SUPPLEMENTARY MATERIAL

Weak compliance with Nigeria's wildlife trade ban imposed to curb mpox spillovers

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Journal: Proceedings of the Royal Society B

Article DOI: 10.1098/rspb.2025.0471

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Supplementary Text

Equation S1

The equation for the model predicting the weekly number of vendors selling wild meat is given by

$$log(Vendor\ count)_{ijklm} = \beta_0 + \beta_1 Period_i + \beta_2 Season_j + \beta_3 Year_k + \beta_4 Market_l + \beta_5 Lagged\ vendor\ count_m + \alpha_{ijklm} + \mathcal{E}_{ijklm} \quad (1)$$

where:

$log(Vendor\ count)_{ijkl}$ represents the weekly number of vendors selling wild meat from September 2020 to December 2024, standardised by dividing the vendor count by the number of records for each week, in $Period_i, Season_j, Year_k, and\ Market_l$, with $Lagged\ mass_m$ accounting for the number of vendors selling wild meat in the previous week; β_0 is the intercept and β_{1-5} are the slopes of the respective predictors; α_{ijklm} is a random intercept for week. $\mathcal{E}_{ijklmn}$ represents the residual errors, assumed to follow a Gaussian distribution ($\mathcal{E}_{ijklm} \sim \mathcal{N}(0, \sigma^2)$).

Equation S2

The equation for the model predicting the weekly mass of wild meat sold per vendor is given by

$$log(Mass)_{ijklmn} = \beta_0 + \beta_1 Period_i + \beta_2 Season_j + \beta_3 Year_k + \beta_4 Market_l + \beta_5 Lagged\ mass_m + \beta_6 Order_n + \alpha_{ijklmn} + \gamma_{ijklmn} + \epsilon_{ijklmn} \quad (2)$$

where:

$log(Mass)_{ijklmn}$ represents the weekly mass sold per vendor in $Period_i, Season_j, Year_k, and\ Market_l$, with $Lagged\ mass_m$ accounting for each vendor's mass in the previous week and $Order_n$ representing the taxonomic orders; β_0 is the intercept and β_{1-5} are the slopes of the respective predictors; α_{ijklmn} and γ_{ijklmn} are random intercepts for week and vendor identity, respectively. $\mathcal{E}_{ijklmn}$ represents the residual errors, assumed to follow a Gaussian distribution ($\mathcal{E}_{ijklmn} \sim \mathcal{N}(0, \sigma^2)$).

Equation S3

The equation for the model predicting the weekly price (carcass asking price) of wild meat sold per vendor is given by

$$log(Value)_{ijklmn} = \beta_0 + \beta_1 Period_i + \beta_2 Season_j + \beta_3 Year_k + \beta_4 Market_l + \beta_5 Lagged\ value_m + \beta_6 Order_n + \alpha_{ijklmn} + \gamma_{ijklmn} + \epsilon_{ijklmn} \quad (3)$$

where:

$log(Value)_{ijklmn}$ represents the weekly price (i.e., carcass asking price) per vendor in $Period_i, Season_j, Year_k, and\ Market_l$, with $Lagged\ value_m$ accounting for the price of wild meat each vendor sold in the previous week and $Order_n$ representing the taxonomic orders; β_0 is the intercept and β_{1-5} are the slopes of the respective predictors; α_{ijklmn} and γ_{ijklmn} are random intercepts for week and vendor identity, respectively. $\mathcal{E}_{ijklmn}$ represents the residual errors, assumed to follow a Gaussian distribution ($\mathcal{E}_{ijklmn} \sim \mathcal{N}(0, \sigma^2)$).

Equation S4

The equation for the model predicting the weekly price per kilogram of wild meat sold per vendor is given by

$$log(Price\ per\ kg)_{ijklmn} = \beta_0 + \beta_1 Period_i + \beta_2 Season_j + \beta_3 Year_k + \beta_4 Market_l + \beta_5 Lagged\ price\ per\ kg_m + \beta_6 Order_n + \alpha_{ijklmn} + \gamma_{ijklmn} + \epsilon_{ijklmn} \quad (4)$$

where:

$log(Price\ per\ kg)_{ijklmn}$ represents the weekly price per kilogram of wild meat sold per vendor in $Period_i, Season_j, Year_k, and\ Market_l$, with $Lagged\ price\ per\ kg_m$ accounting for each vendor's price per kilogram in the previous week and $Order_n$ representing taxonomic orders; β_0 is the intercept and β_{1-5} are the slopes of the respective predictors; α_{ijklmn} and γ_{ijklmn} are random intercepts for week and vendor identity, respectively. $\mathcal{E}_{ijklmn}$ represents the residual errors, assumed to follow a Gaussian distribution ($\mathcal{E}_{ijklmn} \sim \mathcal{N}(0, \sigma^2)$).

Equation S5

The equation for the model predicting the weekly mass of wild meat sold per vendor three months before and after the ban is given by

$$log(mass)_{ijklmn} = \beta_0 + \beta_1 Period_i + \beta_2 Season_j + \beta_3 Market_k + \beta_4 Lagged\ mass_l + \beta_5 Order_m + \alpha_{ijklm} + \gamma_{ijklm} + \epsilon_{ijklm} \quad (5)$$

where:

$log(mass)_{ijklmn}$ represents the weekly price per kilogram of wild meat sold per vendor in $Period_i, Season_j, and\ Market_k$, with $Lagged\ mass_l$ accounting for each vendor's mass in the previous week and $Order_m$ representing taxonomic orders; β_0 is the intercept and β_{1-5} are the slopes of the respective predictors; α_{ijklm} and γ_{ijklm} are random intercepts for week and vendor identity, respectively. $\mathcal{E}_{ijklm}$ represents the residual errors, assumed to follow a Gaussian distribution ($\mathcal{E}_{ijklm} \sim \mathcal{N}(0, \sigma^2)$).

Equation S6

The equation for the model predicting the weekly mass of wild meat sold per vendor six months before and after the ban is given by

$$log(mass)_{ijklmn} = \beta_0 + \beta_1 Period_i + \beta_2 Season_j + \beta_3 Market_k + \beta_4 Lagged\ mass_l + \beta_5 Order_m + \alpha_{ijklm} + \gamma_{ijklm} + \epsilon_{ijklm} \quad (6)$$

where:

$log(mass)_{ijklmn}$ represents the weekly price per kilogram of wild meat sold per vendor in $Period_i, Season_j, and\ Market_k$, with $Lagged\ mass_l$ accounting for each vendor's mass in the previous week and $Order_m$ representing taxonomic orders; β_0 is the intercept and β_{1-5} are the slopes of the respective predictors; α_{ijklm} and γ_{ijklm} are random intercepts for week and vendor identity, respectively. $\mathcal{E}_{ijklm}$ represents the residual errors, assumed to follow a Gaussian distribution ($\mathcal{E}_{ijklm} \sim \mathcal{N}(0, \sigma^2)$).

Supplementary Tables

Table S1. Vendor interview questionnaire.

1. To your knowledge, are there any current restrictions on buying or selling bushmeat in Nigeria?

2. Do you know about the ban on selling and buying bushmeat in Nigeria since May 2022

If they know about ban	If they do not know about ban
3. Are you aware of the reasons behind this ban in 2022? If so, what are they?	
4. How has the ban on wildlife trade affected your business?	How do you think a ban on bushmeat sale to stop the spread of diseases from animals to humans would affect your business?
5. What livelihood alternatives, if any, have you considered or adopted since the ban on bushmeat trade?	What livelihood alternatives would you consider or adopt if a ban on bushmeat trade was enacted and properly enforced?
6. Have you been complying with the ban? If yes, how so?	How closely do you feel you would comply with such a ban on bushmeat trade?
7. What challenges do you face in complying with the ban?	What challenges would you face in complying with such a ban?
8. What changes or support would help you better comply with the ban?	What changes or support would help you better comply with such a ban?
9. Have you experienced any inspections or enforcement actions by authorities since the ban was enacted? If so, please describe your experiences.	
10. Do you believe banning bushmeat trade as a way to reduce the spread of diseases is necessary? Why or why not?	Do you believe banning bushmeat trade as a way to reduce the spread of diseases is necessary? Why or why not?

11. Do you think selling wild animals exposes humans to diseases from the animals?
    A) Agree
    B) Not sure
    C) Disagree

12. Have you heard of any of the following viruses? Please answer 'Yes' or 'No' per option.
    A) Coronavirus
    B) Ebola virus
    C) Lassa virus
    D) Mpox virus (Monkeypox)

Table S2. Law enforcement interview questionnaire.

1. What is the geographic coverage of your role?
2. What do you know about Mpox?
3. What was the government's response to the outbreak of Mpox in 2022?
4. How did the outbreak and any possible government response change your activities?

A) If ban is mentioned	B) If ban is not mentioned
5. Tell me more about the directive. What was it aimed at achieving and what is the current status of the directive?	Do you know about a directive in Nigeria about Mbox in 2022 given by Dr. Mohammad Abubakar, Minister of Agriculture and Rural Development? *Go to #5A if the directive is acknowledged.*
6. Is the directive enforceable?	Inform them about the directive and ask: Why do you think you were not aware of this given the directive's relevance to your work?
7. How has your organization raised public awareness of the directive?	Have you observed any changes in the wildlife trade in the markets since the Mpox outbreak of 2022?
8. What specific actions have been taken to enforce the directive since it was enacted in May 2022?	What impact do you believe government policies or restrictions could have on public compliance with wildlife trade regulations?
9. How often do you or your colleagues conduct inspections or checks in the markets to ensure compliance with the directive?	
10. Which markets have you or your colleagues visited?	
11. What are the biggest challenges you or your colleagues face in enforcing the directive on wildlife trade?	
12. Have you observed any changes in the wildlife trade in the markets since the Mpox outbreak of 2022?	
13. What percentage of the changes is attributable to the directive and what are other reasons for the changes?	

