

# 5811 Output

<3 <3

*Sometime*

## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

## Environments

## Indicators

### List of Indicators:

```
wb_geo <- as_tibble(wb_cachelist$datacatalog)
wb_countries <- as_tibble(wb_cachelist$countries)
```

### Bank liquid reserves to bank assets ratio (%)

Ratio of bank liquid reserves to bank assets is the ratio of domestic currency holdings and deposits with the monetary authorities to claims on other governments, nonfinancial public enterprises, the private sector, and other banking institutions.

### Bank nonperforming loans to total gross loans (%)

Bank nonperforming loans to total gross loans are the value of nonperforming loans divided by the total value of the loan portfolio (including nonperforming loans before the deduction of specific loan-loss provisions). The loan amount recorded as nonperforming should be the gross value of the loan as recorded on the balance sheet, not just the amount that is overdue.

### Domestic credit to private sector by banks (% of GDP)

Domestic credit to private sector by banks refers to financial resources provided to the private sector by other depository corporations (deposit taking corporations except central banks), such as through loans, purchases of nonequity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries these claims include credit to public enterprises.

### Primary income on FDI, payments (current US\$)

Primary income on foreign direct investment covers payments of direct investment income (debit side), which consist of income on equity (dividends, branch profits, and reinvested earnings) and income on the intercompany debt (interest). Data are in current U.S. dollars.

### GDP (current US\$)

GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Data are in current U.S. dollars. Dollar figures for GDP are converted from domestic currencies using single year official exchange rates. For a few countries where the official exchange rate does not reflect the rate effectively applied to actual foreign exchange transactions, an alternative conversion factor is used.

### IBRD loans and IDA credits (DOD, current US\$)

IBRD loans and IDA credits are public and publicly guaranteed debt extended by the World Bank Group. The International Bank for Reconstruction and Development (IBRD) lends at market rates. Credits from the International Development Association (IDA) are at concessional rates. Data are in current U.S. dollars.

### Risk premium on lending (lending rate minus treasury bill rate, %)

Risk premium on lending is the interest rate charged by banks on loans to private sector customers minus the “risk free” treasury bill interest rate at which short-term government securities are issued or traded in the market. In some countries this spread may be negative, indicating that the market considers its best corporate clients to be lower risk than the government. The terms and conditions attached to lending rates differ by country, however, limiting their comparability.

```
#Import
restoliq <- as_tibble(wb(country = "countries_only", indicator = "FD.RES.LIQU.AS.ZS", startdate = 2000, enddate = 2019))
npltototg <- as_tibble(wb(country = "countries_only", indicator = "FB.AST.NPER.ZS", startdate = 2000, enddate = 2019))
credtopriv <- as_tibble(wb(country = "countries_only", indicator = "FD.AST.PRVT.GD.ZS", startdate = 2000, enddate = 2019))
fdiin <- as_tibble(wb(country = "countries_only", indicator = "BX.KLT.DINV.CD.WD", startdate = 2000, enddate = 2019))
gdp <- as_tibble(wb(country = "countries_only", indicator = "NY.GDP.MKTP.CD", startdate = 2000, enddate = 2019))
loancred <- as_tibble(wb(country = "countries_only", indicator = "DT.DOD.MWBG.CD", startdate = 2000, enddate = 2019))
riskprem <- as_tibble(wb(country = "countries_only", indicator = "FR.INR.RISK", startdate = 2000, enddate = 2019))

# Rename all the variables & clean up:
restoliq <- restoliq %>% rename(restoliq = value) %>% select (-c("indicatorID", "indicator", "iso2c", "country"))
npltototg <- npltototg %>% rename(npltototgR = value) %>% select (-c("indicatorID", "indicator", "iso2c", "country"))
credtopriv <- credtopriv %>% rename(credtopriv = value) %>% select (-c("indicatorID", "indicator", "iso2c", "country"))
fdiin <- fdiin %>% rename(fdiin = value) %>% select (-c("indicatorID", "indicator", "iso2c", "country"))
loancred <- loancred %>% rename(loancred = value) %>% select (-c("indicatorID", "indicator", "iso2c", "country"))
riskprem <- riskprem %>% rename(riskprem = value) %>% select (-c("indicatorID", "indicator", "iso2c", "country"))
gdp <- gdp %>% rename(gdp = value) %>% select (-c("indicatorID", "indicator", "iso2c", "country"))
wb_incomeregion <- wb_countries %>% select(c("iso3c", "income", "region"))

# Merge Data together using GDP as base
df <- gdp
df <- df %>% full_join(credtopriv, by = c("iso3c", "date")) %>%
  full_join(riskprem, by = c("iso3c", "date")) %>%
  full_join(loancred, by = c("iso3c", "date")) %>%
  full_join(fdiin, by = c("iso3c", "date")) %>%
  full_join(npltototg, by = c("iso3c", "date")) %>%
  full_join(restoliq, by = c("iso3c", "date")) %>%
  full_join(wb_incomeregion, by = "iso3c")
```

