



Supplementary Information for

Money and Happiness: The Income-Happiness Correlation is Higher When Income Inequality is Higher

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This PDF file includes:

Supplementary Material 1

Tables S1 to S36 (Descriptive Statistics)

Supplementary Material 2

Figures S1 to S4 (Time trends in GDP across 36 countries)

Figures S5 to S8 (Time trends in top10% national income share across 36 countries)

Other supplementary materials for this manuscript include the following:

Supplementary Material 3 (Income category values and midpoint values)

Available at <https://osf.io/x5gcw/>

Supplementary Material 1

Tables S1-S36 below represent the descriptive statistics and correlations among year, GDP per capita (LN), Top 10%, Bottom50% of each nation. For all the tables, Year2 indicates the survey year recoded to start at zero, the first year of the available survey year for each country (e.g., 1972 for the U.S., 1978 for Japan). zLNGDP indicates z-transformed log-transformed GDP per capita. Top10share and Bottom50share indicate the income share held by highest 10% and the lowest 50%. M and SD are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$.

Table S1: FRANCE

Means, standard deviations, and correlations with confidence intervals

Variable	M	SD	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	-0.00	1.00	.96** [.94, .98]		
3. Top10share	0.31	0.02	.15 [-.13, .41]	.06 [-.23, .33]	
4. Bottom50share	0.22	0.01	-.07 [-.34, .22]	.06 [-.22, .34]	-.95** [-.97, -.92]

Table S2: BELGIUM

Means, standard deviations, and correlations with confidence intervals

Variable	M	SD	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	-0.00	1.00	.99** [.98, .99]		
3. Top10share	0.26	0.01	.16 [-.16, .45]	.24 [-.08, .51]	
4. Bottom50share	0.27	0.01	.20 [-.11, .48]	.12 [-.20, .41]	-.73** [-.85, -.54]

Table S3: NETHERLANDS

Means, standard deviations, and correlations with confidence intervals

Variable	M	SD	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	-0.00	1.00	.95** [.91, .97]		
3. Top10share	0.23	0.01	.84** [.72, .91]	.88** [.78, .93]	

4. Bottom50share	0.30	0.01	-.88** [-.94, -.78]	-.78** [-.88, -.62]	-.83** [-.91, -.71]
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Table S4: GERMANY*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	0.00	1.00	.96** [.94, .98]		
3. Top10share	0.32	0.04	.93** [.88, .96]	.90** [.82, .94]	
4. Bottom50share	0.22	0.02	-.96** [-.98, -.93]	-.95** [-.97, -.90]	-.99** [-1.00, -.98]

Table S5: ITALY*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	0.00	1.00	.84** [.74, .91]		
3. Top10share	0.28	0.03	.89** [.81, .94]	.75** [.59, .86]	
4. Bottom50share	0.23	0.02	-.91** [-.95, -.84]	-.83** [-.91, -.71]	-.98** [-.99, -.97]

Table S6: LUXEMBOURG*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	0.00	1.00	.96** [.94, .98]		
3. Top10share	0.36	0.02	-.29 [-.55, .03]	-.01 [-.32, .30]	
4. Bottom50share	0.22	0.01	-.80** [-.89, -.64]	-.81** [-.90, -.67]	-.21 [-.49, .10]

Table S7: DENMARK*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	0.00	1.00	.98** [.97, .99]		
3. Top10share	0.29	0.02	.41** [.15, .62]	.38** [.12, .60]	
4. Bottom50share	0.26	0.01	-.81** [-.89, -.66]	-.67** [-.81, -.46]	-.87** [-.93, -.76]

Table S8: IRELAND*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	0.00	1.00	.98** [.97, .99]		
3. Top10share	0.31	0.03	.82** [.70, .90]	.89** [.80, .94]	
4. Bottom50share	0.23	0.01	-.86** [-.92, -.75]	-.85** [-.92, -.72]	-.82** [-.90, -.69]

Table S9: UK*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	0.00	1.00	.98** [.96, .99]		
3. Top10share	0.33	0.04	.91** [.85, .95]	.96** [.93, .98]	
4. Bottom50share	0.21	0.01	-.61** [-.77, -.36]	-.75** [-.86, -.57]	-.89** [-.94, -.80]

Table S10: GREECE*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	0.00	1.00	.60** [.39, .76]		
3. Top10share	0.36	0.02	-.48**	-.36*	

				[-.67, -.23]	[-.58, -.09]
4. Bottom50share	0.18	0.01	.44** [.15, .66]	.15 [-.17, .44]	-.84** [-.91, -.71]

Table S11: SPAIN*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	-0.00	1.00	.97** [.95, .98]		
3. Top10share	0.35	0.01	-.74** [-.86, -.56]	-.75** [-.86, -.57]	
4. Bottom50share	0.21	0.01	.78** [.61, .88]	.72** [.52, .84]	-.90** [-.94, -.81]

Table S12: PORTUGAL*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	0.00	1.00	.94** [.90, .97]		
3. Top10share	0.37	0.03	.72** [.52, .84]	.87** [.76, .93]	
4. Bottom50share	0.19	0.02	-.60** [-.77, -.35]	-.75** [-.86, -.57]	-.97** [-.98, -.94]

Table S13: NORWAY*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	-0.00	1.00	.97** [.95, .99]		
3. Top10share	0.29	0.03	.30* [.02, .53]	.42** [.17, .63]	
4. Bottom50share	0.28	0.02	-.74** [-.85, -.55]	-.85** [-.92, -.73]	-.95** [-.98, -.91]

Table S14: FINLAND*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	-0.00	1.00	.97** [.94, .98]		
3. Top10share	0.29	0.03	.84** [.71, .91]	.89** [.80, .94]	
4. Bottom50share	0.25	0.01	-.86** [-.92, -.75]	-.84** [-.91, -.71]	-.83** [-.91, -.70]

