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> # -----
> #                               Program Description
> # ----- .... [TRUNCATED]

> # Load in packages
> library(foreign)

> library(data.table)

> library(AER)

> library(ggplot2)

> library(scales)

> library(grid)

> # Load SUSB Data
> USall <- read.csv("./Data/susb04.csv",header = TRUE)

> USall <- as.data.table(USall)

> USall <- USall[,list(NAICS, ENTRSIZE, FIRM,
+                     ESTB, EMPL, NAICSDSCR, ENTRSIZEEDSCR)]

> USleft <- c(1,5,10,15,20,25,30,35,40,45,50,75,100,150,
+            200,300,400,500,750,1000,1500,2500)

> USright <- c(4,9,14,19,24,29,34,39,44,49,74,99,149,199,
+             299,399,499,749,999,1499,2499,10000)

> NUS <- length(USleft)

> load("./Data/CNEC_avgp.RData")

> CHNprod <- CNEC_avgp

> sel <- which(CHNprod$status == 1
+             & CHNprod$nbarworkers > 0 & CHNprod$product > 0 )

> CHNprod <- CHNprod[sel]

> CHleft <- rep(0,NUS)

> CHright <- CHleft

> # Load NGSPS
> load("./Data/KEYFIRM_R.RData")

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> CHNpol <- KEYFIRM[,list(industry,industry_a,opr_hours,product,cod_e)]

> sel <- which(CHNpol$opr_hours > 0
+           & CHNpol$product > 0 & CHNpol$cod_e > 0)

> CHNpol <- CHNpol[sel]

> # Overall cut-off ranges
> quanup <- 0.75

> quandown <- 0.25

> # ----- Paper Industry -----
> # Calculate the CNEC cut-off by production scale
> sel <- which(CHNprod$industry == 2210 .... [TRUNCATED]

> CH <- CHNprod[sel]

> # 2-digit sector price deflator, from Brandt etal 2012 JDE
> deflator <- 96.30/93.50

> for (i in 1:NUS){
+   sel <- which(CH$nbarworkers >= USleft[i] & CH$nbarworkers <= USright[i])
+   CHleft[i] <- quantile(CH$product[sel], probs=qua .... [TRUNCATED]

> CHleft07 <- CHleft*deflator

> CHright07 <- CHright*deflator

> # Calculate the polluting intensity
> sel <- which(CHNpol$industry_a == 22)

> CHp <- CHNpol[sel]

> CHp <- within(CHp,intensity <- cod_e/product)

> # Calculate the US/China approximated production share
> sel <- which(USall$NAICS == 3221)

> US <- USall[sel]

> sel <- which(US$ENTRSIZE != 1 & US$ENTRSIZE != 6 & US$ENTRSIZE != 9)

> US <- US[sel]

> US <- within(US,AVGF <- EMPL/FIRM)

> distchn <- rep(0,NUS)

> distus <- distchn

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> for (i in 1:(NUS-1)){
+   sel <- which(US$AVGF > USleft[i] & US$AVGF <= USright[i])
+   distus[i] <- sum(US$EMPL[sel])
+   sel1 <- which(CHp$product .... [TRUNCATED]

> # Last category
> sel <- which(US$AVGF > USleft[NUS])

> distus[NUS] <- sum(US$EMPL[sel])

> distus <- distus/sum(distus)

> sel1 <- which(CHp$product > CHleft[NUS])

> distchn[NUS] <- sum(CHp$product[sel1])

> distchn <- distchn/sum(distchn)

> selp <- rep(0,NUS)

> ##### Median Intensity #####
> med_int <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CHp$product >= CHleft07[i] & CHp$product <= CHright07[i])
+   selp[i] <- length(sel)
+   med_int[i] <- quanti .... [TRUNCATED]

> sel <- which(CHp$product >= CHleft07[NUS])

> selp[NUS] <- length(sel)

> med_int[NUS] <- quantile(CHp$intensity[sel],probs= 0.5)

> pchn <- sum(med_int*distchn)

> pus <- sum(med_int*distus)

> pmed_paper <- pus/pchn

> ##### Piecewise Linear Estimation #####
> CHleftn <- USleft

> CHrightn <- USright

> for (i in 1:NUS){
+   sel <- which(CH$nbarworkers >= USleft[i] & CH$nbarworkers <= USright[i])
+   i_lm <- lm(log(product) ~ log(nbarworkers), data= .... [TRUNCATED]

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> CHleftn <- CHleftn*deflator

