

OLS Regression Results

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Dep. Variable:          Chart_Position      R-squared:                0.330
Model:                  OLS                Adj. R-squared:           0.285
Method:                 Least Squares       F-statistic:             7.431
Date:                  Tue, 17 Jun 2025     Prob (F-statistic):      2.69e-25
Time:                  15:19:33             Log-Likelihood:          -2290.7
No. Observations:      500                 AIC:                    4645.
Df Residuals:          468                 BIC:                    4780.
Df Model:              31
Covariance Type:       nonrobust
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	coef	std err	t	P> t	[0.025	0.975]
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const	291.2646	25.620	11.369	0.000	240.920	341.610
Num_of_Artists	-0.9861	1.946	-0.507	0.613	-4.811	2.838
Song_Length	0.0340	0.030	1.152	0.250	-0.024	0.092
log_Spotify_streams	-28.9778	2.453	-11.813	0.000	-33.798	-24.157
Genre_Type_Alternative Rock	10.7507	21.284	0.505	0.614	-31.074	52.575
Genre_Type_Christmas	41.1456	13.882	2.964	0.003	13.867	68.425
Genre_Type_Country	9.1972	12.667	0.726	0.468	-15.694	34.088
Genre_Type_Country Pop	-1.4047	14.767	-0.095	0.924	-30.423	27.614
Genre_Type_Dance	-10.1598	27.471	-0.370	0.712	-64.141	43.821
Genre_Type_Dancehall	2.5650	27.380	0.094	0.925	-51.239	56.369
Genre_Type_Disco	-21.0765	21.341	-0.988	0.324	-63.013	20.860
Genre_Type_EDM	-18.3816	21.352	-0.861	0.390	-60.339	23.576
Genre_Type_Electronic	-15.4975	27.403	-0.566	0.572	-69.346	38.351
Genre_Type_Electropop	4.9684	27.439	0.181	0.856	-48.951	58.888
Genre_Type_Hip-Hop	10.9260	12.519	0.873	0.383	-13.675	35.526
Genre_Type_Indie Folk	-16.2855	21.335	-0.763	0.446	-58.210	25.639
Genre_Type_Indie Pop	5.4609	13.695	0.399	0.690	-21.450	32.372
Genre_Type_Indie Rock	3.4562	15.435	0.224	0.823	-26.874	33.786
Genre_Type_K-pop	10.8256	18.872	0.574	0.566	-26.259	47.910
Genre_Type_Latin	39.0525	18.724	2.086	0.038	2.260	75.845
Genre_Type_Latin Pop	34.7898	18.728	1.858	0.064	-2.011	71.591
Genre_Type_Merengue	34.2468	27.417	1.249	0.212	-19.630	88.123
Genre_Type_Musical Theater	-8.2679	21.292	-0.388	0.698	-50.108	33.572
Genre_Type_Pop	7.6167	12.532	0.608	0.544	-17.009	32.243
Genre_Type_Pop Punk	1.4251	16.599	0.086	0.932	-31.192	34.043
Genre_Type_Pop Rock	1.2084	18.926	0.064	0.949	-35.982	38.399
Genre_Type_R&B	0.6938	12.970	0.053	0.957	-24.793	26.181
Genre_Type_Reggaeton	22.0766	13.957	1.582	0.114	-5.349	49.502
Genre_Type_Regional Mexican	19.0739	21.224	0.899	0.369	-22.632	60.779

Genre_Type_Rock	17.3509	15.845	1.095	0.274	-13.785	48.487
Genre_Type_Synth-pop	-7.1578	18.758	-0.382	0.703	-44.017	29.702
Genre_Type_Synthwave	-14.7971	21.436	-0.690	0.490	-56.919	27.325

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Omnibus:                15.774    Durbin-Watson:                0.731
Prob(Omnibus):          0.000    Jarque-Bera (JB):          30.732
Skew:                   -0.137    Prob(JB):                  2.12e-07
Kurtosis:                4.183    Cond. No.                  1.26e+04
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Notes:

- [1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
- [2] The condition number is large, 1.26e+04. This might indicate that there are strong multicollinearity or other numerical problems.