> setwd('C:/Users/guanz/Desktop/JIW2/Week10')

> exitdata <- read.csv('MarketExitAll\_week10\_final.csv')

>

> exitdata$ExitedMarketIn2016 <- factor(exitdata$ExitedMarketIn2016)

>

> #exiting market vs. loss in previous two years

> exitfit <- glm(ExitedMarketIn2016 ~ TotalPA\_2014 + TotalPA\_2015, data=exitdata, family="binomial")

> summary(exitfit)

Call:

glm(formula = ExitedMarketIn2016 ~ TotalPA\_2014 + TotalPA\_2015,

family = "binomial", data = exitdata)

Deviance Residuals:

Min 1Q Median 3Q Max

-1.0701 -0.7216 -0.6847 -0.6115 1.9368

Coefficients:

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

(Intercept) -1.310881 0.135862 -9.649 <2e-16 \*\*\*

TotalPA\_2014 -0.002277 0.001175 -1.938 0.0527 .

TotalPA\_2015 0.000547 0.001041 0.525 0.5993

---

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

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 407.31 on 376 degrees of freedom

Residual deviance: 402.09 on 374 degrees of freedom

AIC: 408.09

Number of Fisher Scoring iterations: 4

> coefficients(exitfit)

(Intercept) TotalPA\_2014 TotalPA\_2015

-1.3108808544 -0.0022768793 0.0005469928

>

> #exiting market vs. loss in previous two years

> exitfit <- glm(ExitedMarketIn2016 ~ TotalPB\_2014 + TotalPB\_2015, data=exitdata, family="binomial")

> summary(exitfit)

Call:

glm(formula = ExitedMarketIn2016 ~ TotalPB\_2014 + TotalPB\_2015,

family = "binomial", data = exitdata)

Deviance Residuals:

Min 1Q Median 3Q Max

-1.2111 -0.7248 -0.6707 -0.5945 2.0080

Coefficients:

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

(Intercept) -1.342616 0.137467 -9.767 <2e-16 \*\*\*

TotalPB\_2014 -0.003249 0.001447 -2.246 0.0247 \*

TotalPB\_2015 0.000115 0.001286 0.089 0.9287

---

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

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 407.31 on 376 degrees of freedom

Residual deviance: 399.09 on 374 degrees of freedom

AIC: 405.09

Number of Fisher Scoring iterations: 4

> coefficients(exitfit)

(Intercept) TotalPB\_2014 TotalPB\_2015

-1.3426156214 -0.0032487791 0.0001150384

>

> #exiting market vs. loss in previous two years

> exitfit <- glm(ExitedMarketIn2016 ~ TotalPC\_2014 + TotalPC\_2015, data=exitdata, family="binomial")

> summary(exitfit)

Call:

glm(formula = ExitedMarketIn2016 ~ TotalPC\_2014 + TotalPC\_2015,

family = "binomial", data = exitdata)

Deviance Residuals:

Min 1Q Median 3Q Max

-1.3741 -0.7283 -0.6576 -0.5036 2.0652

Coefficients:

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

(Intercept) -1.1293746 0.1271012 -8.886 < 2e-16 \*\*\*

TotalPC\_2014 -0.0053783 0.0018621 -2.888 0.00387 \*\*

TotalPC\_2015 0.0001907 0.0014823 0.129 0.89764

---

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

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 404.37 on 375 degrees of freedom

Residual deviance: 392.76 on 373 degrees of freedom

(1 observation deleted due to missingness)

AIC: 398.76

Number of Fisher Scoring iterations: 4

> coefficients(exitfit)

(Intercept) TotalPC\_2014 TotalPC\_2015

-1.1293745846 -0.0053782600 0.0001906872

>

> #exiting market vs. loss in previous two years

> exitfit <- glm(ExitedMarketIn2016 ~ TotalPD\_2014 + TotalPD\_2015, data=exitdata, family="binomial")

> summary(exitfit)

Call:

glm(formula = ExitedMarketIn2016 ~ TotalPD\_2014 + TotalPD\_2015,

family = "binomial", data = exitdata)