14. How do you or your colleagues handle cases of non-compliance with the directive?

15. In your opinion, how effective has the directive been in reducing the trade and consumption of wild meat?

16. What support or resources would assist you or your colleagues in increasing compliance with the directive?

Table S3a. Gaussian-based mixed effects model of the number of vendors selling wild meat weekly. Number of observations: 417. Groups: Week, 52

Random effect:

Groups	Term	Variance	Std. dev
Week	Intercept	0.011	0.010
Residual		0.143	0.378

Fixed effects:

Term	Estimate (*β*)	Standard error (*SE*)	Degree of freedom (DF)	T ratio	P value
Intercept	1.178	0.081	304.755	14.495	< 0.0001
Period: Post-ban	-0.069	0.081	406.790	-0.843	0.400
Season: Wet	-0.001	0.047	64.952	-0.031	0.975
Year: 2021	-0.040	0.082	402.474	-0.485	0.628
Year: 2022	-0.174	0.097	401.407	-1.803	0.072
Year: 2023	-0.179	0.117	393.582	-1.535	0.126
Year: 2024	-0.198	0.117	390.763	-1.691	0.092
Location: Market B	-0.094	0.038	374.479	-2.454	0.015
Lagged vendor count	0.154	0.021	407.504	7.311	< 0.0001

Table S3b. Pairwise post-hoc Tukey test pairwise comparisons of the 'year' variable used in the model assessing changes in the weekly number of wild meat vendors. We accounted for multiple comparisons using the Benjamini-Hochberg procedure, which controls for false discovery rate.

Pair	β	*SE*	DF	T ratio	P value
2020-2021	0.0398	0.0824	402.5060	0.4834	0.8113
2020-2022	0.1741	0.0971	401.4437	1.7920	0.2564
2020-2023	0.1795	0.1177	393.6506	1.5245	0.2564
2020-2024	0.1984	0.1182	390.8429	1.6794	0.2564
2021-2022	0.1343	0.0734	404.3968	1.8302	0.2564
2021-2023	0.1396	0.0981	409.7458	1.4230	0.2592
2021-2024	0.1586	0.0985	409.9439	1.6096	0.2564
2022-2023	0.0054	0.0625	387.3511	0.0861	0.9314
2022-2024	0.0244	0.0629	389.1234	0.3869	0.8113
2023-2024	0.0190	0.0550	365.7037	0.3451	0.8113

Table S4a. Gaussian-based mixed effects model of the mass of wild meat each vendor sold weekly. Number of observations: 3942. Groups: Week, 52; Vendor.ID, 19

Random effect:

Groups	Term	Variance	Std. dev
Week	Intercept	0.213	0.146
Vendor.ID	Intercept	0.306	0.175
Residual		0.913	0.956

Fixed effects:

Term	Estimate (*β*)	Standard error (*SE*)	Degree of freedom (DF)	T ratio	P value
Intercept	1.122	0.091	59.491	12.294	< 0.0001
Period: Post-ban	0.098	0.070	2127.530	1.410	0.159
Year: 2021	-0.041	0.061	3329.651	-0.676	0.499
Year: 2022	-0.141	0.078	1955.876	-1.805	0.071
Year: 2023	-0.417	0.098	1837.361	-4.238	< 0.0001
Year: 2024	-0.430	0.099	1740.527	-4.347	< 0.0001
Location: Market B	0.350	0.094	14.932	3.719	0.002
Season: Wet	-0.014	0.050	67.227	-0.274	0.785
Order: Aves	-1.514	0.963	3902.160	-1.572	0.116
Order: Carnivora	-1.554	0.092	3884.374	-16.814	< 0.0001
Order: Crocodylia	-1.392	0.191	3904.414	-7.282	< 0.0001
Order: Pholidota	-2.506	0.079	3895.343	-31.688	< 0.0001
Order: Primates	-0.613	0.045	3881.927	-13.571	< 0.0001
Order: Rodentia	-0.233	0.036	3870.915	-6.543	< 0.0001
Order: Squamata	-1.703	0.155	3893.914	-10.975	< 0.0001
Order: Testudines	-1.667	0.306	3891.109	-5.456	< 0.0001
Lagged mass	0.092	0.016	3918.500	5.827	< 0.0001

Table S4b. Pairwise post-hoc Tukey test pairwise comparisons of the 'year' variable used in the model assessing changes in mass of wild meat sold weekly. We accounted for multiple comparisons using the Benjamini-Hochberg procedure, which controls for false discovery rate.

Pair	β	*SE*	DF	T ratio	P value
2020 – 2021	0.041	0.061	3317.641	0.674	0.556
2020 – 2022	0.141	0.079	1937.405	1.796	0.104
2020 – 2023	0.417	0.099	1820.212	4.215	< 0.0001
2020 – 2024	0.430	0.100	1723.292	4.323	< 0.0001
2021 – 2022	0.100	0.063	3023.369	1.588	0.140
2021 – 2023	0.376	0.086	2665.055	4.382	< 0.0001
2021 – 2024	0.389	0.086	2543.666	4.515	< 0.0001
2022 – 2023	0.276	0.053	3828.338	5.191	< 0.0001
2022 – 2024	0.289	0.053	3754.312	5.412	< 0.0001
2023 – 2024	0.014	0.049	3903.710	0.276	0.783

Table S4c. Pairwise post-hoc Tukey test pairwise comparisons of the 'order' variable used in the model assessing changes in mass of wild meat sold weekly. We accounted for multiple comparisons using the Benjamini-Hochberg procedure, which controls false discovery rate.

Pair	β	*SE*	DF	T ratio	P value
Artiodactyla – Aves	1.514	0.963	3902.764	1.572	0.182
Artiodactyla – Carnivora	1.554	0.092	3884.705	16.811	< 0.0001
Artiodactyla – Crocodylia	1.392	0.191	3904.646	7.279	< 0.0001
Artiodactyla – Pholidota	2.506	0.079	3895.610	31.678	< 0.0001
Artiodactyla – Primates	0.613	0.045	3882.065	13.568	< 0.0001
Artiodactyla – Rodentia	0.233	0.036	3871.292	6.542	< 0.0001
Artiodactyla – Squamata	1.703	0.155	3894.301	10.971	< 0.0001
Artiodactyla – Testudines	1.667	0.306	3891.483	5.455	< 0.0001
Aves – Carnivora	0.040	0.967	3903.142	0.041	0.967
Aves – Crocodylia	-0.122	0.981	3903.397	-0.124	0.942
Aves – Pholidota	0.992	0.966	3903.377	1.027	0.421
Aves – Primates	-0.901	0.964	3903.012	-0.935	0.466
Aves – Rodentia	-1.281	0.963	3902.608	-1.330	0.275
Aves – Squamata	0.189	0.974	3900.521	0.194	0.942
Aves – Testudines	0.153	1.010	3902.641	0.152	0.942
Carnivora – Crocodylia	-0.161	0.209	3903.282	-0.773	0.530
Carnivora – Pholidota	0.952	0.117	3884.923	8.172	< 0.0001
Carnivora – Primates	-0.941	0.096	3885.587	-9.781	< 0.0001
Carnivora – Rodentia	-1.321	0.093	3885.670	-14.257	< 0.0001
Carnivora – Squamata	0.149	0.177	3892.879	0.845	0.512
Carnivora – Testudines	0.113	0.317	3891.913	0.358	0.837
Crocodylia – Pholidota	1.114	0.204	3903.899	5.457	< 0.0001
Crocodylia – Primates	-0.779	0.193	3904.412	-4.037	< 0.0001
Crocodylia – Rodentia	-1.159	0.191	3904.683	-6.055	< 0.0001
Crocodylia – Squamata	0.311	0.243	3898.952	1.277	0.290
Crocodylia – Testudines	0.275	0.357	3881.654	0.769	0.530
Pholidota – Primates	-1.893	0.084	3892.889	-22.539	< 0.0001
Pholidota – Rodentia	-2.273	0.079	3896.574	-28.751	< 0.0001
Pholidota – Squamata	-0.803	0.170	3898.035	-4.713	< 0.0001
Pholidota – Testudines	-0.839	0.314	3889.727	-2.674	0.012
Primates – Rodentia	-0.380	0.045	3890.064	-8.352	< 0.0001
Primates – Squamata	1.090	0.157	3895.438	6.926	< 0.0001
Primates – Testudines	1.054	0.307	3891.116	3.437	0.001
Rodentia – Squamata	1.470	0.155	3893.705	9.468	< 0.0001
Rodentia – Testudines	1.434	0.306	3891.481	4.691	< 0.0001
Squamata – Testudines	-0.036	0.341	3892.689	-0.105	0.942

Table S5a. Gaussian-based mixed effects model of the weekly price of wild meat. Number of observations: 3942. Groups: Week, 52; Vendor.ID, 19

Random effect:

Groups	Term	Variance	Std. dev
Week	Intercept	0.022	0.149
Vendor.ID	Intercept	0.031	0.177
Residual		0.880	0.939

Fixed effects:

