_m || Country: , mle var        // standard hybrid model
est store hyb1
mixed gincdif c.gndr c.gini_d  ia_gndrgini_oo gndr_m gini_d_m ia_gndrgini_oo_m || Country: , mle var    // standard hybrid approach with additional interaction
est store hyb2
mixed gincdif c.gndr c.gini_d  ia_gndrgini_oo gndr_m gini_d_m ia_gndrgini_om   || Country: , mle var    // controlling for effect heterogeneity in gndr
est store hyb3
mixed gincdif c.gndr c.gini_d  ia_gndrgini_oo gndr_m gini_d_m ia_gndrgini_mo   || Country: , mle var    // controlling for effect heterogeneity in gini
est store hyb4
mixed gincdif c.gndr c.gini_d  ia_gndrgini_oo gndr_m gini_d_m ia_gndrgini_om ia_gndrgini_mo || Country: , mle var     // controlling for effect heterog. in both
est store hyb5

est tab hyb1 hyb2 hyb3 hyb4 hyb5, star                                  // show models


* Compare LSDV, FE transformation and hybrid models
est tab lsdv1 fet1 hyb1, star  keep(c.gndr gini_d ) ///              // estimates exactly identical, as expected
        equations(1)
est tab lsdv2 fet2 hyb2, star keep(c.gndr gini_d  ///               // estimates exactly identical, as expected
        ia_gndrgini_oo c.gndr#c.gini_d) equations(1)
est tab lsdv3 fet3 hyb3, star keep(c.gndr gini_d  ///              // estimates not exactly identical, as noted in note 14 in the paper
        ia_gndrgini_oo ia_gndrgini_od c.gndr#c.gini_d) equations(1)
est tab lsdv4 fet4 hyb4, star keep(c.gndr gini_d  ///              // estimates not exactly identical, as noted in note 14 in the paper
        ia_gndrgini_oo ia_gndrgini_do c.gndr#c.gini_d) equations(1)
est tab lsdv5 fet5 hyb5, star keep(c.gndr gini_d  ///              // estimates not exactly identical, as noted in note 14 in the paper
        ia_gndrgini_oo ia_gndrgini_dd c.gndr#c.gini_d) equations(1)


*******************************************************
* Demonstrate exact equivalence of estimators with balanced data
* Note: The following code is exactly identical to the former code,
*       only that we draw a balanced sample before estimating the models

use example_data_crosslevel.dta, clear


* Drop countries which have no within variation of macro variable of interest
drop if Country == 196 | Country == 246 | Country == 376 | Country == 442
```

```
* Draw balanced sample
sample 266, count by(Country Year gndr)                   // 266 is the smallest n observed in the three dimensional frequency table "Country-Year-Gender"


* LSDV approach
reg gincdif c.gndr  c.gini_d  i.Country                              // standard cFE model, main effect only
est store lsdv1
reg gincdif c.gndr##c.gini_d  i.Country                              // standard cFE model with added interaction
est store lsdv2
reg gincdif c.gndr##c.gini_d  i.Country##c.gndr                      // CFES model controlling for effect heterogeneity in gndr
est store lsdv3
reg gincdif c.gndr##c.gini_d  i.Country##c.gini_d                    // CFES model controlling for effect heterogeneity in gini_d
est store lsdv4
reg gincdif c.gndr##c.gini_d  i.Country##c.gini_d i.Country#c.gndr   // CFES model controlling for effect heterogeneity in gini_d and gndr
est store lsdv5


est tab lsdv1 lsdv2 lsdv3 lsdv4 lsdv5, star                         // show complete models

est tab lsdv1 lsdv2 lsdv3 lsdv4 lsdv5 , ///
       keep(gndr gini_d c.gndr#c.gini_d )                          // omit country fixed effects and slopes



* Generate some new variables for FE with transformation and hybrid approach

* generate country-specific means of all variables
foreach var of varlist gndr gini_d  {
       bys Country: egen `var'_m = mean(`var')
       }

* generate demeaned versions of the two interacting variables
gen gndr_dm = gndr-gndr_m
gen gini_dm = gini_d-gini_d_m

