

LOG PER-CAPITA GDP AND SINGLE MOTNERHOOD PREDICTS MURDER RATES EXPLAINING 39 PERCENT OF VARIATION

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You're now tuned into the motherfucking greatest
Turn the music up in the headphones
Tim, you can go and brush your shoulder off
I probably owe it to you all, proud to be locked by the
force
Trying to hustle some things, that go with the Porsche
Feeling no remorse, feeling like my hand was forced
Middle finger to the law, nigga griping my balls
All the ladies they love me, from the bleachers they scream-
ing
All the ballers is bouncing they like the way I be leaning
All the rappers be hating, off the track that I'm making
But all the hustlers they love it just to see one of us make
it
Came from the bottom the bottom, to the "Top of the
Pops"
Nigga London, Japan and I'm straight off the block
Like a running back, get it man, I'm straight off the block
I can run it back nigga 'cause I'm straight with the RocJay-
Z, "Dirt off your Shoulders"

1. LINEAR MODEL

```
> smrob<-lm( robs$Murder ~ robs$LogGDP + robs$SingleMother)
> summary(smrob)
```

Date: March 25, 2021.

Call:

```
lm(formula = robs$Murder ~ robs$LogGDP + robs$SingleMother)
```

Residuals:

	Min	1Q	Median	3Q	Max
	-3.8114	-1.0733	-0.6414	0.5594	5.9281

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	11.18110	2.89399	3.864	0.000634	***
robs\$LogGDP	-2.70835	0.72268	-3.748	0.000859	***
robs\$SingleMother	0.18204	0.06702	2.716	0.011377	*

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Residual standard error: 2.194 on 27 degrees of freedom

Multiple R-squared: 0.3913, Adjusted R-squared: 0.3462

F-statistic: 8.677 on 2 and 27 DF, p-value: 0.00123

2. DATA

Country	SingleMother	LogGDP	Group	Robbery	Rape	Murder
Belgium	22	4.7	w	205.12	25.36	1
France	21	4.6	w	195.1	20.12	1.6
Portugal	14	4.3	w	160	3.62	1.4
United States	24	4.8	w	109.07	38.55	5
Italy	9	4.5	w	105.99	74.5	0.9
UK	28	4.6	w	101.57	26.96	1.2
Kazakhstan	19	3.9	a	83	10.24	8.6
Netherlands	12	4.7	w	79.24	9.98	0.8
Canada	17	4.7	w	65.87	84	1.8
Ireland	22	4.9	w	60.8	54	0.9
Germany	20	4.7	w	58.19	50	1
Ukraine	28	3.5	w	51	4	6.2
Poland	15	4.2	w	46	9	0.7
Switzerland	11	4.9	w	39.41	35	0.6
Turkey	5	3.9	a	33	30	3.1
Kyrgyzstan	14	3.1	a	28	5.5	4.4
Slovakia	14	4.3	w	22	3	1.2
Mongolia	20	3.6	a	20	12.5	11
Chzechia	19	4.4	w	20	6	1.3
Romania	7	4.1	w	17	5	2
Pakistan	16	3.1	a	12	1.9	6.8
Armenia	12	3.6	a	10	2.5	1.6
Cyprus	10	4.4	a	9	9	1.3
Jordan	5	3.6	a	6	4	1.5
Moldova	20	3.6	w	4	12	3.8
Tajikistan	12	2.9	a	3.3	2.2	1.7
China	7	4	a	3	2.4	1.2
India	8	3.3	a	2.85	6	2.8
Azerbaijan	14	3.7	a	2.5	2.5	4
Thailand	15	3.9	a	2	2.5	8

3. INTERPRETATION

Univariate model predicting Rape Rates from logGDP (per capita) showed rise of rape with logGDP. Here in the multivariate model we see Murder rates fall with logGDP and rise with Single Motherhood.

Univariate model predicting Robbery Rates rise with Single Motherhood.

We offer no theoretical explanation of these empirical discoveries.