Term	Estimate (*β*)	Standard error (*SE*)	Degree of freedom (DF)	T ratio	P value
Intercept	9.809	0.091	63.633	107.634	< 0.0001
Period: Post-ban	0.175	0.069	2204.950	2.539	0.011
Year: 2021	-0.195	0.060	3365.927	-3.272	0.001
Year: 2022	-0.338	0.077	2032.557	-4.388	< 0.0001
Year: 2023	-0.475	0.097	1917.567	-4.898	< 0.0001
Year: 2024	-0.315	0.098	1823.667	-3.228	0.001
Location: Market B	0.316	0.095	16.523	3.342	0.004
Season: Wet	-0.008	0.050	67.437	-0.160	0.874
Order: Aves	-2.181	0.945	3903.054	-2.307	0.021
Order: Carnivora	-1.894	0.091	3884.798	-20.881	< 0.0001
Order: Crocodylia	-1.679	0.188	3904.007	-8.946	< 0.0001
Order: Pholidota	-2.000	0.078	3895.320	-25.755	< 0.0001
Order: Primates	-1.120	0.044	3882.187	-25.244	< 0.0001
Order: Rodentia	-0.261	0.035	3872.646	-7.445	< 0.0001
Order: Squamata	-2.104	0.152	3893.804	-13.810	< 0.0001
Order: Testudines	-1.725	0.300	3891.005	-5.752	< 0.0001
Lagged price	0.099	0.016	3920.081	6.334	< 0.0001

Table S5b. Pairwise post-hoc Tukey test pairwise comparisons of the 'year' variable used in the model assessing changes in the weekly price of wild meat. We accounted for multiple comparisons using the Benjamini-Hochberg procedure, which controls for false discovery rate.

Pair	β	*SE*	DF	T ratio	P value
2020 – 2021	0.195	0.060	3359.185	3.265	0.002
2020 – 2022	0.338	0.077	2019.941	4.367	< 0.0001
2020 – 2023	0.475	0.098	1904.851	4.872	< 0.0001
2020 – 2024	0.315	0.098	1811.030	3.210	0.002
2021 – 2022	0.143	0.062	3085.970	2.307	0.026
2021 – 2023	0.280	0.085	2743.352	3.319	0.002
2021 – 2024	0.120	0.085	2628.314	1.414	0.175
2022 – 2023	0.137	0.052	3837.954	2.629	0.012
2022 – 2024	-0.023	0.053	3774.086	-0.439	0.660
2023 – 2024	-0.160	0.048	3902.461	-3.333	0.002

Table S5c. Pairwise post-hoc Tukey test pairwise comparisons of the 'order' variable used in the model assessing changes in the weekly price of wild meat. We accounted for multiple comparisons using the Benjamini-Hochberg procedure, which controls for false discovery rate.

Pair	β	*SE*	DF	T ratio	P value
Artiodactyla – Aves	2.181	0.946	3902.099	2.306	0.042
Artiodactyla – Carnivora	1.894	0.091	3883.816	20.877	< 0.0001
Artiodactyla – Crocodylia	1.679	0.188	3903.482	8.943	< 0.0001
Artiodactyla – Pholidota	2.000	0.078	3894.584	25.748	< 0.0001
Artiodactyla – Primates	1.120	0.044	3881.298	25.239	< 0.0001
Artiodactyla – Rodentia	0.261	0.035	3871.362	7.444	< 0.0001
Artiodactyla – Squamata	2.104	0.152	3892.942	13.806	< 0.0001
Artiodactyla – Testudines	1.725	0.300	3890.108	5.750	< 0.0001
Aves – Carnivora	-0.286	0.950	3902.507	-0.302	0.832
Aves – Crocodylia	-0.501	0.964	3902.740	-0.520	0.700
Aves – Pholidota	-0.181	0.948	3902.717	-0.191	0.899
Aves – Primates	-1.061	0.946	3902.347	-1.122	0.377
Aves – Rodentia	-1.920	0.946	3901.924	-2.030	0.080
Aves – Squamata	-0.077	0.957	3899.805	-0.080	0.936
Aves – Testudines	-0.455	0.992	3901.907	-0.459	0.727
Carnivora – Crocodylia	-0.215	0.205	3902.152	-1.048	0.408
Carnivora – Pholidota	0.106	0.114	3883.921	0.923	0.475
Carnivora – Primates	-0.775	0.094	3884.767	-8.205	< 0.0001
Carnivora – Rodentia	-1.633	0.091	3885.268	-17.950	< 0.0001
Carnivora – Squamata	0.209	0.173	3891.730	1.208	0.355
Carnivora – Testudines	-0.169	0.311	3890.592	-0.543	0.700
Crocodylia – Pholidota	0.321	0.200	3902.753	1.600	0.180
Crocodylia – Primates	-0.560	0.190	3903.270	-2.955	0.007
Crocodylia – Rodentia	-1.419	0.188	3903.588	-7.546	< 0.0001
Crocodylia – Squamata	0.424	0.239	3897.786	1.776	0.130
Crocodylia – Testudines	0.046	0.351	3880.826	0.131	0.921
Pholidota – Primates	-0.881	0.082	3891.742	-10.675	< 0.0001
Pholidota – Rodentia	-1.739	0.078	3895.745	-22.383	< 0.0001
Pholidota – Squamata	0.104	0.167	3896.644	0.620	0.664
Pholidota – Testudines	-0.275	0.308	3888.376	-0.891	0.479
Primates – Rodentia	-0.859	0.045	3889.480	-19.211	< 0.0001
Primates – Squamata	0.984	0.155	3894.054	6.371	< 0.0001
Primates – Testudines	0.606	0.301	3889.752	2.012	0.080
Rodentia – Squamata	1.843	0.152	3892.440	12.091	< 0.0001
Rodentia – Testudines	1.464	0.300	3890.195	4.879	< 0.0001
Squamata – Testudines	-0.378	0.335	3891.387	-1.131	0.377

Table S6a. Gaussian-based mixed effects model of the weekly price per kilogram of wild meat. Number of observations: 3942. Groups: Week, 52; Vendor.ID, 19

Random effect:

Groups	Term	Variance	Std. dev
Week	Intercept	0.016	0.130
Vendor.ID	Intercept	0.034	0.184
Residual		0.751	0.867

Fixed effects:

Term	Estimate (*β*)	Standard error (*SE*)	Degree of freedom (DF)	T ratio	P value
Intercept	8.907	0.088	38.685	101.088	< 0.0001
Period: Post-ban	0.022	0.063	2087.558	0.345	0.730
Year: 2021	-0.282	0.055	3277.279	-5.129	< 0.0001
Year: 2022	-0.404	0.071	1903.880	-5.695	< 0.0001
Year: 2023	-0.487	0.089	1792.733	-5.455	< 0.0001
Year: 2024	-0.322	0.090	1698.715	-3.595	0.000
Location: Market B	-0.426	0.096	12.138	-4.424	0.001
Season: Wet	0.003	0.045	65.556	0.067	0.947
Order: Aves	-2.101	0.873	3898.353	-2.406	0.016
Order: Carnivora	-1.674	0.084	3880.774	-19.976	< 0.0001
Order: Crocodylia	-1.476	0.173	3903.682	-8.514	< 0.0001
Order: Pholidota	-0.592	0.072	3892.045	-8.252	< 0.0001
Order: Primates	-1.322	0.041	3878.889	-32.272	< 0.0001
Order: Rodentia	-0.174	0.032	3866.503	-5.384	< 0.0001
Order: Squamata	-1.721	0.141	3890.171	-12.227	< 0.0001
Order: Testudines	-1.035	0.277	3887.479	-3.736	0.0002
Lagged price per kilogram	0.111	0.014	3915.006	7.754	< 0.0001

Table S6b Pairwise post-hoc Tukey test pairwise comparisons of the 'year' variable used in the model assessing changes in the weekly price per kilogram of wild meat. We accounted for multiple comparisons using the Benjamini-Hochberg procedure, which controls for false discovery rate.

Pair	β	*SE*	DF	T ratio	P value
2020 – 2021	0.282	0.055	3279.036	5.117	< 0.0001
2020 – 2022	0.404	0.071	1905.351	5.666	< 0.0001
2020 – 2023	0.487	0.090	1795.210	5.425	< 0.0001
2020 – 2024	0.322	0.090	1700.950	3.575	0.001
2021 – 2022	0.122	0.057	3019.582	2.133	0.047
2021 – 2023	0.205	0.078	2660.393	2.632	0.014
2021 – 2024	0.041	0.078	2541.364	0.520	0.603
2022 – 2023	0.083	0.048	3826.017	1.717	0.103
2022 – 2024	-0.081	0.048	3754.101	-1.680	0.103
2023 – 2024	-0.164	0.044	3902.874	-3.691	0.001

Table S6c. Pairwise post-hoc Tukey test pairwise comparisons of the 'order' variable used in the model assessing changes in the weekly price per kilogram of wild meat. We accounted for multiple comparisons using the Benjamini-Hochberg procedure, which controls for false discovery rate.