Table S15: SWEDEN*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	-0.00	1.00	.98** [.97, .99]		
3. Top10share	0.29	0.02	.39** [.12, .60]	.40** [.14, .61]	
4. Bottom50share	0.27	0.01	-.86** [-.92, -.74]	-.83** [-.91, -.70]	-.79** [-.89, -.64]

Table S16: AUSTRIA*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	21.50	14.58			
2. zLNGDP	-0.00	1.00	.98** [.96, .99]		
3. Top10share	0.23	0.01	.69** [.48, .83]	.67** [.45, .81]	
4. Bottom50share	0.33	0.01	.03 [-.29, .33]	.16 [-.16, .45]	-.45** [-.67, -.17]

Table S17: ARGENTINA*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	10.33	7.32			
2. zLNGDP	0.00	1.00	.79** [.53, .92]		
3. Top10share	0.45	0.05	-.74**	-.65**	

				[-.89, -.45]	[-.85, -.28]
4. Bottom50share	0.14	0.03	.91** [.77, .96]	.69** [.34, .87]	-.90** [-.96, -.75]

Table S18: BOLIVIA*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	10.87	6.99			
2. zLNGDP	-0.00	1.00	.97** [.93, .99]		
3. Top10share	0.51	0.02	-.90** [-.96, -.76]	-.88** [-.95, -.70]	
4. Bottom50share	0.11	0.01	.96** [.90, .98]	.94** [.84, .98]	-.98** [-.99, -.94]

Table S19: BRASIL*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	10.33	7.32			
2. zLNGDP	0.00	1.00	.83** [.60, .93]		
3. Top10share	0.56	0.01	.59** [.20, .82]	.61** [.22, .83]	
4. Bottom50share	0.11	0.00	-.51* [-.77, -.08]	-.16 [-.57, .32]	-.70** [-.87, -.37]

Table S20: CHILE*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	10.33	7.32			
2. zLNGDP	-0.00	1.00	.93** [.81, .97]		
3. Top10share	0.61	0.01	.17 [-.30, .57]	.43 [-.03, .74]	
4. Bottom50share	0.09	0.01	.50* [.07, .77]	.15 [-.33, .57]	-.65** [-.85, -.29]

Table S21: COLOMBIA*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	10.87	6.99			
2. zLNGDP	-0.00	1.00	.89** [.72, .96]		
3. Top10share	0.51	0.02	-.87** [-.95, -.70]	-.64** [-.85, -.26]	
4. Bottom50share	0.11	0.01	.91** [.77, .96]	.66** [.29, .86]	-.98** [-.99, -.96]

Table S22: COSTA RICA*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	10.87	6.99			
2. zLNGDP	0.00	1.00	.98** [.96, .99]		
3. Top10share	0.49	0.02	.85** [.66, .94]	.83** [.61, .93]	
4. Bottom50share	0.10	0.01	-.87** [-.95, -.70]	-.82** [-.93, -.59]	-.95** [-.98, -.88]

Table S23: DOMINICAN REPUBLIC*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	12.50	5.92			
2. zLNGDP	-0.00	1.00	.95** [.87, .98]		
3. Top10share	0.51	0.02	-.90** [-.96, -.76]	-.81** [-.93, -.57]	
4. Bottom50share	0.11	0.01	.96** [.90, .98]	.87** [.69, .95]	-.98** [-.99, -.94]

Table S24: ECUADOR*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	10.87	6.99			
2. zLNGDP	0.00	1.00	.96** [.90, .99]		
3. Top10share	0.43	0.04	-.90**	-.78**	

				[-.96, -.77]	[-.91, -.50]
4. Bottom50share	0.14	0.01	.82** [.59, .93]	.66** [.30, .86]	-.95** [-.98, -.88]

Table S25: EL SALVADOR*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	10.87	6.99			
2. zLNGDP	0.00	1.00	.99** [.98, 1.00]		
3. Top10share	0.48	0.03	-.50* [-.77, -.07]	-.36 [-.70, .11]	
4. Bottom50share	0.09	0.01	.69** [.36, .87]	.66** [.30, .86]	-.80** [-.92, -.56]

Table S26: GUATEMALA*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	10.87	6.99			
2. zLNGDP	0.00	1.00	.99** [.98, 1.00]		
3. Top10share	0.51	0.02	-.90** [-.96, -.76]	-.84** [-.94, -.63]	
4. Bottom50share	0.11	0.01	.96** [.90, .98]	.92** [.81, .97]	-.98** [-.99, -.94]

Table S27: HONDURAS*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	10.87	6.99			
2. zLNGDP	-0.00	1.00	.98** [.95, .99]		
3. Top10share	0.51	0.02	-.90** [-.96, -.76]	-.84** [-.93, -.61]	
4. Bottom50share	0.11	0.01	.96** [.90, .98]	.91** [.77, .96]	-.98** [-.99, -.94]

Table S28: MEXICO*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	10.33	7.32			
2. zLNGDP	-0.00	1.00	.73** [.41, .89]		
3. Top10share	0.57	0.03	.83** [.62, .93]	.88** [.71, .95]	
4. Bottom50share	0.08	0.00	-.12 [-.53, .34]	-.54* [-.80, -.11]	-.55* [-.80, -.14]

Table S29: NICARAGUA*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	10.87	6.99			
2. zLNGDP	0.00	1.00	.98** [.96, .99]		
3. Top10share	0.51	0.02	-.90** [-.96, -.76]	-.87** [-.95, -.68]	
4. Bottom50share	0.11	0.01	.96** [.90, .98]	.94** [.84, .98]	-.98** [-.99, -.94]

Table S30: PANAMA*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	10.87	6.99			
2. zLNGDP	0.00	1.00	.99** [.98, 1.00]		
3. Top10share	0.51	0.02	-.90** [-.96, -.76]	-.90** [-.96, -.75]	
4. Bottom50share	0.11	0.01	.96** [.90, .98]	.96** [.89, .98]	-.98** [-.99, -.94]