> CHrightn <- CHrightn*deflator

> # Calculate new distribution for Chinese firms
> distchn1 <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CHp$product > CHleftn[i] & CHp$product <= CHrightn[i])
+   distchn1[i] <- sum(CHp$product[sel])
+ }

> # Last category
> sel1 <- which(CHp$product > CHleftn[NUS])

> distchn1[NUS] <- sum(CHp$product[sel1])

> distchn1 <- distchn1/sum(distchn1)

> ##### Regressing Intensity #####
> reg_int <- rep(0,NUS)

> for (i in 1:NUS){
+   sel <- which(CHp$product >= CHleftn[i] & CHp$product <= CHrightn[i])
+   i_lm <- lm(log(intensity) ~ log(product),data = CHp[s .... [TRUNCATED])

> pchn1 <- sum(reg_int*distchn1)

> pus1 <- sum(reg_int*distus)

> preg_paper <- pus1/pchn1

> ##### Full Parametric Analysis #####
> y_lm <- lm(log(product) ~ log(nbarworkers), data = CH)

> p_lm <- lm(log(intensity) ~ log(product), data = CHp)

> tmpa <- summary(y_lm)$coefficients["(Intercept)","Estimate"]

> tmpb <- summary(y_lm)$coefficients["log(nbarworkers)","Estimate"]

> tmpc <- summary(p_lm)$coefficients["(Intercept)","Estimate"]

> tmpd <- summary(p_lm)$coefficients["log(product)","Estimate"]

> mid_us <- (USleft+USright)/2

> par_int <- exp(tmpc + tmpd*(tmpa + tmpb*log(mid_us)))

> # Calculate new distribution for Chinese firms

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> distchn2 <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CH$nbarworkers > USleft[i] & CH$nbarworkers <= USright[i])
+   distchn2[i] <- sum(CH$nbarworkers[sel])
+ }

> # Last category
> sel1 <- which(CH$nbarworkers > USleft[NUS])

> distchn2[NUS] <- sum(CH$nbarworkers[sel1])

> distchn2 <- distchn2/sum(distchn2)

> pus <- sum(par_int*distus)

> pch <- sum(par_int*distchn2)

> ppar_paper <- pus/pch

> # ----- Food Industry -----
> # Calculate the CNEC cut-off by production scale
> sel <- which(CHNprod$industry_a == 13)

> CH <- CHNprod[sel]

> # 2-digit sector price deflator, from Brandt etal 2012 JDE
> deflator <- 108.80/99.90

> for (i in 1:NUS){
+   sel <- which(CH$nbarworkers >= USleft[i] & CH$nbarworkers <= USright[i])
+   CHleft[i] <- quantile(CH$product[sel], probs=qua .... [TRUNCATED]

> CHleft07 <- CHleft*deflator

> CHright07 <- CHright*deflator

> # Calculate the polluting intensity
> sel <- which(CHNpol$industry_a == 13)

> CHp <- CHNpol[sel]

> CHp <- within(CHp,intensity <- cod_e/product)

> # Calculate the US/China approximated production share
> sel <- which(USall$NAICS == 311)

> US <- USall[sel]

> sel <- which(US$ENTRSIZE != 1 & US$ENTRSIZE != 6 & US$ENTRSIZE != 9)

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> US <- US[sel]

> US <- within(US,AVGF <- EMPL/FIRM)

> distchn <- rep(0,NUS)

> distus <- distchn

> for (i in 1:(NUS-1)){
+   sel <- which(US$AVGF > USleft[i] & US$AVGF <= USright[i])
+   distus[i] <- sum(US$EMPL[sel])
+   sel1 <- which(CHp$product .... [TRUNCATED]

> # Last category
> sel <- which(US$AVGF > USleft[NUS])

> distus[NUS] <- sum(US$EMPL[sel])

> distus <- distus/sum(distus)

> sel1 <- which(CHp$product > CHleft[NUS])

> distchn[NUS] <- sum(CHp$product[sel1])

> distchn <- distchn/sum(distchn)

> selp <- rep(0,NUS)

> ##### Median Intensity #####
> med_int <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CHp$product >= CHleft07[i] & CHp$product <= CHright07[i])
+   selp[i] <- length(sel)
+   med_int[i] <- quanti .... [TRUNCATED]

> sel <- which(CHp$product >= CHleft07[NUS])

> selp[NUS] <- length(sel)

> med_int[NUS] <- quantile(CHp$intensity[sel],probs= 0.5)

> pchn <- sum(med_int*distchn)

> pus <- sum(med_int*distus)