* generate various versions of the interaction term
gen ia_gndrgini_oo=gndr*gini_d                                      // for standard cFE and hybrid approach
gen ia_gndrgini_dd=gndr_dm*gini_dm                                  // for cFES with (extended) FE transformations
gen ia_gndrgini_do=gndr_dm*gini_d                                   // for cFES with (extended) FE trsnsformations
gen ia_gndrgini_od=gndr*gini_dm                                     // for cFES with (extended) FE transformations
gen ia_gndrgini_om=gndr*gini_d_m                                    // for cFES hybrid models
gen ia_gndrgini_mo=gndr_m*gini_d                                    // for cFES hybrid models

bys Country: egen ia_gndrgini_oo_m = mean(ia_gndrgini_oo)           // for standard hybrid approach


* cFES model with (extended) FE transformations
xtreg gincdif c.gndr  c.gini_d , fe i(Country)                      // standard cFE approach
est store fet1
xtreg gincdif c.gndr  c.gini_d  ia_gndrgini_oo, fe i(Country)       // standard cFE approach with additional interaction
est store fet2
xtreg gincdif c.gndr  c.gini_d  ia_gndrgini_od, fe i(Country)       // cFES model controlling for effect heterogeneity in gndr
est store fet3
xtreg gincdif c.gndr  c.gini_d  ia_gndrgini_do, fe i(Country)       // cFES model controlling for effect heterogeneity in gini
est store fet4
xtreg gincdif c.gndr  c.gini_d  ia_gndrgini_dd, fe i(Country)       // cFES model controlling for effect heterogeneity in both
```

```
est store fet5

est tab fet1 fet2 fet3 fet4 fet5, star                                    // show models

* cFES hybrid models
mixed gincdif c.gndr c.gini_d  gndr_m gini_d_m || Country: , mle var      // standard hybrid model
est store hyb1
mixed gincdif c.gndr c.gini_d  ia_gndrgini_oo gndr_m gini_d_m ia_gndrgini_oo_m || Country: , mle var    // standard hybrid approach with additional interaction
est store hyb2
mixed gincdif c.gndr c.gini_d  ia_gndrgini_oo gndr_m gini_d_m ia_gndrgini_om   || Country: , mle var   // controlling for effect heterogeneity in gndr
est store hyb3
mixed gincdif c.gndr c.gini_d  ia_gndrgini_oo gndr_m gini_d_m ia_gndrgini_mo   || Country: , mle var   // controlling for effect heterogeneity in gini
est store hyb4
mixed gincdif c.gndr c.gini_d  ia_gndrgini_oo gndr_m gini_d_m ia_gndrgini_om ia_gndrgini_mo || Country: , mle var     // controlling for effect hetero. in both
est store hyb5

est tab hyb1 hyb2 hyb3 hyb4 hyb5, star                                    // show models


* Compare LSDV, FE transformation and hybrid models
est tab lsdv1 fet1 hyb1, star  keep(c.gndr gini_d ) ///            // estimates exactly identical, as expected
      equations(1)
est tab lsdv2 fet2 hyb2, star keep(c.gndr gini_d  ///             // estimates exactly identical, as expected
      ia_gndrgini_oo c.gndr#c.gini_d) equations(1)
est tab lsdv3 fet3 hyb3, star keep(c.gndr gini_d  ///             // estimates not exactly identical, as noted in note 14 in the paper
      ia_gndrgini_oo ia_gndrgini_od c.gndr#c.gini_d) equations(1)
est tab lsdv4 fet4 hyb4, star keep(c.gndr gini_d  ///             // estimates not exactly identical, as noted in note 14 in the paper
      ia_gndrgini_oo ia_gndrgini_do c.gndr#c.gini_d)equations(1)
est tab lsdv5 fet5 hyb5, star keep(c.gndr gini_d  ///             // estimates not exactly identical, as noted in note 14 in the paper
      ia_gndrgini_oo ia_gndrgini_dd c.gndr#c.gini_d) equations(1)
```