Pair	β	*SE*	DF	T ratio	P value
Artiodactyla – Aves	2.101	0.873	3902.659	2.405	0.029
Artiodactyla – Carnivora	1.674	0.084	3884.348	19.972	< 0.0001
Artiodactyla – Crocodylia	1.476	0.173	3905.512	8.510	< 0.0001
Artiodactyla – Pholidota	0.592	0.072	3895.014	8.249	< 0.0001
Artiodactyla – Primates	1.322	0.041	3881.777	32.266	< 0.0001
Artiodactyla – Rodentia	0.174	0.032	3870.862	5.383	< 0.0001
Artiodactyla – Squamata	1.721	0.141	3893.649	12.223	< 0.0001
Artiodactyla – Testudines	1.035	0.277	3890.949	3.735	0.0004
Aves – Carnivora	-0.427	0.877	3903.046	-0.487	0.663
Aves – Crocodylia	-0.625	0.890	3903.335	-0.702	0.527
Aves – Pholidota	-1.509	0.876	3903.236	-1.723	0.128
Aves – Primates	-0.779	0.874	3902.909	-0.892	0.424
Aves – Rodentia	-1.927	0.873	3902.504	-2.206	0.043
Aves – Squamata	-0.380	0.884	3900.478	-0.431	0.686
Aves – Testudines	-1.066	0.916	3902.478	-1.163	0.326
Carnivora – Crocodylia	-0.198	0.189	3904.171	-1.044	0.364
Carnivora – Pholidota	-1.082	0.106	3883.891	-10.231	< 0.0001
Carnivora – Primates	-0.352	0.087	3884.981	-4.039	0.0001
Carnivora – Rodentia	-1.500	0.084	3886.177	-17.842	< 0.0001
Carnivora – Squamata	0.046	0.160	3892.519	0.290	0.772
Carnivora – Testudines	-0.639	0.288	3891.518	-2.222	0.043
Crocodylia – Pholidota	-0.884	0.185	3904.624	-4.775	< 0.0001
Crocodylia – Primates	-0.155	0.175	3905.242	-0.883	0.424
Crocodylia – Rodentia	-1.302	0.174	3905.536	-7.498	< 0.0001
Crocodylia – Squamata	0.244	0.221	3899.337	1.106	0.345
Crocodylia – Testudines	-0.441	0.324	3881.773	-1.361	0.240
Pholidota – Primates	0.730	0.076	3891.458	9.571	< 0.0001
Pholidota – Rodentia	-0.418	0.072	3895.805	-5.814	< 0.0001
Pholidota – Squamata	1.128	0.155	3897.294	7.297	< 0.0001
Pholidota – Testudines	0.443	0.285	3889.155	1.557	0.172
Primates – Rodentia	-1.148	0.041	3890.349	-27.762	< 0.0001
Primates – Squamata	0.399	0.143	3894.724	2.794	0.010
Primates – Testudines	-0.286	0.278	3890.561	-1.029	0.364
Rodentia – Squamata	1.546	0.141	3893.185	10.982	< 0.0001
Rodentia – Testudines	0.861	0.277	3891.008	3.106	0.004
Squamata – Testudines	-0.685	0.309	3892.083	-2.217	0.043

Table S7. Gaussian-based mixed effects model of the weekly mass of wild meat sold three months before and after the ban. Number of observations: 689. Groups: Week, 23; Vendor.ID, 19. Overall $R^2 = 0.39$.

Random effect:

Groups	Term	Variance	Std. dev
Week	Intercept	0.019	0.140
Vendor.ID	Intercept	0.026	0.162
Residual		0.613	0.783

Fixed effects:

Term	Estimate (*β*)	Standard error (*SE*)	Degree of freedom (DF)	T ratio	P value
Intercept	2.174	0.165	69.940	13.173	< 0.0001
Period: Post-ban	0.368	0.088	25.427	4.189	0.0003
Season: Wet	0.137	0.155	54.881	0.886	0.379
Location: Market B	0.220	0.101	15.023	2.174	0.046
Order: Carnivora	-1.455	0.201	663.742	-7.222	< 0.0001
Order: Crocodylia	-1.509	0.306	661.682	-4.926	< 0.0001
Order: Pholidota	-2.214	0.152	665.356	-14.558	< 0.0001
Order: Primates	-0.571	0.088	661.405	-6.476	< 0.0001
Order: Rodentia	-0.340	0.070	644.068	-4.850	< 0.0001
Order: Squamata	-1.369	0.800	654.782	-1.710	0.087
Order: Testudines	-1.344	0.362	660.324	-3.711	0.0002
Lagged price per kilogram	-0.017	0.032	676.685	-0.545	0.585

Table S8. Gaussian-based mixed effects model of the weekly mass of wild meat sold six months before and after the ban. Number of observations: 1401. Groups: Week, 48; Vendor.ID, 19. Overall R^2 = 0.38.

Random effect:

Groups	Term	Variance	Std. dev
Week	Intercept	0.051	0.227
Vendor.ID	Intercept	0.028	0.167
Residual		0.635	0.797

Fixed effects:

Term	Estimate (*β*)	Standard error (*SE*)	Degree of freedom (DF)	T ratio	P value
Intercept	2.273	0.096	59.472	23.696	< 0.0001
Period: Post-ban	0.196	0.090	62.596	2.185	0.033
Season: Wet	0.171	0.093	87.705	1.841	0.069
Location: Market B	0.225	0.091	15.490	2.460	0.026
Order: Carnivora	-1.504	0.142	1359.436	-10.565	< 0.0001
Order: Crocodylia	-1.503	0.237	1355.644	-6.329	< 0.0001
Order: Pholidota	-2.302	0.114	1362.249	-20.134	< 0.0001
Order: Primates	-0.611	0.062	1348.825	-9.793	< 0.0001
Order: Rodentia	-0.347	0.050	1334.066	-6.980	< 0.0001
Order: Squamata	-1.508	0.470	1355.632	-3.205	0.001
Order: Testudines	-1.533	0.333	1354.160	-4.606	< 0.0001
Lagged price per kilogram	0.006	0.023	1387.061	0.269	0.788

Supplementary Figures

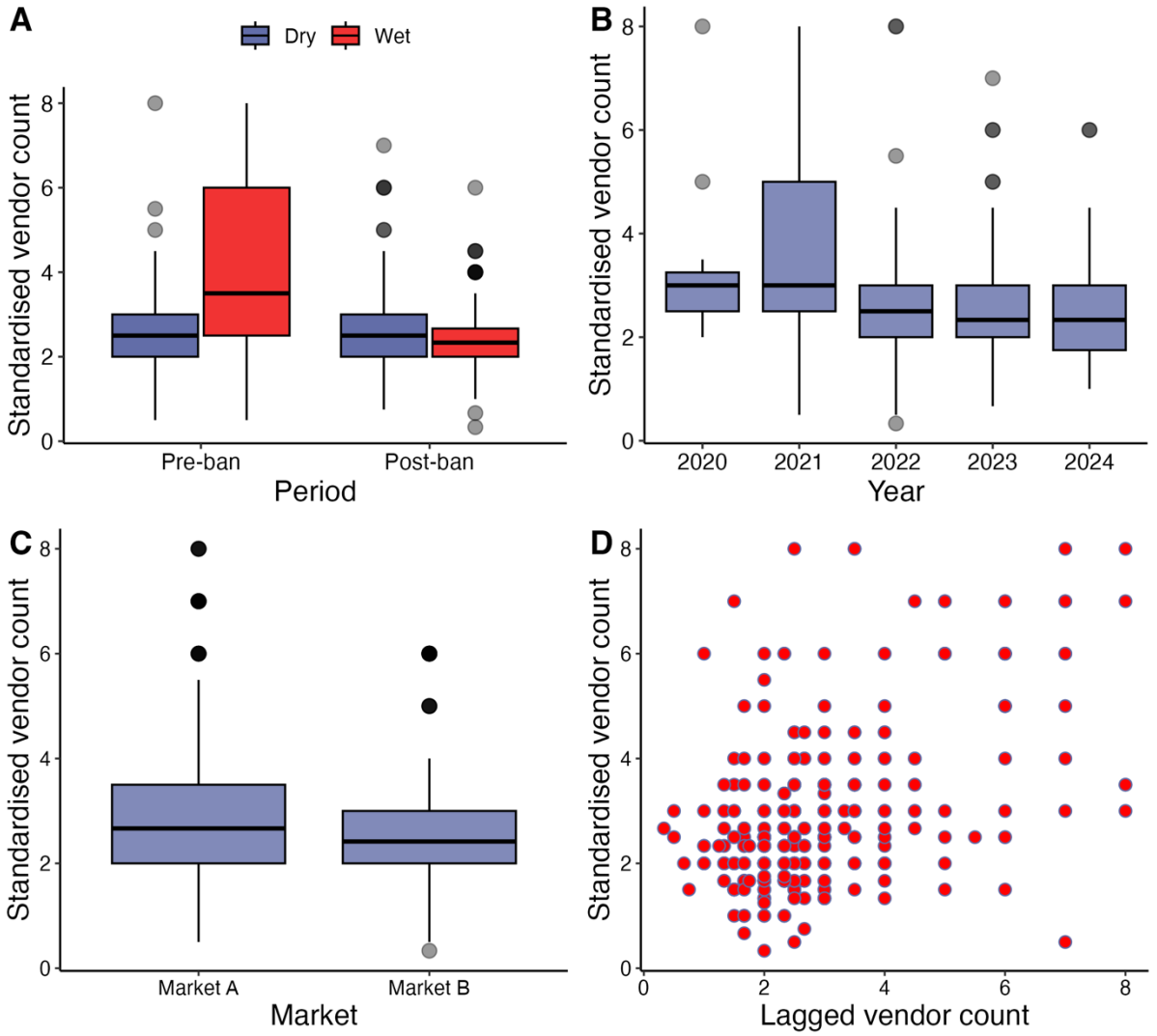

Figure S1. Distribution of fixed-effect predictors used in the model assessing differences in the standardised number of vendors selling wild meat weekly. Variable names are indicated on the x-axis and/or legend. The boxes represent the interquartile range of the data (between the first and the third quartiles), with the median number of animals captured shown by the thick horizontal line in each box. Whiskers show the minimum and maximum values of the data for each community, and outliers are represented by the dots. The plot was made in R using *ggplot*.