Table S31: PARAGUAY*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	10.33	7.32			
2. zLNGDP	0.00	1.00	.93** [.83, .97]		
3. Top10share	0.51	0.02	-.90**	-.77**	

				[-.96, -.76]	[-.91, -.48]
4. Bottom50share	0.11	0.01		.96** [.90, .98]	.85** [.65, .94] -.98** [-.99, -.94]

Table S32: PERU*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	10.33	7.32			
2. zLNGDP	0.00	1.00	.96** [.90, .99]		
3. Top10share	0.56	0.03	-.74** [-.89, -.44]	-.78** [-.91, -.51]	
4. Bottom50share	0.09	0.01	.88** [.72, .95]	.92** [.79, .97]	-.95** [-.98, -.87]

Table S33: URUGUAY*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	10.33	7.32			
2. zLNGDP	0.00	1.00	.91** [.78, .97]		
3. Top10share	0.45	0.04	-.74** [-.89, -.44]	-.85** [-.94, -.64]	
4. Bottom50share	0.16	0.02	.82** [.60, .93]	.90** [.75, .96]	-.97** [-.99, -.94]

Table S34: VENEZUELA*Means, standard deviations, and correlations with confidence intervals*

Variable	M	SD	1	2	3
1. Year2	10.33	7.32			
2. zLNGDP	0.00	1.00	.65** [.27, .85]		
3. Top10share	0.51	0.02	-.90** [-.96, -.76]	-.43 [-.74, .03]	
4. Bottom50share	0.11	0.01	.96** [.90, .98]	.53* [.10, .79]	-.98** [-.99, -.94]

Table S35: JAPAN*Means, standard deviations, and correlations with confidence intervals*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	16.50	9.96			
2. zLNGDP	-0.00	1.00	.83** [.64, .93]		
3. Top10share	0.39	0.03	.90** [.80, .95]	.66** [.35, .84]	
4. Bottom50share	0.19	0.01	-.91** [-.96, -.83]	-.63** [-.83, -.28]	-.99** [-1.00, -.98]

Table S36: UNITED STATES

Means, standard deviations, and correlations with confidence intervals

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Year2	23.00	13.71			
2. zLNGDP	-0.00	1.00	.98** [.97, .99]		
3. Top10share	0.40	0.04	.98** [.97, .99]	.99** [.98, .99]	
4. Bottom50share	0.16	0.03	-.97** [-.99, -.95]	-.97** [-.98, -.95]	-.98** [-.99, -.97]

Figures S1-S4. Time trends in GDP across 36 countries. For all the figures, the X-axis is the first survey year available in each country. The Y-axis indicates GDPpc capita (log-transformed, standardized). The blue line depicts the total trend. For the detailed correlation coefficient, please see Supplementary Material 1.

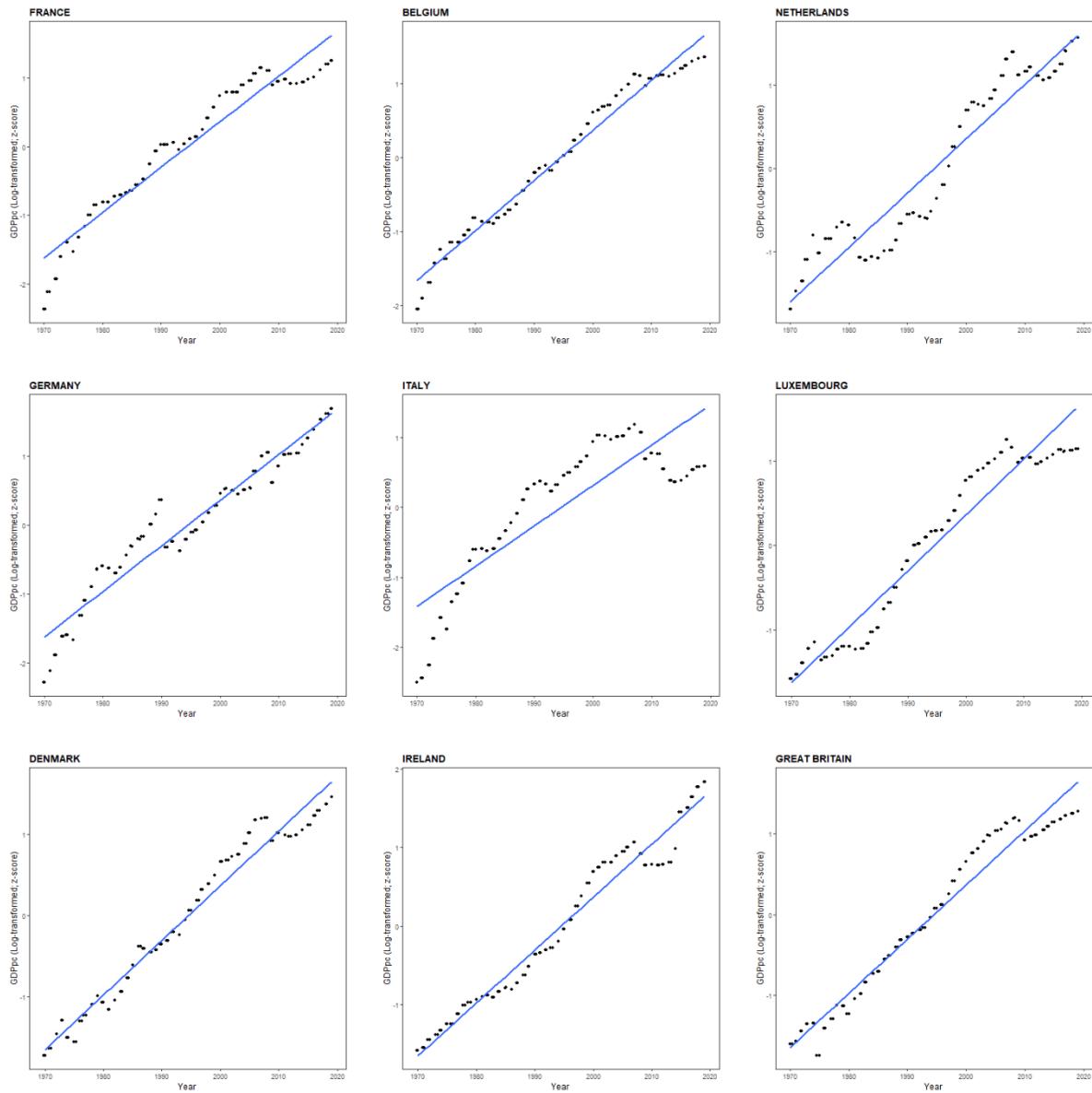


Figure S1. Time trends in GDP in France, Belgium, Netherland, Germany, Italy, Luxembourg, Denmark, Ireland, and UK.