> pmed_agri <- pus/pchn

> ##### Piecewise Linear Estimation #####

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> CHleftn <- USleft

> CHrightn <- USright

> for (i in 1:NUS){
+   sel <- which(CH$nbarworkers >= USleft[i] & CH$nbarworkers <= USright[i])
+   i_lm <- lm(log(product) ~ log(nbarworkers), data= .... [TRUNCATED])

> CHleftn <- CHleftn*deflator

> CHrightn <- CHrightn*deflator

> # Calculate new distribution for Chinese firms
> distchn1 <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CHp$product > CHleftn[i] & CHp$product <= CHrightn[i])
+   distchn1[i] <- sum(CHp$product[sel])
+ }

> # Last category
> sel1 <- which(CHp$product > CHleftn[NUS])

> distchn1[NUS] <- sum(CHp$product[sel1])

> distchn1 <- distchn1/sum(distchn1)

> ##### Regressing Intensity #####
> reg_int <- rep(0,NUS)

> for (i in 1:NUS){
+   sel <- which(CHp$product >= CHleftn[i] & CHp$product <= CHrightn[i])
+   i_lm <- lm(log(intensity) ~ log(product),data = CHp[s .... [TRUNCATED])

> pchn1 <- sum(reg_int*distchn1)

> pus1 <- sum(reg_int*distus)

> preg_agri <- pus1/pchn1

> ##### Full Parametric Analysis #####
> y_lm <- lm(log(product) ~ log(nbarworkers), data = CH)

> p_lm <- lm(log(intensity) ~ log(product), data = CHp)

> tmpa <- summary(y_lm)$coefficients["(Intercept)","Estimate"]

> tmpb <- summary(y_lm)$coefficients["log(nbarworkers)","Estimate"]

> tmpc <- summary(p_lm)$coefficients["(Intercept)","Estimate"]

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> tmpd <- summary(p_lm)$coefficients["log(product)","Estimate"]

> mid_us <- (USleft+USright)/2

> par_int <- exp(tmpc + tmpd*(tmpa + tmpb*log(mid_us)))

> # Calculate new distribution for Chinese firms
> distchn2 <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CH$nbarworkers > USleft[i] & CH$nbarworkers <= USright[i])
+   distchn2[i] <- sum(CH$nbarworkers[sel])
+ }

> # Last category
> sel1 <- which(CH$nbarworkers > USleft[NUS])

> distchn2[NUS] <- sum(CH$nbarworkers[sel1])

> distchn2 <- distchn2/sum(distchn2)

> pus <- sum(par_int*distus)

> pch <- sum(par_int*distchn2)

> ppar_agri <- pus/pch

> # ----- Textile Industry -----
> # Calculate the CNEC cut-off by production scale
> sel <- which(CHNprod$industry_a == .... [TRUNCATED]

> CH <- CHNprod[sel]

> # 2-digit sector price deflator, from Brandt etal 2012 JDE
> deflator <- 103.80/100.60

> for (i in 1:NUS){
+   sel <- which(CH$nbarworkers >= USleft[i] & CH$nbarworkers <= USright[i])
+   CHleft[i] <- quantile(CH$product[sel], probs=qua .... [TRUNCATED]

> CHleft07 <- CHleft*deflator

> CHright07 <- CHright*deflator

> # Calculate the polluting intensity
> sel <- which(CHNpol$industry_a == 17)

> CHp <- CHNpol[sel]

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> CHp <- within(CHp,intensity <- cod_e/product)

> # Calculate the US/China approximated production share
> sel <- which(USall$NAICS == 313)

> US <- USall[sel]

> sel <- which(US$ENTRSIZE != 1 & US$ENTRSIZE != 6 & US$ENTRSIZE != 9)

> US <- US[sel]

> US <- within(US,AVGF <- EMPL/FIRM)

> distchn <- rep(0,NUS)

> distus <- distchn

> for (i in 1:(NUS-1)){
+   sel <- which(US$AVGF > USleft[i] & US$AVGF <= USright[i])
+   distus[i] <- sum(US$EMPL[sel])
+   sel1 <- which(CHp$product .... [TRUNCATED]

> # Last category
> sel <- which(US$AVGF > USleft[NUS])

> distus[NUS] <- sum(US$EMPL[sel])

> distus <- distus/sum(distus)

> sel1 <- which(CHp$product > CHleft[NUS])

> distchn[NUS] <- sum(CHp$product[sel1])

> distchn <- distchn/sum(distchn)