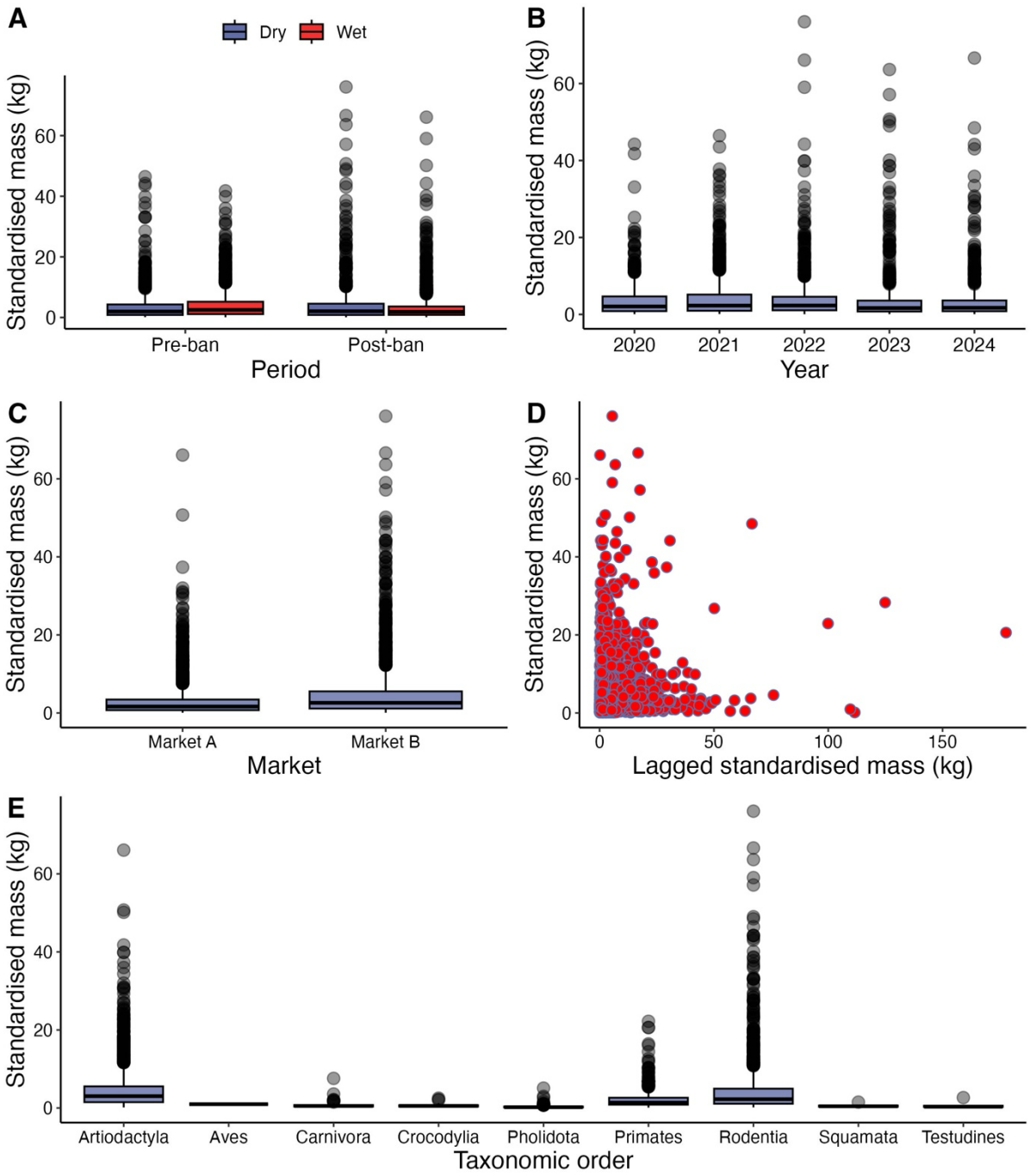

Figure S2. Distribution of fixed-effect predictors used in the model assessing differences in the standardised mass of wild meat vendors displayed for sale. Variable names are indicated on the x-axis and/or legend. Note that we dropped five values that were over 98 kg to improve visualisation. The boxes represent the interquartile range of the data (between the first and the third quartiles), with the median number of animals captured shown by the thick horizontal line in each box. Whiskers show the minimum and maximum values of the data for each community, and outliers are represented by the dots. The plot was made in R using *ggplot*.

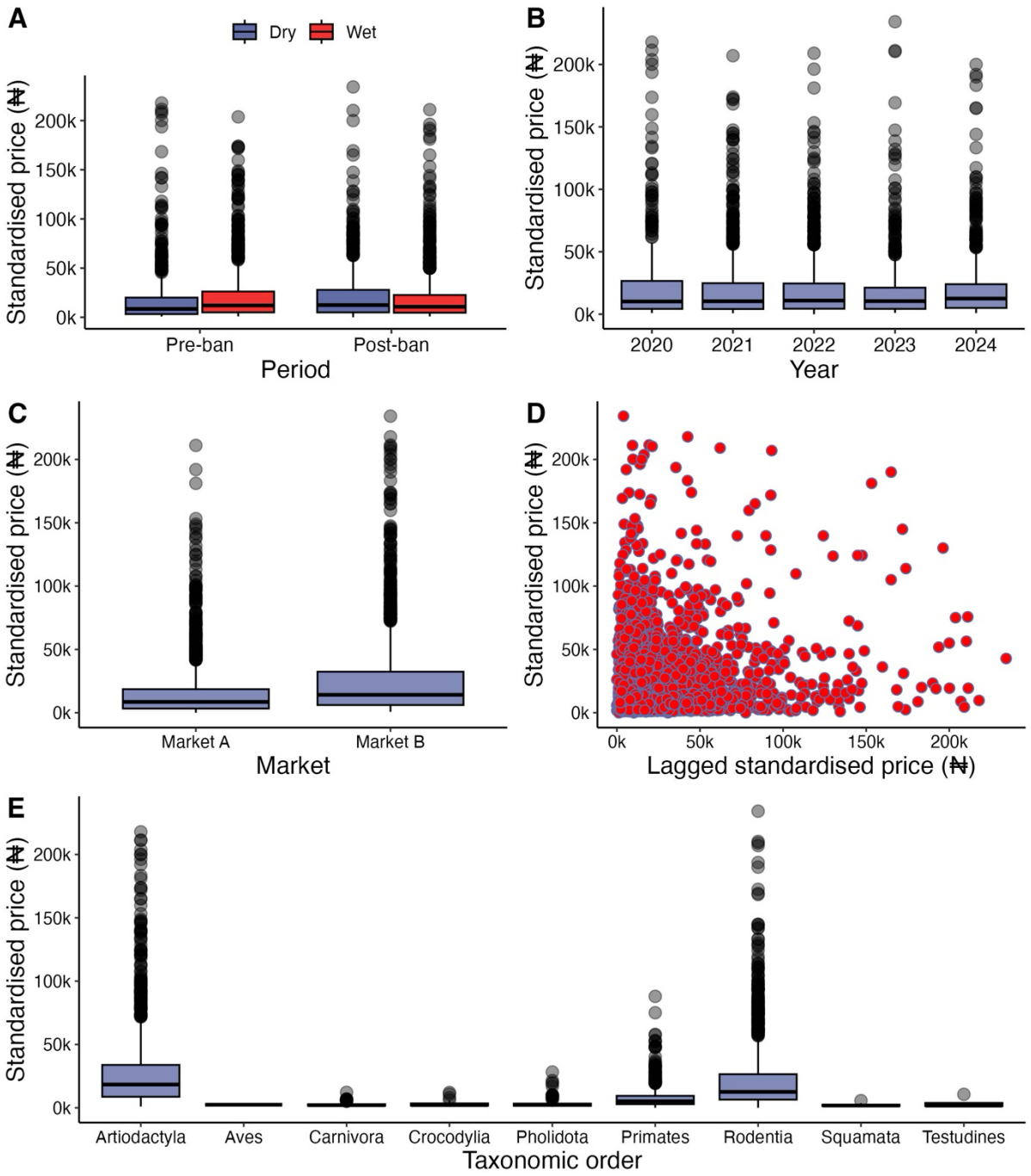

Figure S3. Distribution of fixed-effect predictors used in the model assessing differences in the standardised price (carcass asking price) of wild meat vendors displayed for sale. Variable names are indicated on the x-axis and/or legend. Note that we dropped five values that were over ₦300,000 to improve visualisation. The boxes represent the interquartile range of the data (between the first and the third quartiles), with the median number of animals captured shown by the thick horizontal line in each box. Whiskers show the minimum and maximum values of the data for each community, and outliers are represented by the dots. The plot was made in R using *ggplot*.

