**DATA EXERCISE #1**

**Due at the end of week 3**

**Format of the Project:**

The Data Exercise must be posted to the LEO Student Assignments as a Attachments are limited to a maximum two files in doc, docx., xls. xlsx., or rtf. formats. OTHER FORMATS ARE NOT ACCEPTABLE, will not be reviewed or graded.

**Please note that hand-written and scanned works, pdf. files, jpg. files, as well as files posted in google drive, will not be accepted or graded.**

**Please note that starting from the Fall 2020 semester the UMGC moved to the 7th Edition of the APA Style. The links to the 7th Edition of the APA Style methodology are posted in Content – Course Resources – Writing Resources.**

**No more than 20% of the text of the project should be made up of quotes.**

***Please note that Use of the 7th Edition APA Citation Methodology is required for all parts of the assignment.***

Written projects:

1. Must be typed, double-spaced, in 12-point Times New Roman or Arial font, with one-inch margins
2. Must have the title page in APA-7th style
3. Must have in-text citations in APA-7th edition style
4. Must have reference list in APA-7th edition style. Please note that you must reference the data you are using for the project
5. Must be prepared using word processing software (Microsoft Word preferred)

**Data exercise #1 Assignment**

**Consists of two parts.**

**Part 1: Expenditures Approach to Calculating GDP (weight 45% of the assignment grade)**

BEA estimates the nation's GDP for each year and each quarter. But new GDP statistics are released every month. Why? Because for each quarter, BEA estimates GDP three times. The **advance estimate**, coming about a month after the quarter's end, is an early look based on the best information available at that time. The **second estimate** and **third estimate** each incorporate additional source data that weren't available the month before, improving accuracy.( [www.bea.gov](http://www.bea.gov)).

BEA publishes estimates of levels at annual rates (for most series) for ease of comparisons with related and historical data. For example, in its February 2, 2004 personal income and outlays release, BEA estimated that personal income for December 2003 was $9,335.8 billion at an annual rate. This is easily compared to BEA’s estimates of personal income for the fourth quarter of 2003 ($9,312.6 billion, at an annual rate) and for the entire year of 2003 ($9,187.4 billion).([www.bea.gov](http://www.bea.gov)).

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**Complete the following exercise**

Visit the Bureau of Economic Analysis website at [www.bea.gov](http://www.bea.gov). From the drop-down menu under “Data”, click on “by Economics Account”.

Then click on “National”> “Gross Domestic Product > and “Full Release and Tables”. (To find “Full Release and Tables” you need to scroll down the page to the section “Current Release".

Use table 3 (Gross Domestic Product: Level and Change from Preceding Period). Tables are located at the end of the Release, so you need to scroll all the way down to the tables.

The left columns are nominal GDP (and its components) and the right half represents real GDP (chained 2012 dollars).

1. **Create the table that contains the following information for the last available quarter. Please note that using the data for previous years and/or previous estimates will produce grade zero for this part of the project.**

*You need this information from both* parts of the table 3- (nominal GDP (and its components) from left columns and real GDP (chained 2012 dollars) from the right part of the table 3). Omit the intermediate lines found in Table 3 on the web site.

* **Gross domestic product**
* **Personal consumption expenditures**
* **Gross private domestic investment**
* **Net exports of goods and services**
* **Government consumption expenditures and gross investment**

**b) Calculate the percentage (the proportion) of each category in nominal GDP and in real GDP.**

Using Nominal GDP:

[Personal consumption expenditures / Nominal GDP]\*100%

[Gross private domestic investment / Nominal GDP]\*100%

[Net exports of goods and services / Nominal GDP]\*100%

[Government consumption expenditures and gross investment/ Nominal GDP]\*100%

And using Real GDP:

[Personal consumption expenditures / Real GDP]\*100%

[Gross private domestic investment / Real]\*100%

[Net exports of goods and services / Real GDP]\*100%

[Government consumption expenditures and gross investment/ Real GDP]\*100%

**Present the information that you received (a) and (b) as a table(s) in your project.**

1. **Write a report (2 pages double - spaced), which contains an analysis of the results you received.**

***In this report consider, but do not be limited to the following:***

1. Why was the nominal GDP greater than the real GDP? By how much?
2. GDP is composed of a number of categories. What category makes up the largest portion of GDP? What category makes up the smallest portion of GDP?
3. What is “Gross private domestic investment”? What does gross private domestic investment measure?
4. What is “Net exports of goods and services”? Why it is negative?
5. In the left part of the table 3 (nominal GDP) find the category “National defense”. How much was the National defense for the last quarter? Calculate percentage of National defense out of “Government consumption expenditures and gross investment”. Calculate percentage of National defense out of GDP.
6. **Please analyze and discuss the significance of the data that you received for this Data exercise.**
7. Reflect on what you have learned from this exercise.

**Part 2: Income Approach to Calculating GDP (weight 45% of the assignment grade)**

**Complete the following exercise**:

Go to <http://www.bea.gov/>

Visit the Bureau of Economic Analysis website at [www.bea.gov](http://www.bea.gov/). From the drop-down menu under “Data”, click on “by Economics Account”. Then click on “National”, “Gross Domestic Product, and “Full Release and Tables”. Use table 7 (Relation of Gross Domestic Product, Gross National Product, and National Income) and table 8 (Personal Income and its Disposition).

1. **Create the table that contains the following information for the last quarter *where data required for this exercise is available*.**

**Please note that using the data for previous years and/or previous estimates will produce grade zero for this part of the project.**

Omit the intermediate lines found in Tables 7 and 8 on the web site.

* **Gross domestic product**
* **Gross national product**
* **Net national product** (you should calculate it as Gross national product minus Consumption of fixed capital)
* **National income**
* **Personal income**
* **Personal Disposable Income**
* **Personal Savings**

**Present the information that you received in your project.**

**2. Write a report *in your own words* (2 pages, double-spaced), which contains the analysis of the results you received. *In this report consider, but do not be limited to the following:***

1. What is the difference between gross domestic product (GDP) and gross national product (GNP)? What is the difference in what GDP measures compared to GNP?
2. Based on the table, what calculations must you make to determine GNP from GDP?
3. What is national income (NI)? What does NI measure?
4. Which was higher in this year, GNP or NI? By how much?
5. What calculations must you make to determine NI from GNP?
6. NI is composed of a number of categories. What category makes up the largest portion of NI?
7. What calculations must you make to determine Personal Income from National Income?
8. What calculations must you make to determine Personal Disposable Income and Personal Savings?
9. **Please analyze and discuss the significance of the data that you received for this Data exercise.**
10. Reflect on what you have learned from this exercise.

**PRESENTATION OF THE DATA EXERCISE AND USE OF APA CITATION METHODOLOGY (10%) of the project grade):**

-Organization, Format and Presentation of the Data Exercise. The project should have the Title page. Each part of the Data Exercise must begin with sub-headings. Please use the sub-headings included in the assignment. Please use double space, with one-inch margins, and 12-point Times New Roman font. (3% of the project grade)

Use of Tables, Figures and Other Graphics to Summarize and Support Analysis Presented in the Paper. All tables and charts should have the numbering system, like “Table 1…”, the title, and the note to reference the source of the information. (3% of the project grade)

Research Sources and Significance of Research Information and Data, Use of APA Citation Methodology (4% of the project grade).