Analyses

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Libraries

```
library(haven)
library(lme4)
```

```
## Loading required package: Matrix
```

```
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
library(modelsummary)
library(ggplot2)
library(jtools)
library(lmerTest)
```

```
##
## Attaching package: 'lmerTest'
```

```
## The following object is masked from 'package:lme4':
##
##     lmer
```

```
## The following object is masked from 'package:stats':
##
##     step
```

```
library(tidyverse)
```

```
## Registered S3 methods overwritten by 'broom':
##   method            from
##   tidy.glht         jtools
##   tidy.summary.glht jtools
```

```
## -- Attaching packages ---------------------------------------- tidyverse 1.3.1 --
```

```
## v tibble  3.1.5      v purrr   0.3.4
## v tidyr   1.1.4      v stringr 1.4.0
## v readr   2.0.2      v forcats 0.5.1
```

```
## -- Conflicts ------------------------------------------- tidyverse_conflicts() --
## x tidyr::expand() masks Matrix::expand()
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## x tidyr::pack()   masks Matrix::pack()
## x tidyr::unpack() masks Matrix::unpack()
```

```
library(readxl)
```

Import Data

You can also embed plots, for example:

```
## New names:
## * '' -> ...1
```

```
## Warning in mask$eval_all_mutate(quo): NAs introduced by coercion
```

```
## Warning in mask$eval_all_mutate(quo): NAs introduced by coercion
```

Models

Model Equation:

$$moneymoral_{ij} = \gamma_{00} + \gamma_{01} * gini_j + \gamma_{02} + equality_j^{cm} + \gamma_{10} + equality_{ij}^{cmc}$$

```
m1 <- lmer(moneymoral ~ `Gini Coefficient` + eq_cmc + eq_cm + (1|country), df)
summary(m1)
```

```
## Linear mixed model fit by REML. t-tests use Satterthwaite's method [
## lmerModLmerTest]
## Formula: moneymoral ~ 'Gini Coefficient' + eq_cmc + eq_cm + (1 | country)
##    Data: df
##
## REML criterion at convergence: 10981
```