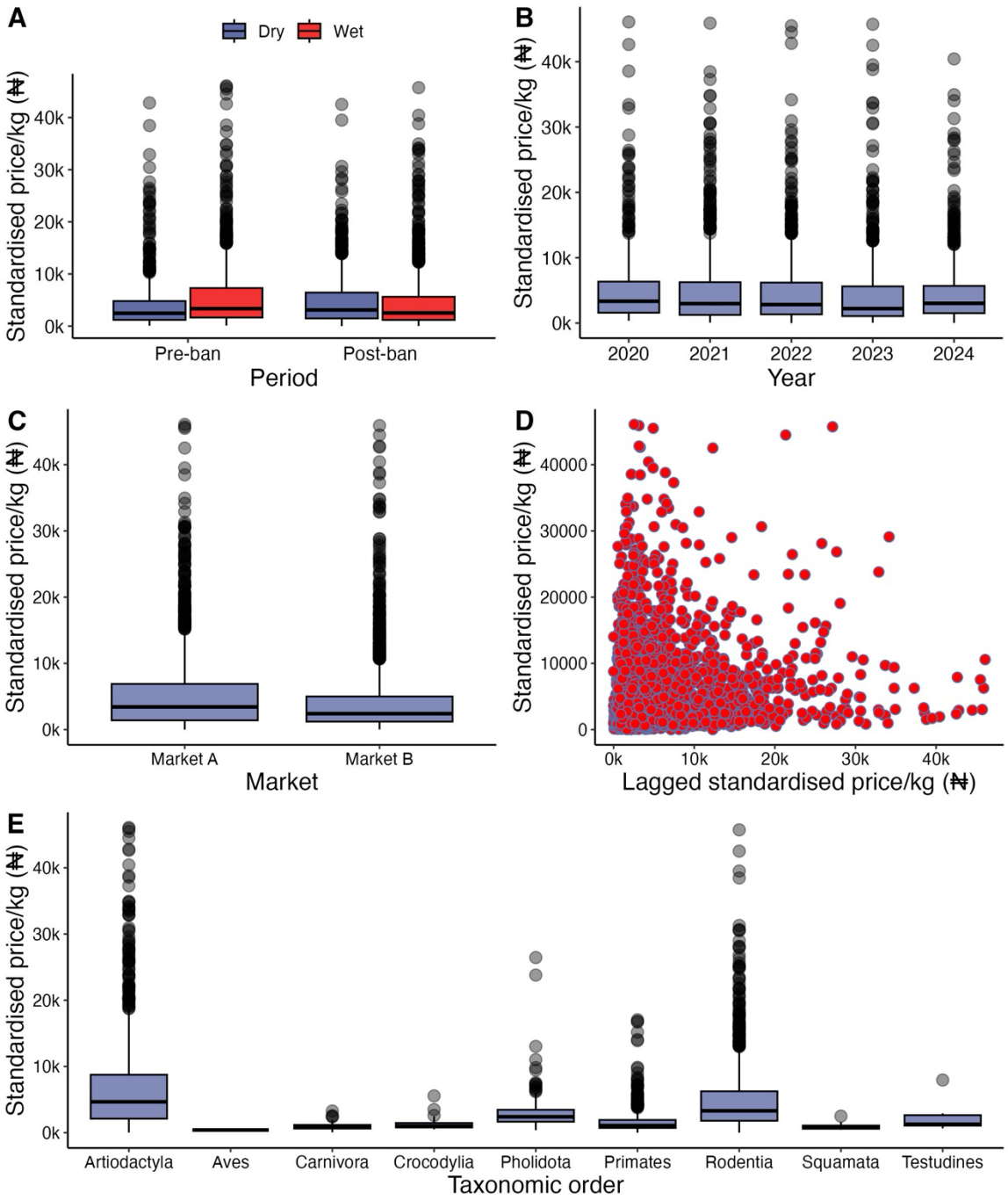

Figure S4. Distribution of fixed-effect predictors used in the model assessing differences in the standardised price per kilogram of wild meat vendors displayed for sale. Variable names are indicated on the x-axis and/or legend. Note that we dropped two values that were over ₦40,000 to improve visualisation. The boxes represent the interquartile range of the data (between the first and the third quartiles), with the median number of animals captured shown by the thick horizontal line in each box. Whiskers show the minimum and maximum values of the data for each community, and outliers are represented by the dots. The plot was made in R using *ggplot*.

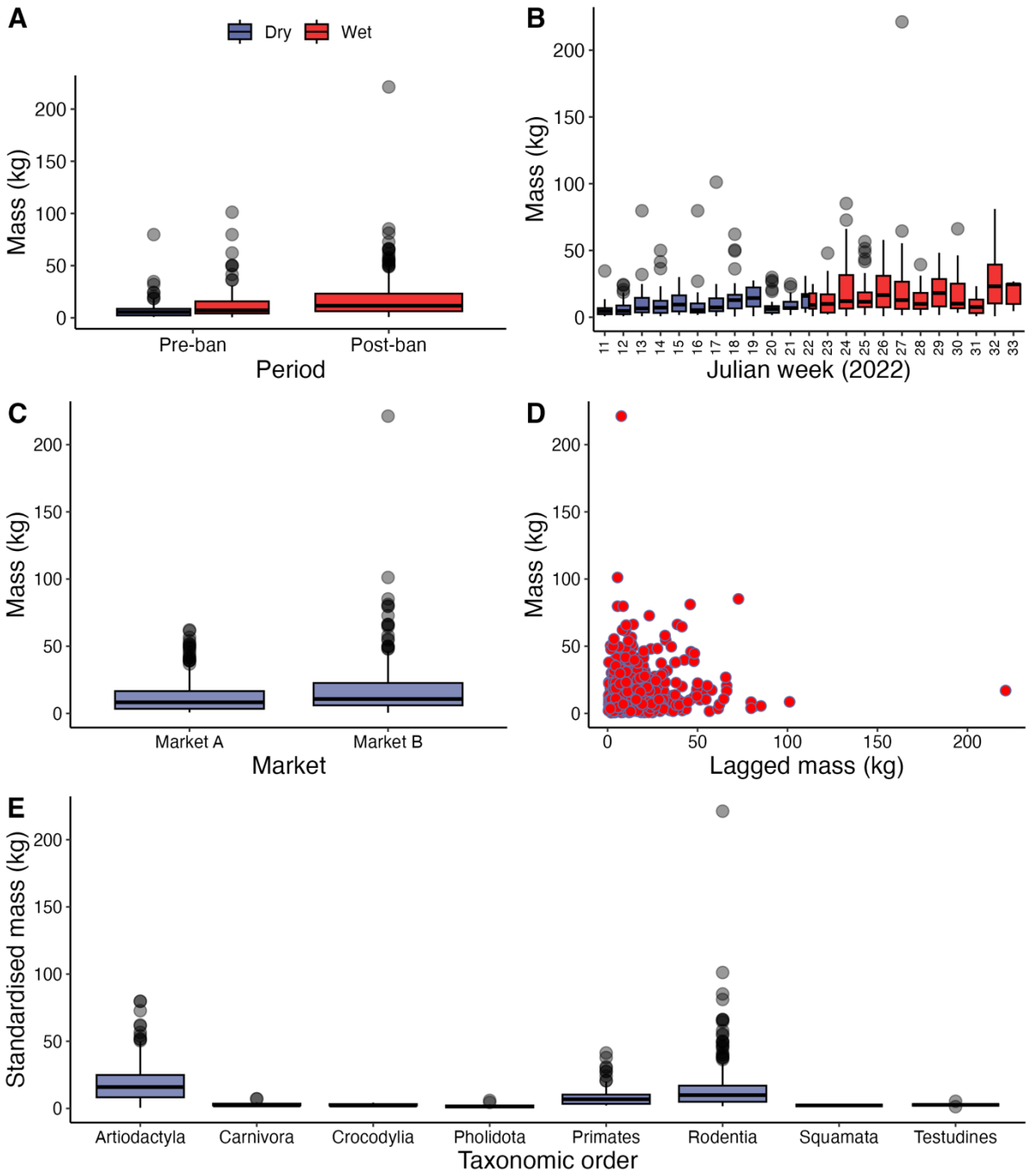

Figure S5. Distribution of fixed-effect predictors used in the model assessing differences in the weekly mass of wild meat vendors displayed for sale three months before and after the ban. Variable names are indicated on the x-axis and/or legend. The boxes represent the interquartile range of the data (between the first and the third quartiles), with the median number of animals captured shown by the thick horizontal line in each box. Whiskers show the minimum and maximum values of the data for each community, and outliers are represented by the dots. The plot was made in R using *ggplot*.

