> setwd('C:/Users/guanz/Desktop/JIW2/Week5/R')

> dataset2014ind <- read.csv('2014ind.csv')

> dataset2014sg <- read.csv('2014sg.csv')

> dataset2015ind <- read.csv('2015ind.csv')

> dataset2015sg <- read.csv('2015sg.csv')

>

> #2014 individual

> fit2014ind <- lm(Transfers\_individual\_pmm ~ Premium\_individual\_pmm + Costs\_individual\_pmm, data=dataset2014ind, weights=MM\_individual)

> summary(fit2014ind)

Call:

lm(formula = Transfers\_individual\_pmm ~ Premium\_individual\_pmm +

Costs\_individual\_pmm, data = dataset2014ind, weights = MM\_individual)

Weighted Residuals:

Min 1Q Median 3Q Max

-79700 -4926 1325 7568 89009

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) -48.50271 7.22977 -6.709 5.89e-11 \*\*\*

Premium\_individual\_pmm -0.11363 0.02846 -3.993 7.62e-05 \*\*\*

Costs\_individual\_pmm 0.25718 0.01925 13.360 < 2e-16 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 17770 on 452 degrees of freedom

(317 observations deleted due to missingness)

Multiple R-squared: 0.3107, Adjusted R-squared: 0.3076

F-statistic: 101.9 on 2 and 452 DF, p-value: < 2.2e-16

>

> #2014 small group

> fit2014sg <- lm(Transfers\_smallgroup\_pmm ~ Premium\_smallgroup\_pmm + Costs\_smallgroup\_pmm, data=dataset2014sg, weights=MM\_smallgroup)

> summary(fit2014sg)

Call:

lm(formula = Transfers\_smallgroup\_pmm ~ Premium\_smallgroup\_pmm +

Costs\_smallgroup\_pmm, data = dataset2014sg, weights = MM\_smallgroup)

Weighted Residuals:

Min 1Q Median 3Q Max

-73655 -2317 -510 1144 49701

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) -19.146315 3.512134 -5.451 7.27e-08 \*\*\*

Premium\_smallgroup\_pmm 0.008714 0.017024 0.512 0.609

Costs\_smallgroup\_pmm 0.050872 0.020428 2.490 0.013 \*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 6809 on 609 degrees of freedom

(160 observations deleted due to missingness)

Multiple R-squared: 0.05035, Adjusted R-squared: 0.04723

F-statistic: 16.14 on 2 and 609 DF, p-value: 1.475e-07

>

> #2015 individual

> fit2015ind <- lm(Transfers\_individual\_pmm ~ Premium\_individual\_pmm + Costs\_individual\_pmm, data=dataset2015ind, weights=MM\_individual)

> summary(fit2015ind)

Call:

lm(formula = Transfers\_individual\_pmm ~ Premium\_individual\_pmm +

Costs\_individual\_pmm, data = dataset2015ind, weights = MM\_individual)

Weighted Residuals:

Min 1Q Median 3Q Max

-147105 -6744 878 10143 158418

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) -105.69707 10.72412 -9.856 < 2e-16 \*\*\*

Premium\_individual\_pmm 0.21768 0.03286 6.625 8.74e-11 \*\*\*

Costs\_individual\_pmm 0.08534 0.01053 8.105 3.82e-15 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 23730 on 517 degrees of freedom

(312 observations deleted due to missingness)

Multiple R-squared: 0.2383, Adjusted R-squared: 0.2354

F-statistic: 80.88 on 2 and 517 DF, p-value: < 2.2e-16

>

> #2015 small group

> fit2015sg <- lm(Transfers\_smallgroup\_pmm ~ Premium\_smallgroup\_pmm + Costs\_smallgroup\_pmm, data=dataset2015sg, weights=MM\_smallgroup)

> summary(fit2015sg)

Call:

lm(formula = Transfers\_smallgroup\_pmm ~ Premium\_smallgroup\_pmm +

Costs\_smallgroup\_pmm, data = dataset2015sg, weights = MM\_smallgroup)

Weighted Residuals:

Min 1Q Median 3Q Max

-203979 -4133 -833 2091 127779

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) -30.43089 6.79658 -4.477 8.95e-06 \*\*\*

Premium\_smallgroup\_pmm 0.02919 0.03254 0.897 0.370

Costs\_smallgroup\_pmm 0.05664 0.03568 1.587 0.113

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 13620 on 638 degrees of freedom

(191 observations deleted due to missingness)

Multiple R-squared: 0.03454, Adjusted R-squared: 0.03151

F-statistic: 11.41 on 2 and 638 DF, p-value: 1.351e-05

>

> #coefficients

> coefficients(fit2014ind)

(Intercept) Premium\_individual\_pmm Costs\_individual\_pmm

-48.5027115 -0.1136346 0.2571754

> coefficients(fit2014sg)

(Intercept) Premium\_smallgroup\_pmm Costs\_smallgroup\_pmm

-19.146314623 0.008714121 0.050871943

> coefficients(fit2015ind)

(Intercept) Premium\_individual\_pmm Costs\_individual\_pmm

-105.69707295 0.21768458 0.08534201

> coefficients(fit2015sg)

(Intercept) Premium\_smallgroup\_pmm Costs\_smallgroup\_pmm

-30.43089364 0.02919026 0.05663834