## Add variable for ASEAN Countries

BRN Brunei Darussalam KHM Cambodia IDN Indonesia LAO Lao People's Democratic Republic MYS Malaysia MMR Myanmar PHL Philippines SGP Singapore THA Thailand VNM Viet Nam

```
asean = c("BRN", "KHM", "IDN", "LAO", "MYS", "MMR", "PHL", "SGP", "THA", "VNM")
```

*#For some reason that code does not work, so i do it by hand*

```
df <- mutate(df, asean = ifelse(iso3c %in% list(list(asean)), 1, 0))
```

```
df <- mutate(df, asean = ifelse(iso3c == "BRN", 1,  
                                ifelse(iso3c == "KHM", 1,  
                                    ifelse(iso3c == "IDN", 1,  
                                        ifelse(iso3c == "LAO", 1,  
                                            ifelse(iso3c == "MYS", 1,  
                                                ifelse(iso3c == "MMR", 1,  
                                                    ifelse(iso3c == "PHL", 1,  
                                                        ifelse(iso3c == "SGP", 1,  
                                                            ifelse(iso3c == "THA",  
                                                                ifelse(iso3c ==
```

```
df_sum <- df %>% group_by(region) %>%  
  summarize(gdp = mean(gdp, na.rm=TRUE),  
            credtopriv = mean(credtopriv, na.rm=TRUE),  
            riskprem = mean(riskprem, na.rm=TRUE),  
            fdiin = mean(fdiin, na.rm=TRUE),  
            npltototg = mean(npltototg, na.rm=TRUE),  
            restoliq = mean(restoliq, na.rm=TRUE))
```

```
## Warning in mean.default(npltototg, na.rm = TRUE): argument is not numeric  
## or logical: returning NA
```

```
## Warning in mean.default(npltototg, na.rm = TRUE): argument is not numeric  
## or logical: returning NA
```

```
## Warning in mean.default(npltototg, na.rm = TRUE): argument is not numeric  
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## Warning in mean.default(npltototg, na.rm = TRUE): argument is not numeric  
## or logical: returning NA
```

```
## Warning in mean.default(npltototg, na.rm = TRUE): argument is not numeric  
## or logical: returning NA
```

```
df_sum_asean <- df %>% group_by(asean) %>%  
  summarize(gdp = mean(gdp, na.rm=TRUE),  
            credtopriv = mean(credtopriv, na.rm=TRUE),  
            riskprem = mean(riskprem, na.rm=TRUE),  
            fdiin = mean(fdiin, na.rm=TRUE),  
            npltototg = mean(npltototg, na.rm=TRUE),  
            restoliq = mean(restoliq, na.rm=TRUE))
```

```
## Warning in mean.default(npltototg, na.rm = TRUE): argument is not numeric
```

```
## or logical: returning NA
```

```
## Warning in mean.default(npltototg, na.rm = TRUE): argument is not numeric
```

```
## or logical: returning NA
```

```
df_sum
```

```
## # A tibble: 8 x 7
```

##	region	gdp	credtopriv	riskprem	fdiin	npltototg	restoliq
##	<chr>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>
## 1	Aggregates	NaN	NaN	NaN	NaN	NA	NaN
## 2	East Asia & P~	3.22e11	59.1	4.39	7.21e 9	NA	21.5
## 3	Europe & Cent~	2.90e11	65.9	5.17	1.66e10	NA	16.2
## 4	"Latin Americ~	8.91e10	39.5	7.82	3.57e 9	NA	22.1
## 5	Middle East &~	8.12e10	41.7	4.25	2.93e 9	NA	24.5
## 6	North America	4.66e12	81.9	2.57	9.02e10	NA	1.54
## 7	South Asia	1.45e11	29.5	3.61	2.56e 9	NA	25.8
## 8	"Sub-Saharan ~	1.72e10	15.3	8.26	4.52e 8	NA	23.6

```
df_sum_asean
```

```
## # A tibble: 2 x 7
```

##	asean	gdp	credtopriv	riskprem	fdiin	npltototg	restoliq
##	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>
## 1	0	242523202122.	42.5	6.13	8063053363.	NA	21.0
## 2	1	108484047571.	49.6	4.62	4812959134.	NA	28.8