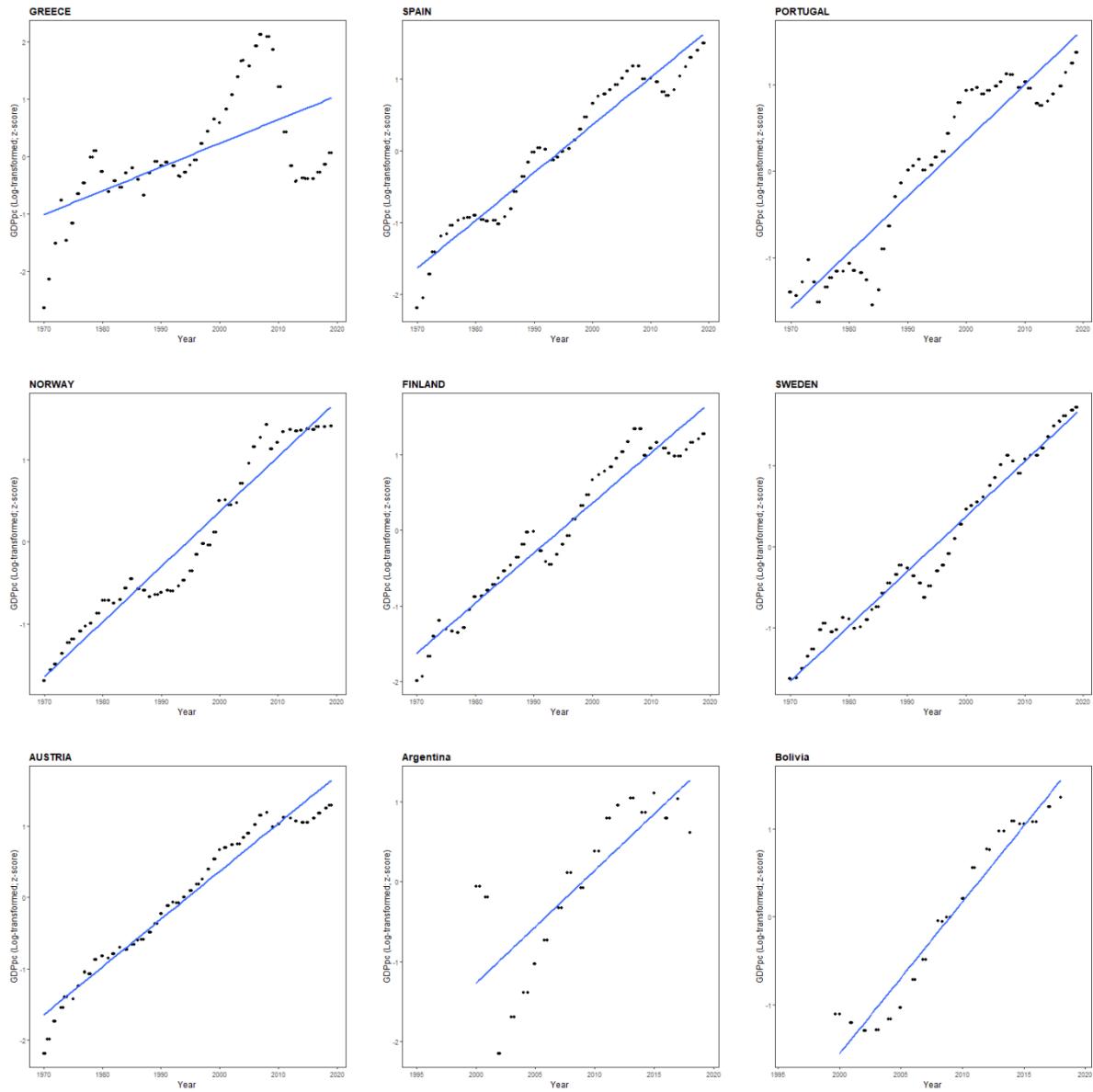


Figure S2. Time trends in GDP in Greece, Spain, Portugal, Finland, Norway, Sweden, Austria, Argentina, and Bolivia