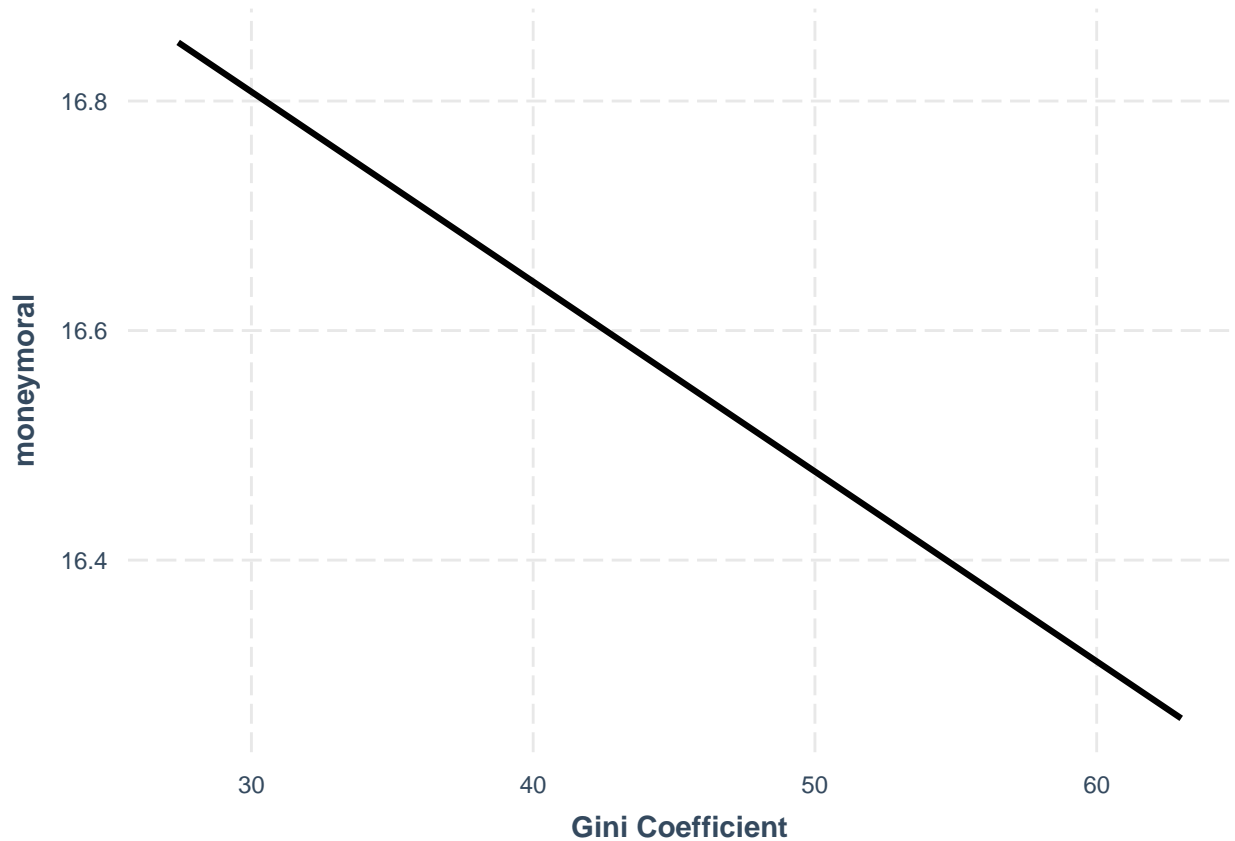|	Model 1
(Intercept)	16.411
	(0.719)
Gini Coefficient	−0.017
	(0.008)
eq_cmc	0.307
	(0.017)
eq_cm	0.297
	(0.202)
SD (Intercept)	0.261
SD (Observations)	0.981
Num.Obs.	3898
R2 Marg.	0.098
R2 Cond.	0.158
AIC	10 993.0
BIC	11 030.7
ICC	0.1
RMSE	0.98

```
## 
## Scaled residuals:
##     Min      1Q  Median      3Q     Max 
## -1.9653 -0.6801 -0.3143  0.4268  3.8482 
## 
## Random effects:
##  Groups   Name        Variance Std.Dev.
##  country  (Intercept) 0.06788  0.2605  
##  Residual             0.96265  0.9811  
## Number of obs: 3898, groups:  country, 19
## 
## Fixed effects:
##                    Estimate Std. Error         df t value Pr(>|t|)    
## (Intercept)       1.641e+01  7.186e-01  1.600e+01  22.839 1.23e-13 ***
## 'Gini Coefficient' -1.654e-02  7.742e-03  1.600e+01  -2.137   0.0484 *  
## eq_cmc            3.072e-01  1.682e-02  3.878e+03  18.262  < 2e-16 ***
## eq_cm             2.974e-01  2.022e-01  1.600e+01   1.471   0.1608    
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## 
## Correlation of Fixed Effects:
##            (Intr) 'GCff' eq_cmc
## 'GinCffcnt' -0.542              
## eq_cmc       0.000  0.000       
## eq_cm       -0.907  0.148  0.000
```

```
# m0 <- lmer(moneymoral ~ 1 + (age_cmc|country), df)
# summary(m0)
```

```
msummary(m1)
```

Plots

```
effect_plot(m1, pred="Gini Coefficient")
```


The model analysis /table shows that for level 1 we have a fixed effect for equality (cmc) at .31 (SE .017). On level 2, we have two fixed effects for for Gini Coefficient at -.017 (SE .008) and for equality (country mean) at 0.3 (SE=0.2). All fixed effects were significant (p<0.05) with the exception of equality (country mean). Furthermore, the mean moralisation of money varies over country by 0.07 (random intercept). The model did not converge for random slopes which is why there are excluded for now.