> selp <- rep(0,NUS)

> ##### Median Intensity #####
> med_int <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CHp$product >= CHleft07[i] & CHp$product <= CHright07[i])
+   selp[i] <- length(sel)
+   med_int[i] <- quanti .... [TRUNCATED]

> sel <- which(CHp$product >= CHleft07[NUS])

> selp[NUS] <- length(sel)

> med_int[NUS] <- quantile(CHp$intensity[sel],probs= 0.5)

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> pchn <- sum(med_int*distchn)

> pus <- sum(med_int*distus)

> pmed_text <- pus/pchn

> ##### Piecewise Linear Estimation #####
> CHleftn <- USleft

> CHrightn <- USright

> for (i in 1:NUS){
+   sel <- which(CH$nbarworkers >= USleft[i] & CH$nbarworkers <= USright[i])
+   i_lm <- lm(log(product) ~ log(nbarworkers), data= .... [TRUNCATED]

> CHleftn <- CHleftn*deflator

> CHrightn <- CHrightn*deflator

> # Calculate new distribution for Chinese firms
> distchn1 <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CHp$product > CHleftn[i] & CHp$product <= CHrightn[i])
+   distchn1[i] <- sum(CHp$product[sel])
+ }

> # Last category
> sel1 <- which(CHp$product > CHleftn[NUS])

> distchn1[NUS] <- sum(CHp$product[sel1])

> distchn1 <- distchn1/sum(distchn1)

> ##### Regressing Intensity #####
> reg_int <- rep(0,NUS)

> for (i in 1:NUS){
+   sel <- which(CHp$product >= CHleftn[i] & CHp$product <= CHrightn[i])
+   i_lm <- lm(log(intensity) ~ log(product),data = CHp[s .... [TRUNCATED]

> pchn1 <- sum(reg_int*distchn1)

> pus1 <- sum(reg_int*distus)

> preg_text <- pus1/pchn1

> ##### Full Parametric Analysis #####
> y_lm <- lm(log(product) ~ log(nbarworkers), data = CH)

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> p_lm <- lm(log(intensity) ~ log(product), data = CHp)
> tmpa <- summary(y_lm)$coefficients["(Intercept)","Estimate"]
> tmpb <- summary(y_lm)$coefficients["log(nbarworkers)","Estimate"]
> tmpc <- summary(p_lm)$coefficients["(Intercept)","Estimate"]
> tmpd <- summary(p_lm)$coefficients["log(product)","Estimate"]
> mid_us <- (USleft+USright)/2
> par_int <- exp(tmpc + tmpd*(tmpa + tmpb*log(mid_us)))
> # Calculate new distribution for Chinese firms
> distchn2 <- rep(0,NUS)
> for (i in 1:(NUS-1)){
+   sel <- which(CH$nbarworkers > USleft[i] & CH$nbarworkers <= USright[i])
+   distchn2[i] <- sum(CH$nbarworkers[sel])
+ }
> # Last category
> sel1 <- which(CH$nbarworkers > USleft[NUS])
> distchn2[NUS] <- sum(CH$nbarworkers[sel1])
> distchn2 <- distchn2/sum(distchn2)
> pus <- sum(par_int*distus)
> pch <- sum(par_int*distchn2)
> ppar_text <- pus/pch
> # ----- Chemical Industry -----
> # Calculate the CNEC cut-off by production scale
> sel <- which(CHNprod$industry_a == .... [TRUNCATED]
> CH <- CHNprod[sel]
> # 2-digit sector price deflator, from Brandt etal 2012 JDE
> deflator <- 108.80/99.90
> for (i in 1:NUS){
+   sel <- which(CH$nbarworkers >= USleft[i] & CH$nbarworkers <= USright[i])
+   CHleft[i] <- quantile(CH$product[sel], probs=qua .... [TRUNCATED]
> CHleft07 <- CHleft*deflator

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> CHright07 <- CHright*deflator

> # Calculate the polluting intensity
> sel <- which(CHNpol$industry_a == 26)

> CHp <- CHNpol[sel]

> CHp <- within(CHp,intensity <- cod_e/product)

> # Calculate the US/China approximated production share
> sel <- which(USall$NAICS == 3251 | USall$NAICS == 3252
+             | USall$NAICS == 325 .... [TRUNCATED])

> US <- USall[sel]

> sel <- which(US$ENTRSIZE != 1 & US$ENTRSIZE != 6 & US$ENTRSIZE != 9)

> US <- US[sel]

