Problem Set I

ECO7707 - International Economic Relations

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Data Collection and Gravity Equation

1. Use the function get.Comtrade() which we discussed in class to download all trade flows between the 20 largest countries for the year 2014. Collect only information on the total trade (i.e. use c = "TOTAL") but get information on both imports and exports.

```
# Import the datasets on countries GDP for two years 2014 and 1995.
#-------------------------------------------------------------------------------

gdp_1995 <- read.csv("/Users/armandkapllani/Desktop/UF_Econ/International_Econo
gdp_2014 <- read.csv("/Users/armandkapllani/Desktop/UF_Econ/International_Econo
distance <- read.csv("/Users/armandkapllani/Desktop/UF_Econ/International_Econo

gdp_1995 <- data.table(gdp_1995)
gdp_2014 <- data.table(gdp_2014)


# 1.1. Use the function get.Comtrade() which we discussed in class to download
#      trade flows between the 20 largest countries for the year 2014. Collect
#      information on the total trade (i.e. use c = "TOTAL") but get informatio
#      both imports and exports.
#-------------------------------------------------------------------------------

## Exports (2014)

I_C <- as.character(c(gdp_2014$cty_code))
d1 <- NULL
for (i_c in I_C[1:5]) {
for (i_k in I_C) {
if (i_c == i_k) {
next
}
else if (i_c != i_k) {
data_i_c <- get.Comtrade(r = i_c, p = i_k, rg = "2", c = "TOTAL", ps = "2014")
d1 <- rbind(d1, data_i_c)
```

```
}
}
Sys.sleep(10)
}

Sys.sleep(3660)

I_C <- as.character(c(gdp_2014$cty_code))
d2 <- NULL
for (i_c in I_C[6:10]) {
for (i_k in I_C) {
if (i_c == i_k) {
next
}
else if (i_c != i_k) {
data_i_c <- get.Comtrade(r = i_c, p = i_k, rg = "2", c = "TOTAL", ps = "2014")
d2 <- rbind(d2, data_i_c)
}
}
Sys.sleep(10)
}

Sys.sleep(3660)

I_C <- as.character(c(gdp_2014$cty_code))
d3 <- NULL
for (i_c in I_C[11:15]) {
for (i_k in I_C) {
if (i_c == i_k) {
next
}
else if (i_c != i_k) {
data_i_c <- get.Comtrade(r = i_c, p = i_k, rg = "2", c = "TOTAL", ps = "2014")
d3 <- rbind(d3, data_i_c)
}
}
Sys.sleep(10)
}

Sys.sleep(3660)

I_C <- as.character(c(gdp_2014$cty_code))
d4 <- NULL
for (i_c in I_C[16:20]) {
for (i_k in I_C) {
if (i_c == i_k) {
next
}
else if (i_c != i_k) {
data_i_c <- get.Comtrade(r = i_c, p = i_k, rg = "2", c = "TOTAL", ps = "2014")
```

```
d4<- rbind(d4, data_i_c)
}
}
Sys.sleep(10)
}

dta <- rbind(d1, d2, d3, d4)
dta <- data.table(data)

## Imports (2014)

I_C <- as.character(c(gdp_2014$cty_code))
d5 <- NULL
for (i_c in I_C[1:5]) {
for (i_k in I_C) {
if (i_c == i_k) {
next
}
else if (i_c != i_k) {
data_i_c <- get.Comtrade(r = i_c, p = i_k, rg = "1", c = "TOTAL", ps = "2014")
d5 <- rbind(d5, data_i_c)
}
}
Sys.sleep(10)
}

Sys.sleep(3660)

I_C <- as.character(c(gdp_2014$cty_code))
d6 <- NULL
for (i_c in I_C[6:10]) {
for (i_k in I_C) {
if (i_c == i_k) {
next
}
else if (i_c != i_k) {
data_i_c <- get.Comtrade(r = i_c, p = i_k, rg = "1", c = "TOTAL", ps = "2014")
d6 <- rbind(d6, data_i_c)
}
}
Sys.sleep(10)
}

Sys.sleep(3660)

I_C <- as.character(c(gdp_2014$cty_code))
d7 <- NULL
for (i_c in I_C[11:15]) {
for (i_k in I_C) {
if (i_c == i_k) {
```

```
next
}
else if (i_c != i_k) {
data_i_c <- get.Comtrade(r = i_c, p = i_k, rg = "1", c = "TOTAL", ps = "2014")
d7 <- rbind(d7, data_i_c)
}
}
Sys.sleep(10)
}

Sys.sleep(3660)

I_C <- as.character(c(gdp_2014$cty_code))
d8 <- NULL
for (i_c in I_C[16:20]) {
for (i_k in I_C) {
if (i_c == i_k) {
next
}
else if (i_c != i_k) {
data_i_c <- get.Comtrade(r = i_c, p = i_k, rg = "1", c = "TOTAL", ps = "2014")
d8 <- rbind(d8, data_i_c)
}
}
Sys.sleep(10)
}

data_countries_2014 <- rbind(d1, d2, d3, d4, d5, d6, d7, d8)
data_countries_2014 <- data.table(data_countries_2014)
```