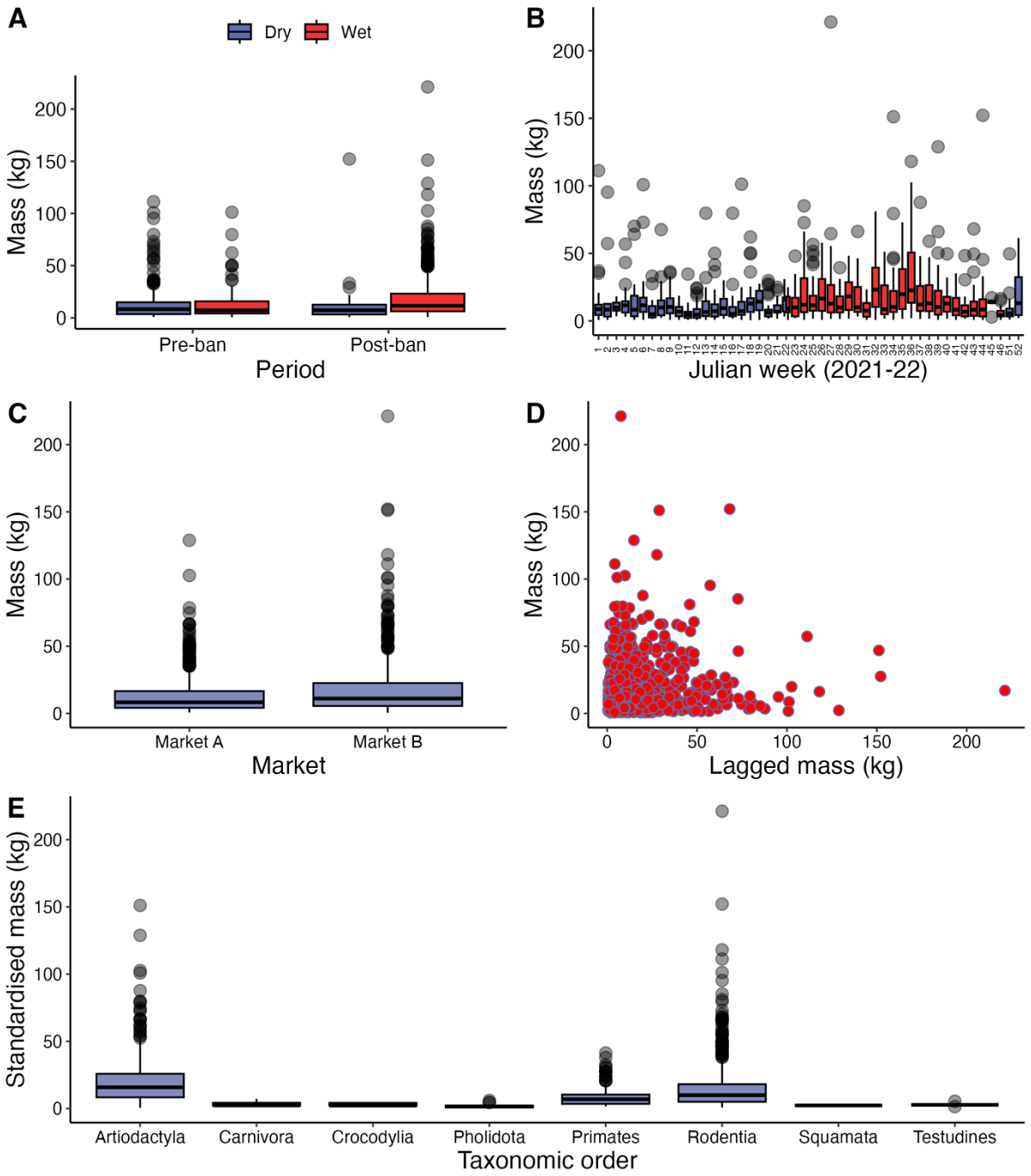

Figure S6. Distribution of fixed-effect predictors used in the model assessing differences in the weekly mass of wild meat vendors displayed for sale six months before and after the ban. Variable names are indicated on the x-axis and/or legend. The boxes represent the interquartile range of the data (between the first and the third quartiles), with the median number of animals captured shown by the thick horizontal line in each box. Whiskers show the minimum and maximum values of the data for each community, and outliers are represented by the dots. The plot was made in R using *ggplot*.

Figure S7. Diagnostics of the model predicting the weekly number of vendors selling wild meat. Diagnostic parameters and interpretation of the plot are provided on top of each panel. Model assessment was conducted in R using *performance*.

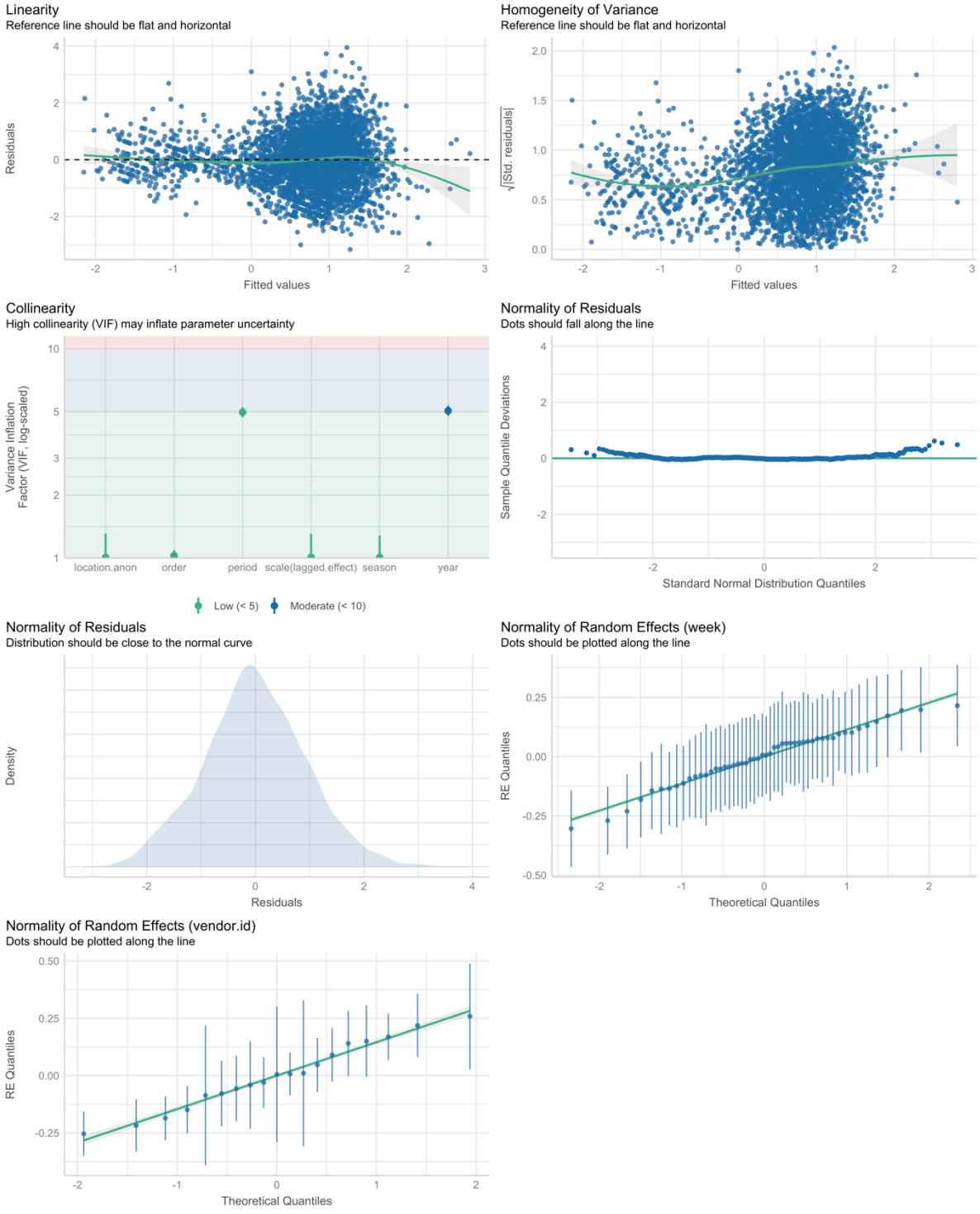

Figure S8. Diagnostics of the model predicting the weekly mass of wild meat each vendor sold. Diagnostic parameters and interpretation of the plot are provided on top of each panel. Model assessment was conducted in R using *performance*.

Figure S9. Diagnostics of the model predicting the weekly price (carcass asking price) of wild meat each vendor sold. Diagnostic parameters and interpretation of the plot are provided on top of each panel. Model assessment was conducted in R using *performance*.