Deviance Residuals:

Min 1Q Median 3Q Max

-0.9485 -0.5503 -0.4793 -0.3910 2.2024

Coefficients:

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

(Intercept) -2.088003 0.658925 -3.169 0.00153 \*\*

TotalPD\_2014 -0.004900 0.010596 -0.462 0.64377

TotalPD\_2015 -0.002241 0.008257 -0.271 0.78610

---

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

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 29.012 on 35 degrees of freedom

Residual deviance: 27.584 on 33 degrees of freedom

(341 observations deleted due to missingness)

AIC: 33.584

Number of Fisher Scoring iterations: 5

> coefficients(exitfit)

(Intercept) TotalPD\_2014 TotalPD\_2015

-2.088003064 -0.004900139 -0.002240753

>

> #exiting market vs. loss in previous two years

> exitfit <- glm(ExitedMarketIn2016 ~ TotalPE\_2014 + TotalPE\_2015, data=exitdata, family="binomial")

> summary(exitfit)

Call:

glm(formula = ExitedMarketIn2016 ~ TotalPE\_2014 + TotalPE\_2015,

family = "binomial", data = exitdata)

Deviance Residuals:

Min 1Q Median 3Q Max

-0.7275 -0.5632 -0.5249 -0.4827 2.0810

Coefficients:

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

(Intercept) -1.760254 0.619274 -2.842 0.00448 \*\*

TotalPE\_2014 0.004191 0.011000 0.381 0.70319

TotalPE\_2015 -0.006262 0.009631 -0.650 0.51553

---

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

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 29.012 on 35 degrees of freedom

Residual deviance: 28.498 on 33 degrees of freedom

(341 observations deleted due to missingness)

AIC: 34.498

Number of Fisher Scoring iterations: 5

> coefficients(exitfit)

(Intercept) TotalPE\_2014 TotalPE\_2015

-1.760254373 0.004191133 -0.006262428

>

> #exiting market vs. loss in previous two years

> exitfit <- glm(ExitedMarketIn2016 ~ TotalPA\_2014\_Quintile + TotalPA\_2015\_Quintile, data=exitdata, family="binomial")

> summary(exitfit)

Call:

glm(formula = ExitedMarketIn2016 ~ TotalPA\_2014\_Quintile + TotalPA\_2015\_Quintile,

family = "binomial", data = exitdata)

Deviance Residuals:

Min 1Q Median 3Q Max

-0.8557 -0.7764 -0.6553 -0.5972 1.9036

Coefficients:

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

(Intercept) -0.81626 0.21223 -3.846 0.00012 \*\*\*

TotalPA\_2014\_Quintile -0.18001 0.12391 -1.453 0.14628

TotalPA\_2015\_Quintile -0.02432 0.12308 -0.198 0.84338

---

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

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 407.31 on 376 degrees of freedom

Residual deviance: 402.18 on 374 degrees of freedom

AIC: 408.18

Number of Fisher Scoring iterations: 4

> coefficients(exitfit)

(Intercept) TotalPA\_2014\_Quintile TotalPA\_2015\_Quintile

-0.81626433 -0.18001086 -0.02431609

>

> #exiting market vs. loss in previous two years

> exitfit <- glm(ExitedMarketIn2016 ~ TotalPB\_2014\_Quintile + TotalPB\_2015\_Quintile, data=exitdata, family="binomial")

> summary(exitfit)

Call:

glm(formula = ExitedMarketIn2016 ~ TotalPB\_2014\_Quintile + TotalPB\_2015\_Quintile,

family = "binomial", data = exitdata)

Deviance Residuals:

Min 1Q Median 3Q Max

-0.8710 -0.7688 -0.6478 -0.5842 1.9247

Coefficients:

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

(Intercept) -0.77376 0.21264 -3.639 0.000274 \*\*\*

TotalPB\_2014\_Quintile -0.16003 0.11815 -1.354 0.175595

TotalPB\_2015\_Quintile -0.06692 0.11718 -0.571 0.567966

---

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

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 407.31 on 376 degrees of freedom