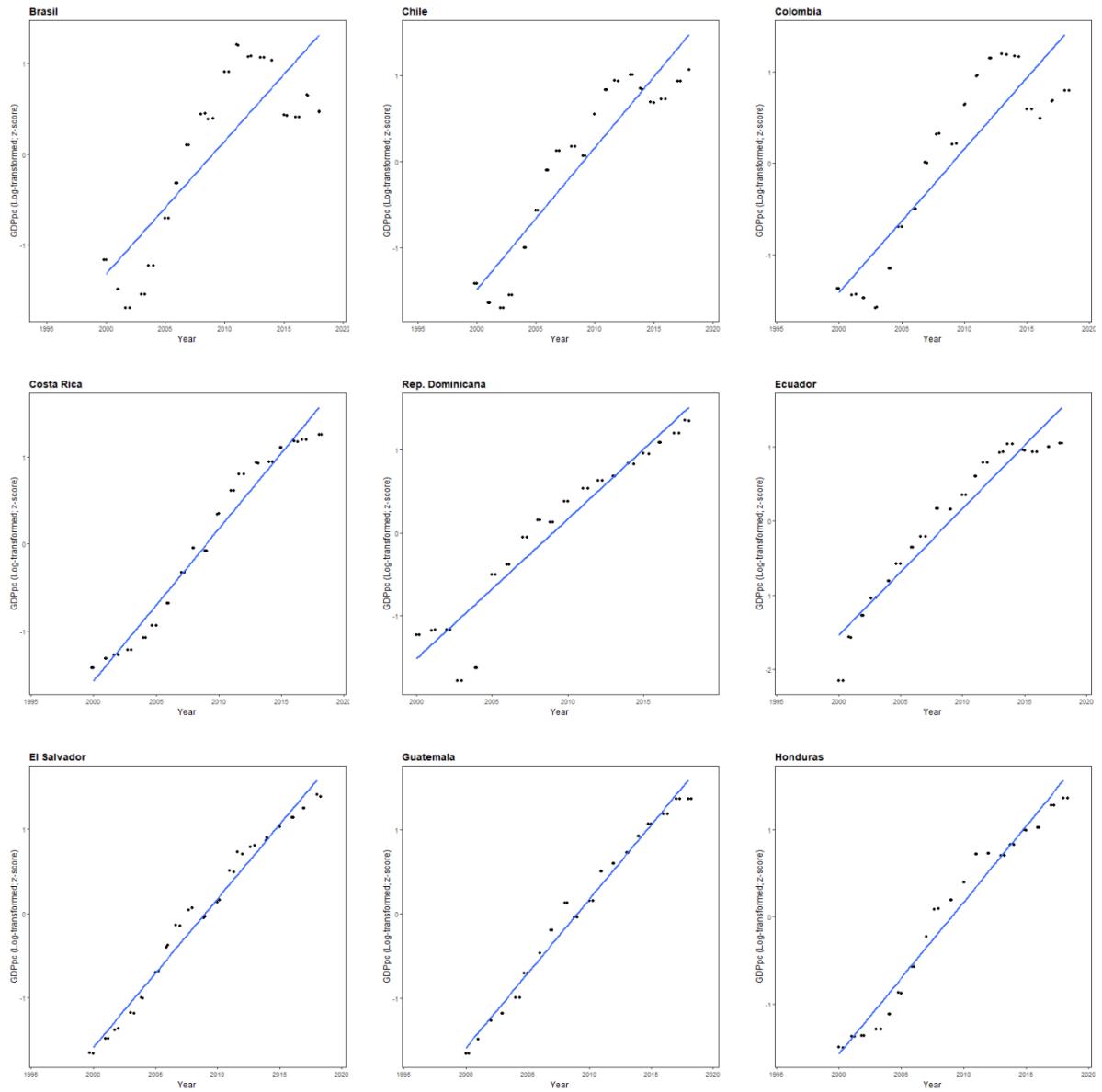


Figure S3. Time trends in GDP in Brasil, Chile, Colombia, Costa Rica, Rep. Dominicana, Ecuador, El Salvador, Guatemala, and Honduras