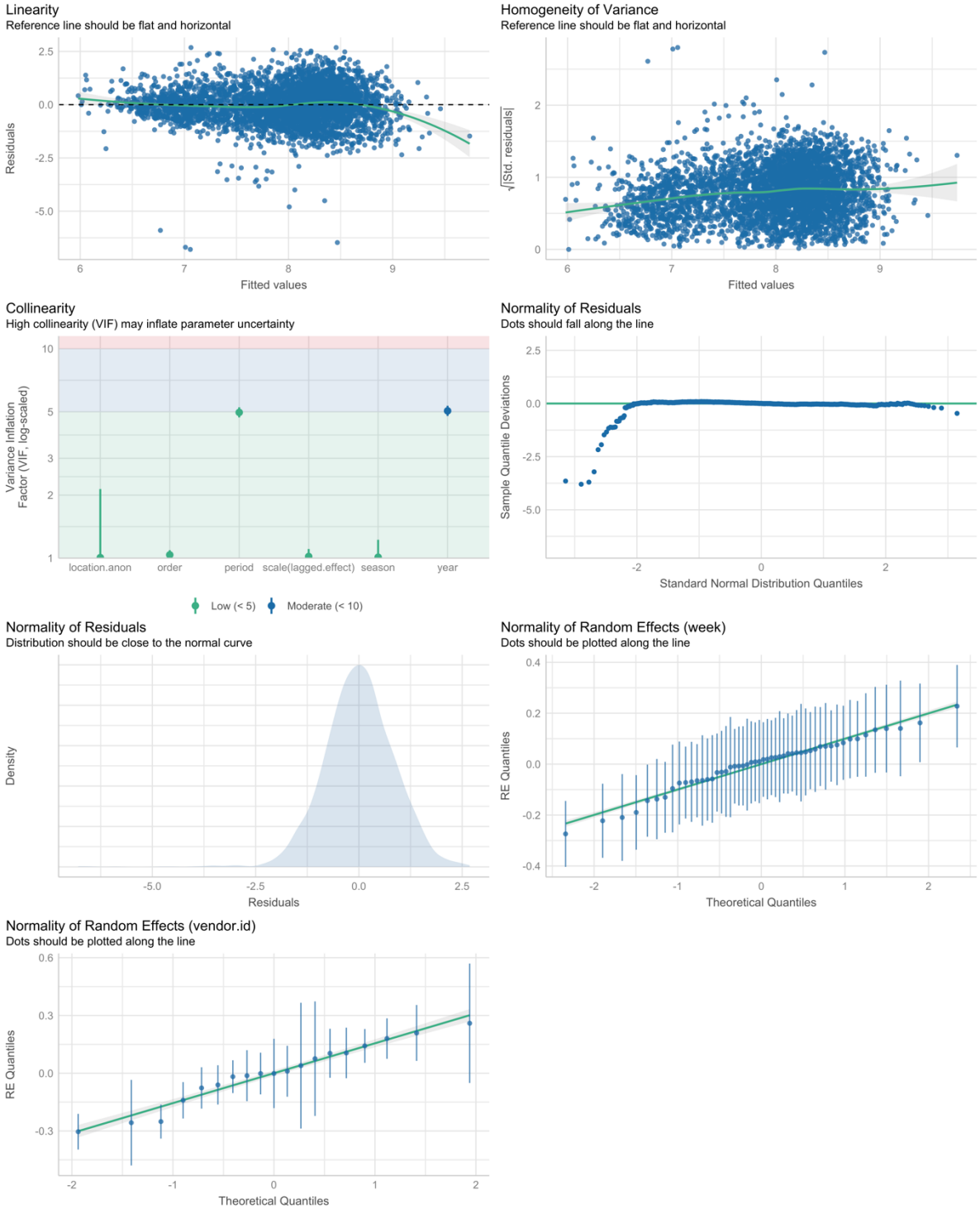

Figure S10. Diagnostics of the model predicting the weekly price (carcass asking price) per kilogram of wild meat that each vendor sold. Diagnostic parameters and interpretation of the plot are provided on top of each panel. Model assessment was conducted in R using *performance*.

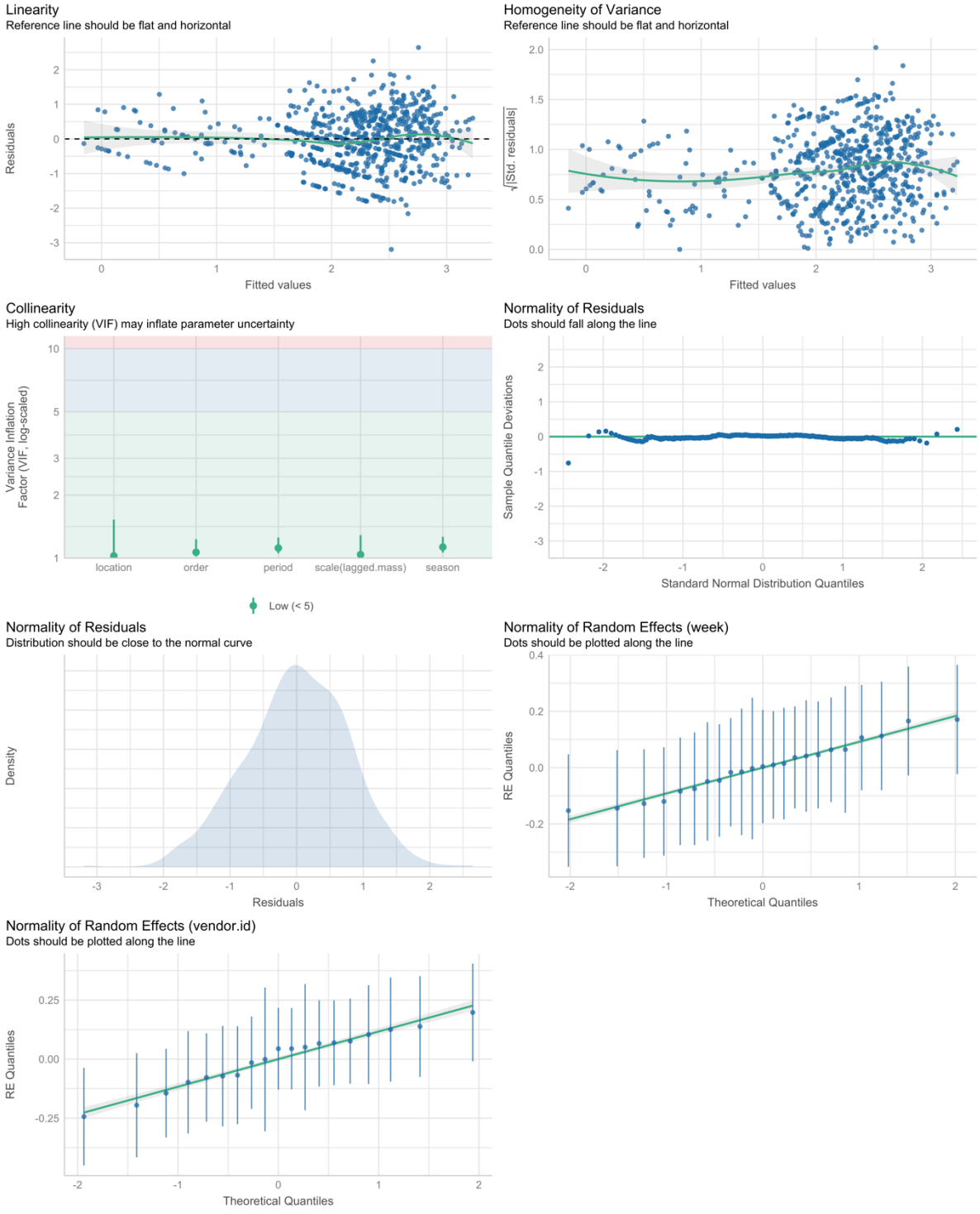

Figure S11. Diagnostics of the model predicting the total mass sold per week, three months before and after the ban. Diagnostic parameters and interpretation of the plot are provided on top of each panel. Model assessment was conducted in R using *performance*.

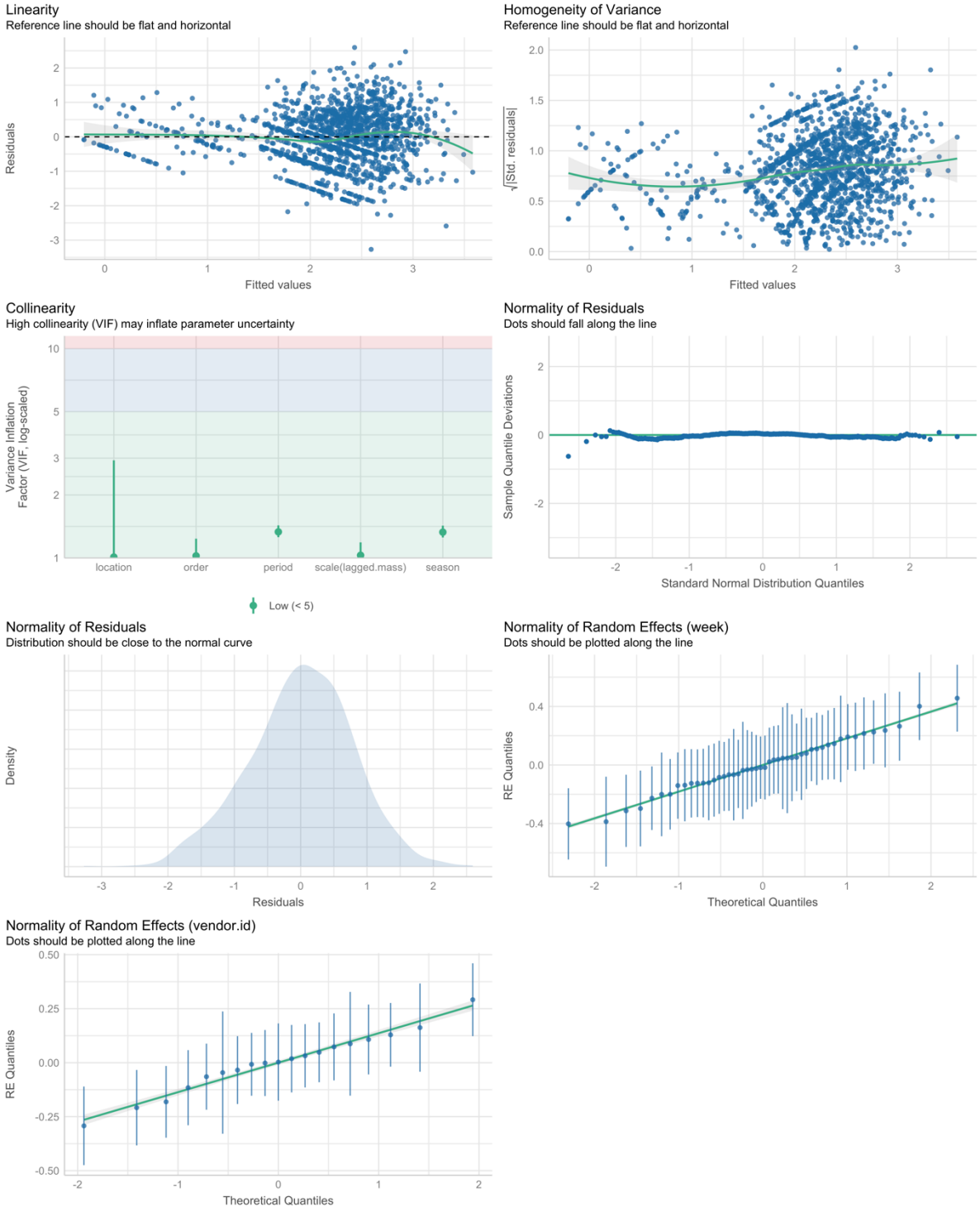

Figure S12. Diagnostics of the model predicting the total mass sold per week, six months before and after the ban. Diagnostic parameters and interpretation of the plot are provided on top of each panel. Model assessment was conducted in R using *performance*.