> US <- US[, list(FIRM=sum(FIRM, na.rm = TRUE), ESTB=sum(ESTB, na.rm = TRUE),
+                EMPL=sum(EMPL, na.rm = TRUE)), by=list(ENTRSIZE)]

> US <- within(US,AVGF <- EMPL/FIRM)

> distchn <- rep(0,NUS)

> distus <- distchn

> for (i in 1:(NUS-1)){
+   sel <- which(US$AVGF > USleft[i] & US$AVGF <= USright[i])
+   distus[i] <- sum(US$EMPL[sel])
+   sel1 <- which(CHp$product .... [TRUNCATED])

> # Last category
> sel <- which(US$AVGF > USleft[NUS])

> distus[NUS] <- sum(US$EMPL[sel])

> distus <- distus/sum(distus)

> sel1 <- which(CHp$product > CHleft[NUS])

> distchn[NUS] <- sum(CHp$product[sel1])

> distchn <- distchn/sum(distchn)

> selp <- rep(0,NUS)

> ##### Median Intensity #####

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> med_int <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CHp$product >= CHleft07[i] & CHp$product <= CHright07[i])
+   selp[i] <- length(sel)
+   med_int[i] <- quanti .... [TRUNCATED]

> sel <- which(CHp$product >= CHleft07[NUS])

> selp[NUS] <- length(sel)

> med_int[NUS] <- quantile(CHp$intensity[sel],probs= 0.5)

> pchn <- sum(med_int*distchn)

> pus <- sum(med_int*distus)

> pmed_chem <- pus/pchn

> ##### Piecewise Linear Estimation #####
> CHleftn <- USleft

> CHrightn <- USright

> for (i in 1:NUS){
+   sel <- which(CH$nbarworkers >= USleft[i] & CH$nbarworkers <= USright[i])
+   i_lm <- lm(log(product) ~ log(nbarworkers), data= .... [TRUNCATED]

> CHleftn <- CHleftn*deflator

> CHrightn <- CHrightn*deflator

> # Calculate new distribution for Chinese firms
> distchn1 <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CHp$product > CHleftn[i] & CHp$product <= CHrightn[i])
+   distchn1[i] <- sum(CHp$product[sel])
+ }

> # Last category
> sel1 <- which(CHp$product > CHleftn[NUS])

> distchn1[NUS] <- sum(CHp$product[sel1])

> distchn1 <- distchn1/sum(distchn1)

> ##### Regressing Intensity #####
> reg_int <- rep(0,NUS)

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> for (i in 1:NUS){
+   sel <- which(CHp$product >= CHleftn[i] & CHp$product <= CHrightn[i])
+   i_lm <- lm(log(intensity) ~ log(product), data = CHp[s .... [TRUNCATED]

> pchn1 <- sum(reg_int*distchn1)

> pus1 <- sum(reg_int*distus)

> preg_chem <- pus1/pchn1

> ##### Full Parametricc Analysis #####
> y_lm <- lm(log(product) ~ log(nbarworkers), data = CH)

> p_lm <- lm(log(intensity) ~ log(product), data = CHp)

> tmpa <- summary(y_lm)$coefficients["(Intercept)","Estimate"]

> tmpb <- summary(y_lm)$coefficients["log(nbarworkers)","Estimate"]

> tmpc <- summary(p_lm)$coefficients["(Intercept)","Estimate"]

> tmpd <- summary(p_lm)$coefficients["log(product)","Estimate"]

> mid_us <- (USleft+USright)/2

> par_int <- exp(tmpc + tmpd*(tmpa + tmpb*log(mid_us)))

> # Calculate new distribution for Chinese firms
> distchn2 <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CH$nbarworkers > USleft[i] & CH$nbarworkers <= USright[i])
+   distchn2[i] <- sum(CH$nbarworkers[sel])
+ }

> # Last category
> sel1 <- which(CH$nbarworkers > USleft[NUS])

> distchn2[NUS] <- sum(CH$nbarworkers[sel1])

> distchn2 <- distchn2/sum(distchn2)

> pus <- sum(par_int*distus)

> pch <- sum(par_int*distchn2)

> ppar_chem <- pus/pch

> # ----- Beverage Industry -----
> # Calculate the CNEC cut-off by production scale

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> sel <- which(CHNprod$industry_a == .... [TRUNCATED]

> CH <- CHNprod[sel]

> # 2-digit sector price deflator, from Brandt etal 2012 JDE
> deflator <- 103.80/100.60