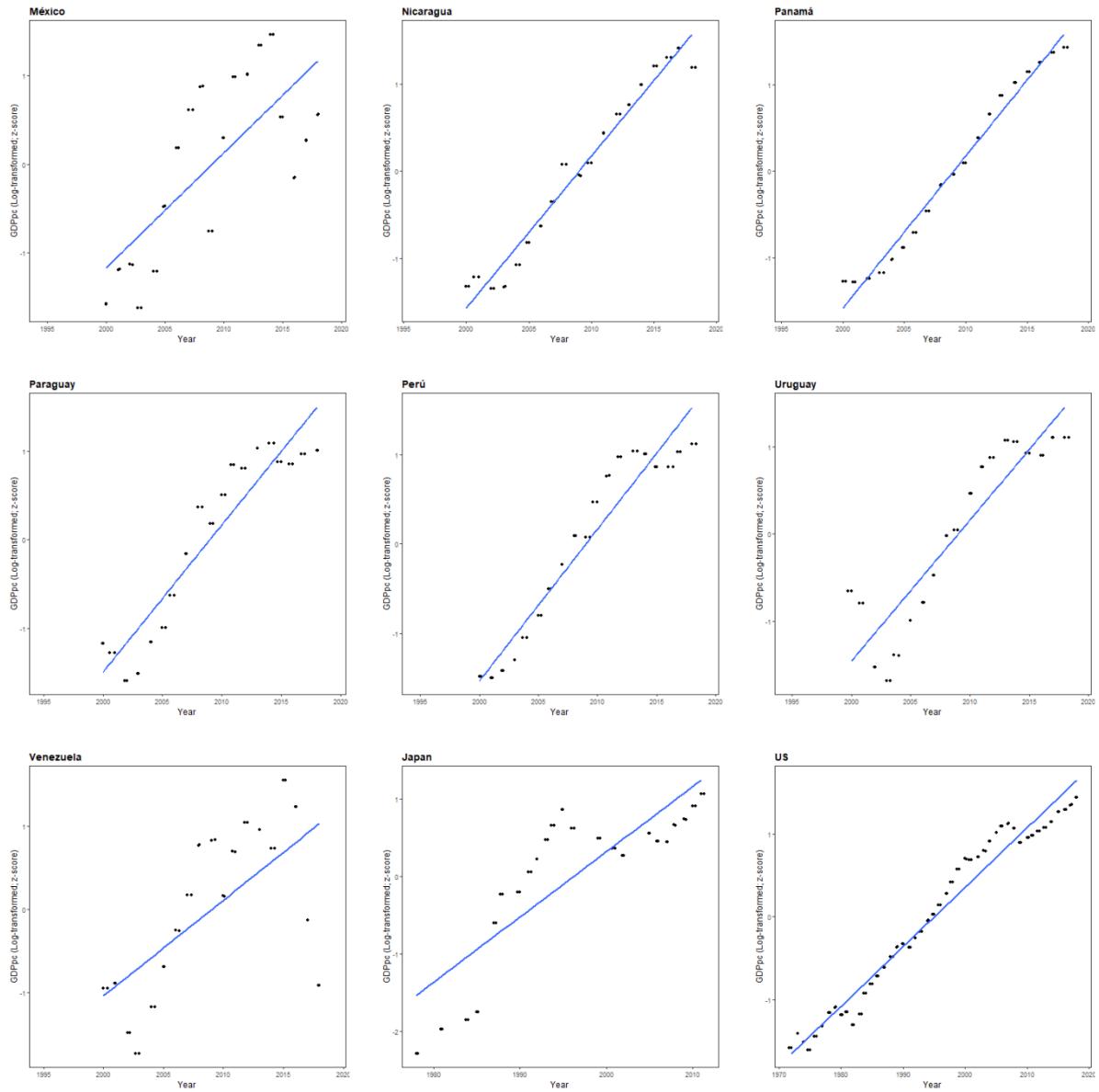


Figure S4. Time trends in GDP in México, Nicaragua, Panamá, Paraguay, Perú, Uruguay, Venezuela, Japan, US

Figures S5-S8. Time trends in Top10%Share across 36 countries. For all the figures, the X-axis is the first survey year available in each country. The Y-axis indicates the income share by Top 10% earners in a country. The blue line depicts the total trend.

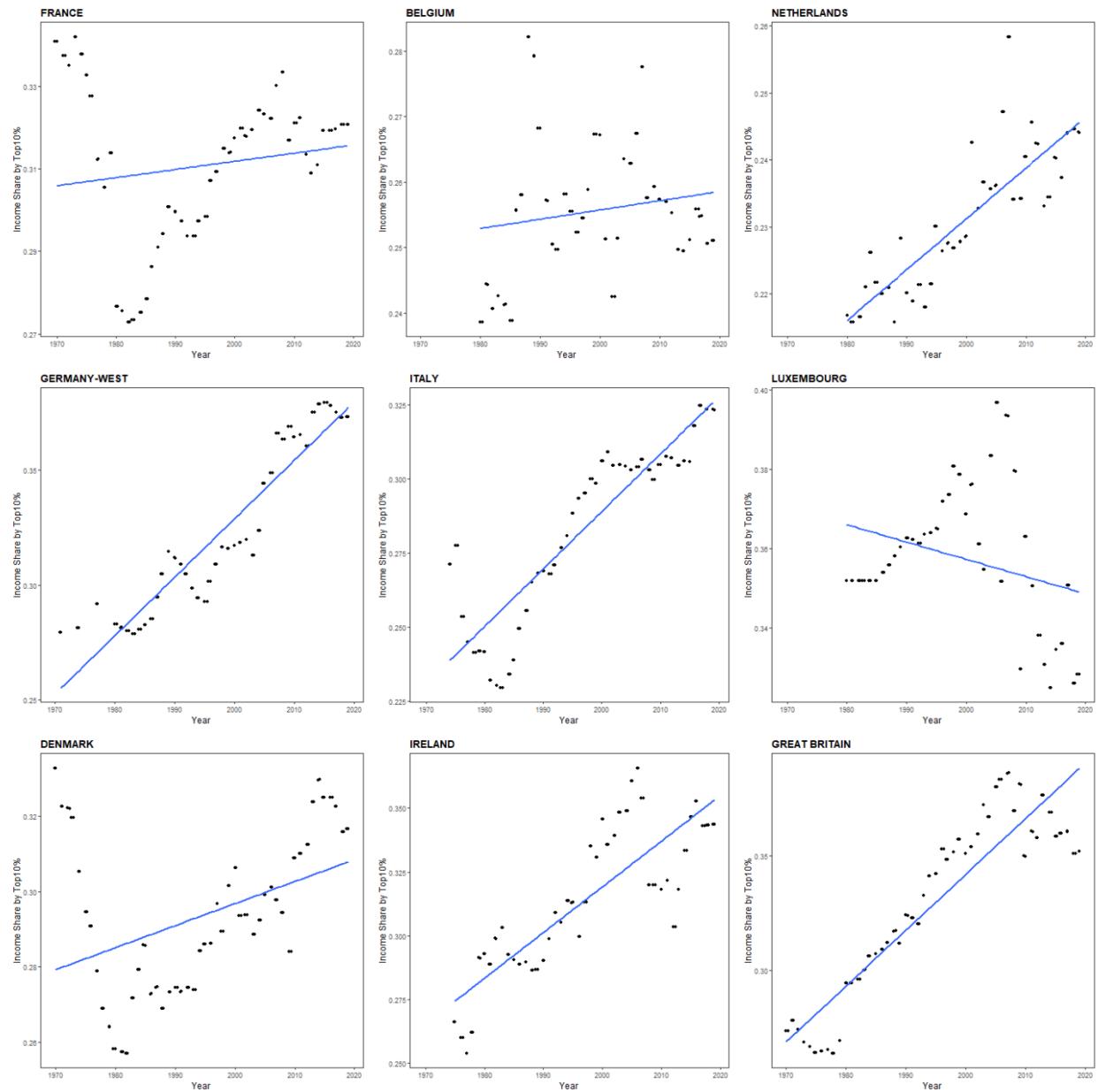


Figure S5. Time trends in Top10% Share in France, Belgium, Netherland, Germany, Italy, Luxembourg, Denmark, Ireland, and UK.

