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

> summary(fit2014ind)

Call:

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

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

Weighted Residuals:

Min 1Q Median 3Q Max

-136760 -11835 -833 14035 174446

Coefficients:

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

(Intercept) 90.13125 15.10088 5.969 4.84e-09 \*\*\*

Transfers\_individual\_pmm 1.10080 0.08239 13.360 < 2e-16 \*\*\*

Premium\_individual\_pmm 0.76078 0.04805 15.833 < 2e-16 \*\*\*

---

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

Residual standard error: 36770 on 452 degrees of freedom

(317 observations deleted due to missingness)

Multiple R-squared: 0.541, Adjusted R-squared: 0.5389

F-statistic: 266.3 on 2 and 452 DF, p-value: < 2.2e-16

>

> #2014 small group

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

> summary(fit2014sg)

Call:

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

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

Weighted Residuals:

Min 1Q Median 3Q Max

-50582 -6799 -1080 4883 60185

Coefficients:

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

(Intercept) 36.74610 6.94086 5.294 1.67e-07 \*\*\*

Transfers\_smallgroup\_pmm 0.19816 0.07957 2.490 0.013 \*

Premium\_smallgroup\_pmm 0.70421 0.01775 39.671 < 2e-16 \*\*\*

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

Residual standard error: 13440 on 609 degrees of freedom

(160 observations deleted due to missingness)

Multiple R-squared: 0.7349, Adjusted R-squared: 0.7341

F-statistic: 844.2 on 2 and 609 DF, p-value: < 2.2e-16

>

> #2015 individual

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

> summary(fit2015ind)

Call:

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

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

Weighted Residuals:

Min 1Q Median 3Q Max

-1873423 -16337 -1354 13650 331683

Coefficients:

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

(Intercept) 164.0674 45.4184 3.612 0.000333 \*\*\*

Transfers\_individual\_pmm 1.3211 0.1630 8.105 3.82e-15 \*\*\*

Premium\_individual\_pmm 0.6147 0.1319 4.660 4.03e-06 \*\*\*

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

Residual standard error: 93370 on 517 degrees of freedom

(312 observations deleted due to missingness)

Multiple R-squared: 0.207, Adjusted R-squared: 0.2039

F-statistic: 67.47 on 2 and 517 DF, p-value: < 2.2e-16

>

> #2015 small group

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

> summary(fit2015sg)

Call:

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

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

Weighted Residuals:

Min 1Q Median 3Q Max

-78066 -7438 -1551 5232 81515

Coefficients:

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

(Intercept) 5.13364 7.64027 0.672 0.502

Transfers\_smallgroup\_pmm 0.06944 0.04375 1.587 0.113

Premium\_smallgroup\_pmm 0.78286 0.01843 42.488 <2e-16 \*\*\*

---

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

Residual standard error: 15080 on 638 degrees of freedom

(191 observations deleted due to missingness)

Multiple R-squared: 0.7476, Adjusted R-squared: 0.7468

F-statistic: 944.7 on 2 and 638 DF, p-value: < 2.2e-16

>

> #coefficients

> coefficients(fit2014ind)

(Intercept) Transfers\_individual\_pmm Premium\_individual\_pmm

90.1312500 1.1007988 0.7607792

> coefficients(fit2014sg)

(Intercept) Transfers\_smallgroup\_pmm Premium\_smallgroup\_pmm

36.7460998 0.1981581 0.7042124

> coefficients(fit2015ind)

(Intercept) Transfers\_individual\_pmm Premium\_individual\_pmm

164.0674020 1.3211465 0.6147404

> coefficients(fit2015sg)

(Intercept) Transfers\_smallgroup\_pmm Premium\_smallgroup\_pmm

5.13363597 0.06944125 0.78286481