BEA - Regional - Download

Datasets

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Contents

Introduction

```
rm(list = ls())
pklist <- c("tidyverse")
source("https://fgeerolf.github.io/datasets/load-packages.R")
options(tibble.print_max = 100)
```

An updated version of this note is available here: https://fgeerolf.github.io/datasets/bea-regional-download.pdf
Link to download th BEA Regional flat files: https://apps.bea.gov/regional/downloadzip.cfm

Datasets

State PCE

```
load("fips.statenames.xwalk.RData")

crosswalk <- fips.statenames.xwalk %>%
  select(state.code = stateabbrev, state.name = statenames1) %>%
  filter(state.name != "Foreign")

save(crosswalk, file = "crosswalk.RData")
```

```
PCE <- read.csv("PCEbyState/PCE_ALL_AREAS.csv") %>%
  gather(variable, value, -GeoFIPS, -GeoName, -Region, -ComponentId,
         -ComponentName, -Line, -IndustryClassification, -Description) %>%
  mutate(date = variable %>% paste %>% substr(2, 5),
         date = date %>% as.numeric) %>%
  select(-variable) %>%
  select(date, fips = GeoFIPS, GeoName, line = Line, Description, value) %>%
  filter(!is.na(line)) %>%
  mutate(variable.desc1 = Description %>% paste,
         state.name = GeoName %>% paste,
```

```
         fips = fips %>% paste %>% as.numeric/1000,
         variable = paste0("PCE_line", line)) %>%
  inner_join(crosswalk, by = "state.name") %>%
  select(variable, variable.desc1, state.code, state.name, date, value) %>%
  mutate(variable.desc1 = variable.desc1 %>% paste)

save(PCE, file = "PCE.RData")
```

State GDP

```
GDP <- "qgdpstate_all/qgdpstate_all.csv" %>%
  read.csv %>%
  gather(variable, value, -GeoFIPS, -GeoName, -Region, -ComponentId, -ComponentName,
         -IndustryId, -IndustryClassification, -Description) %>%
  mutate(time = variable %>% paste,
         year = time %>% substr(2, 5) %>% as.numeric,
         qtr = time %>% substr(8, 8) %>% as.numeric,
         date = year + (qtr - 1)/4) %>%
  select(-time, -variable, -year, -qtr) %>%
  mutate(value = value %>% as.numeric,
         fips = GeoFIPS %>% paste %>% as.numeric /1000) %>%
  select(-GeoFIPS, -GeoName) %>%
  right_join(fips.statenames.xwalk %>%
               select(fips, state.code = stateabbrev),
             by = "fips") %>%
  # Remove State = Foreign (FR)
  filter(state.code != "FR") %>%
  select(state.code, date, everything()) %>%
  left_join(crosswalk, by = "state.code") %>%
  select(-fips) %>%
  arrange(state.code, date) %>%
  mutate_at(vars(-date, -value), funs(paste)) %>%
  mutate(variable = paste0("GDP_comp", ComponentId, "_ind", IndustryId)) %>%
  select(variable, variable.desc1 = ComponentName, variable.desc2 = Description,
         state.code, state.name, date, value)
```

```
## Warning: attributes are not identical across measure variables;
## they will be dropped
```

```
## Warning in function_list[[k]](value): NAs introduced by coercion
```

```
## Warning in function_list[[k]](value): NAs introduced by coercion
```

```
save(GDP, file = "GDP.RData")
```

Computing Environment

```
Sys.time()
```

```
## [1] "2018-09-29 16:42:42 PDT"
```

```
sessionInfo()
```

```
## R version 3.5.1 (2018-07-02)
## Platform: x86_64-apple-darwin15.6.0 (64-bit)
## Running under: macOS High Sierra 10.13.6
##
## Matrix products: default
## BLAS: /Library/Frameworks/R.framework/Versions/3.5/Resources/lib/libRblas.0.dylib
## LAPACK: /Library/Frameworks/R.framework/Versions/3.5/Resources/lib/libRlapack.dylib
##
## locale:
## [1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8
##
## attached base packages:
## [1] stats     graphics  grDevices utils     datasets  methods   base
##
## other attached packages:
##  [1] bindrcpp_0.2.2  forcats_0.3.0   stringr_1.3.1   dplyr_0.7.6
##  [5] purrr_0.2.5     readr_1.1.1     tidyr_0.8.1     tibble_1.4.2
##  [9] ggplot2_3.0.0   tidyverse_1.2.1
##
## loaded via a namespace (and not attached):
##  [1] Rcpp_0.12.18     cellranger_1.1.0 pillar_1.3.0     compiler_3.5.1
##  [5] plyr_1.8.4       bindr_0.1.1      tools_3.5.1      digest_0.6.15
##  [9] lubridate_1.7.4  jsonlite_1.5     evaluate_0.11    nlme_3.1-137
## [13] gtable_0.2.0     lattice_0.20-35  pkgconfig_2.0.2  rlang_0.2.2
## [17] cli_1.0.0        rstudioapi_0.7   yaml_2.2.0       haven_1.1.2
## [21] withr_2.1.2      xml2_1.2.0       httr_1.3.1       knitr_1.20
## [25] hms_0.4.2        rprojroot_1.3-2  grid_3.5.1       tidyselect_0.2.4
## [29] glue_1.3.0       R6_2.2.2         readxl_1.1.0     rmarkdown_1.10
## [33] modelr_0.1.2     magrittr_1.5     backports_1.1.2  scales_1.0.0
## [37] htmltools_0.3.6  rvest_0.3.2      assertthat_0.2.0 colorspace_1.3-2
## [41] stringi_1.2.4    lazyeval_0.2.1   munsell_0.5.0    broom_0.5.0
## [45] crayon_1.3.4
```