Residual deviance: 401.49 on 374 degrees of freedom

AIC: 407.49

Number of Fisher Scoring iterations: 4

> coefficients(exitfit)

(Intercept) TotalPB\_2014\_Quintile TotalPB\_2015\_Quintile

-0.77376059 -0.16003035 -0.06691732

>

> #exiting market vs. loss in previous two years

> exitfit <- glm(ExitedMarketIn2016 ~ TotalPC\_2014\_Quintile + TotalPC\_2015\_Quintile, data=exitdata, family="binomial")

> summary(exitfit)

Call:

glm(formula = ExitedMarketIn2016 ~ TotalPC\_2014\_Quintile + TotalPC\_2015\_Quintile,

family = "binomial", data = exitdata)

Deviance Residuals:

Min 1Q Median 3Q Max

-0.9059 -0.7844 -0.6469 -0.5530 1.9765

Coefficients:

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

(Intercept) -0.67853 0.21773 -3.116 0.00183 \*\*

TotalPC\_2014\_Quintile -0.21833 0.10577 -2.064 0.03900 \*

TotalPC\_2015\_Quintile -0.06212 0.10458 -0.594 0.55249

---

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

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 407.31 on 376 degrees of freedom

Residual deviance: 398.72 on 374 degrees of freedom

AIC: 404.72

Number of Fisher Scoring iterations: 4

> coefficients(exitfit)

(Intercept) TotalPC\_2014\_Quintile TotalPC\_2015\_Quintile

-0.67852945 -0.21833303 -0.06212445

>

> #exiting market vs. loss in previous two years

> exitfit <- glm(ExitedMarketIn2016 ~ TotalPD\_2014\_Quintile + TotalPD\_2015\_Quintile, data=exitdata, family="binomial")

> summary(exitfit)

Call:

glm(formula = ExitedMarketIn2016 ~ TotalPD\_2014\_Quintile + TotalPD\_2015\_Quintile,

family = "binomial", data = exitdata)

Deviance Residuals:

Min 1Q Median 3Q Max

-0.9998 -0.7207 -0.7207 -0.5756 1.8918

Coefficients:

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

(Intercept) -0.4332 0.5370 -0.807 0.420

TotalPD\_2014\_Quintile -0.1420 0.1287 -1.103 0.270

TotalPD\_2015\_Quintile -0.2491 0.2773 -0.898 0.369

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 407.31 on 376 degrees of freedom

Residual deviance: 404.37 on 374 degrees of freedom

AIC: 410.37

Number of Fisher Scoring iterations: 4

> coefficients(exitfit)

(Intercept) TotalPD\_2014\_Quintile TotalPD\_2015\_Quintile

-0.4331749 -0.1420358 -0.2491067

>

> #exiting market vs. loss in previous two years

> exitfit <- glm(ExitedMarketIn2016 ~ TotalPE\_2014\_Quintile + TotalPE\_2015\_Quintile, data=exitdata, family="binomial")

> summary(exitfit)

Call:

glm(formula = ExitedMarketIn2016 ~ TotalPE\_2014\_Quintile + TotalPE\_2015\_Quintile,

family = "binomial", data = exitdata)

Deviance Residuals:

Min 1Q Median 3Q Max

-0.8405 -0.8405 -0.6035 -0.2812 2.3298

Coefficients:

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

(Intercept) -0.8588 0.1427 -6.019 1.75e-09 \*\*\*

TotalPE\_2014\_Quintile -0.3760 0.1139 -3.302 0.000961 \*\*\*

TotalPE\_2015\_Quintile -0.2826 0.2607 -1.084 0.278325

---

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

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 407.31 on 376 degrees of freedom

Residual deviance: 389.50 on 374 degrees of freedom

AIC: 395.5

Number of Fisher Scoring iterations: 5

> coefficients(exitfit)

(Intercept) TotalPE\_2014\_Quintile TotalPE\_2015\_Quintile

-0.8587630 -0.3760110 -0.282570