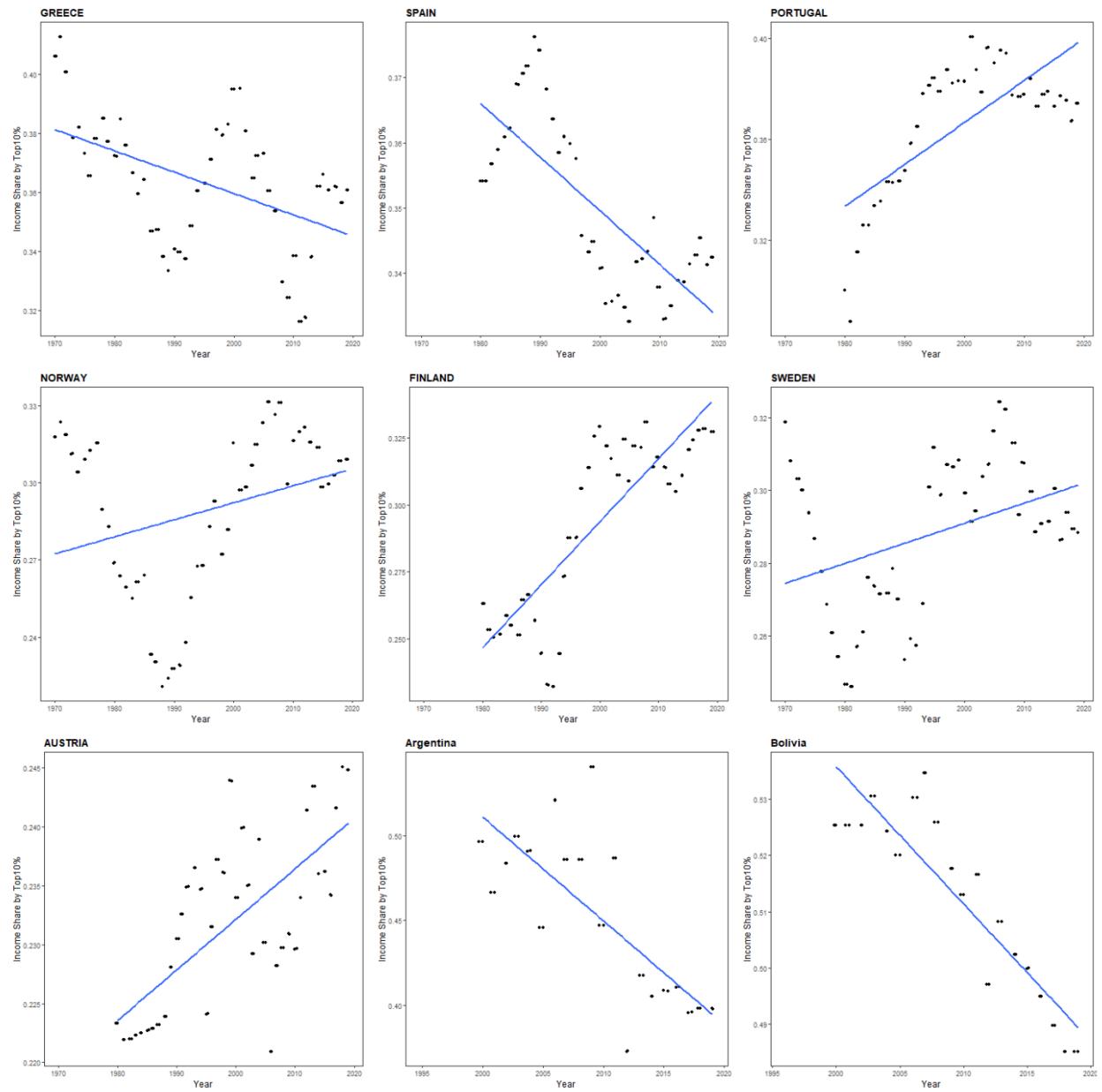


Figure S6. Time trends in Top10% Share in Greece, Spain, Portugal, Finland, Norway, Sweden, Austria, Argentina, and Bolivia