> for (i in 1:NUS){
+   sel <- which(CH$nbarworkers >= USleft[i] & CH$nbarworkers <= USright[i])
+   CHleft[i] <- quantile(CH$product[sel], probs=qua .... [TRUNCATED]

> CHleft07 <- CHleft*deflator

> CHright07 <- CHright*deflator

> # Calculate the polluting intensity
> sel <- which(CHNpol$industry_a == 15)

> CHp <- CHNpol[sel]

> CHp <- within(CHp,intensity <- cod_e/product)

> # Calculate the US/China approximated production share
> sel <- which(USall$NAICS == 3121)

> US <- USall[sel]

> sel <- which(US$ENTRSIZE != 1 & US$ENTRSIZE != 6 & US$ENTRSIZE != 9)

> US <- US[sel]

> US <- within(US,AVGF <- EMPL/FIRM)

> distchn <- rep(0,NUS)

> distus <- distchn

> for (i in 1:(NUS-1)){
+   sel <- which(US$AVGF > USleft[i] & US$AVGF <= USright[i])
+   distus[i] <- sum(US$EMPL[sel])
+   sel1 <- which(CHp$product .... [TRUNCATED]

> # Last category
> sel <- which(US$AVGF > USleft[NUS])

> distus[NUS] <- sum(US$EMPL[sel])

> distus <- distus/sum(distus)

> sel1 <- which(CHp$product > CHleft[NUS])

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> distchn[NUS] <- sum(CHp$product[sel1])

> distchn <- distchn/sum(distchn)

> selp <- rep(0,NUS)

> ##### Median Intensity #####
> med_int <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CHp$product >= CHleft07[i] & CHp$product <= CHright07[i])
+   selp[i] <- length(sel)
+   med_int[i] <- quanti .... [TRUNCATED]

> sel <- which(CHp$product >= CHleft07[NUS])

> selp[NUS] <- length(sel)

> med_int[NUS] <- quantile(CHp$intensity[sel],probs= 0.5)

> pchn <- sum(med_int*distchn)

> pus <- sum(med_int*distus)

> pmed_bever <- pus/pchn

> ##### Regressing Intensity #####
> reg_int <- rep(0,NUS)

> for (i in 1:NUS){
+   sel <- which(CHp$product >= CHleftn[i] & CHp$product <= CHrightn[i])
+   i_lm <- lm(log(intensity) ~ log(product),data = CHp[s .... [TRUNCATED]

> pchn1 <- sum(reg_int*distchn1)

> pus1 <- sum(reg_int*distus)

> preg_bever <- pus1/pchn1

> ##### Full Parametricc Analysis #####
> y_lm <- lm(log(product) ~ log(nbarworkers), data = CH)

> p_lm <- lm(log(intensity) ~ log(product), data = CHp)

> tmpa <- summary(y_lm)$coefficients["(Intercept)","Estimate"]

> tmpb <- summary(y_lm)$coefficients["log(nbarworkers)","Estimate"]

> tmpc <- summary(p_lm)$coefficients["(Intercept)","Estimate"]

```



```

> tmpd <- summary(p_lm)$coefficients["log(product)","Estimate"]

> mid_us <- (USleft+USright)/2

> par_int <- exp(tmpc + tmpd*(tmpa + tmpb*log(mid_us)))

> # Calculate new distribution for Chinese firms
> distchn2 <- rep(0,NUS)

> for (i in 1:(NUS-1)){
+   sel <- which(CH$nbarworkers > USleft[i] & CH$nbarworkers <= USright[i])
+   distchn2[i] <- sum(CH$nbarworkers[sel])
+ }

> # Last category
> sel1 <- which(CH$nbarworkers > USleft[NUS])

> distchn2[NUS] <- sum(CH$nbarworkers[sel1])

> distchn2 <- distchn2/sum(distchn2)

> pus <- sum(par_int*distus)

> pch <- sum(par_int*distchn2)

> ppar_bever <- pus/pch

> # ===== Table F.1 =====
> pmed <- c(pmed_paper,pmed_agri,pmed_text,pmed_chem,pmed_bever)

> preg <- c(preg_paper,preg_agri,preg_text,preg_chem,-1)

> ppar <- c(ppar_paper,ppar_agri,ppar_text,ppar_chem,ppar_bever)

> pmed
[1] 0.3981391 0.6070310 0.8162214 1.0253367 1.0384678

> preg
[1] 0.3481298 0.6936877 0.9345822 1.8018213 -1.0000000

> ppar
[1] 0.4346391 0.6111772 0.9750131 1.0116893 0.8898084

```