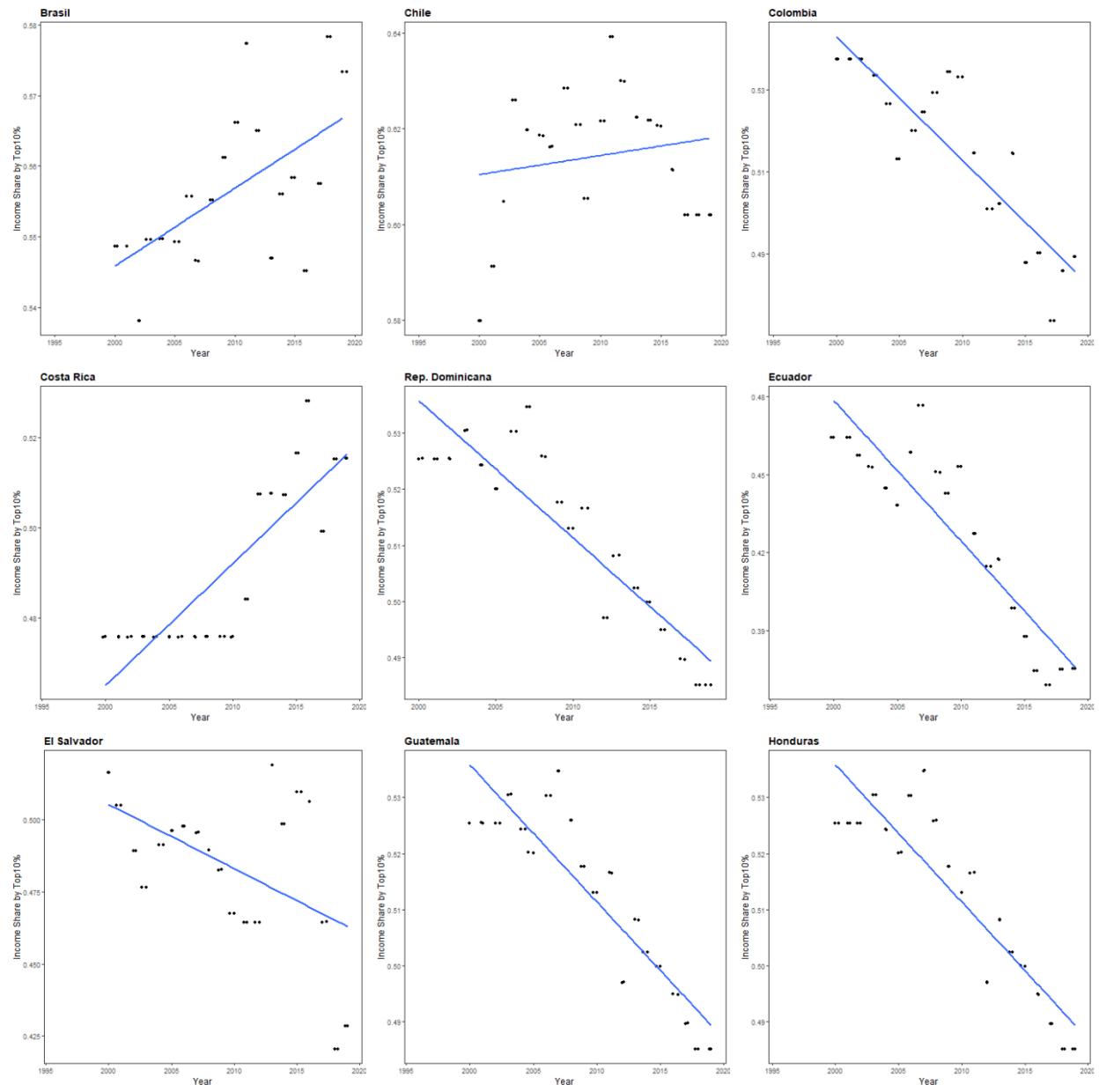


Figure S7. Time trends in Top 10% Share in Brasil, Chile, Colombia, Costa Rica, Rep. Dominicana, Ecuador, El Salvador, Guatemala, and Honduras

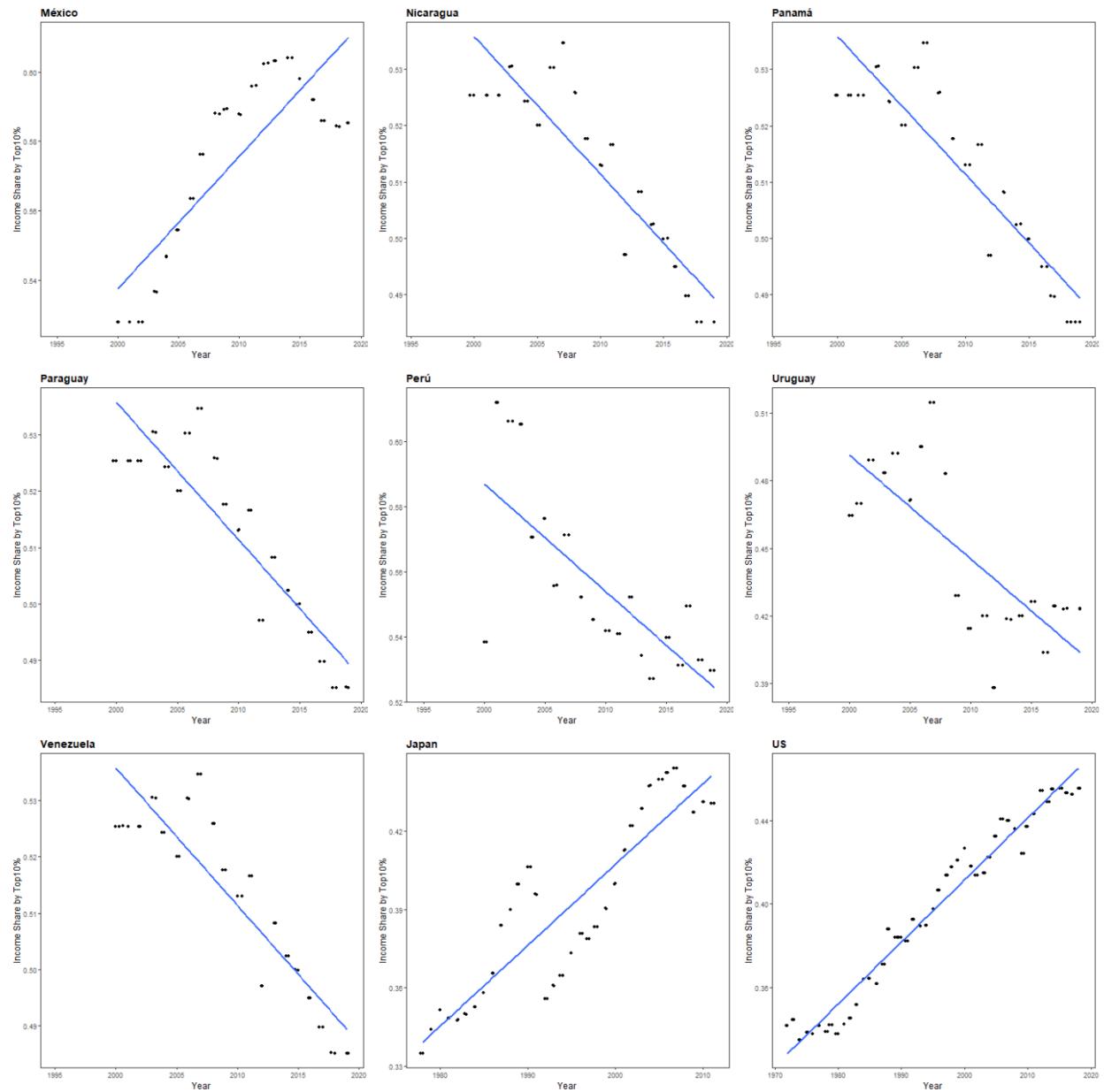


Figure S8. Time trends in Top 10% Share in México, Nicaragua, Panamá, Paraguay, Perú, Uruguay, Venezuela, Japan, US