# Project Report

A. what data sources you used

<https://catalogue.data.govt.nz/dataset/freight-information-gathering-system>

<https://www.investopedia.com/articles/forex/111015/how-cpi-affects-dollar-against-other-currencies.asp>

<https://tradingeconomics.com/new-zealand/consumer-price-index-cpi>

<https://www.rbnz.govt.nz/statistics/series/exchange-and-interest-rates/exchange-rates-and-the-trade-weighted-index>

B. Why you chose those data sources

Such data include Gross National Product and its components, Gross National Expenditure, Gross National Income in the National Income and Product Accounts, and also the capital stock and national wealth. In these examples data may be stated in nominal or real values, that is, in money or inflation-adjusted terms.

The Consumer Price Index (CPI) is a critical indicator of pricing pressures in an economy and provides a gauge of inflation. Forex traders monitor the CPI, as it can lead to changes in monetary policy by the central bank that will either strengthen or weaken the currency against rivals in the markets.

C. What target you chose (i.e., what is the intended use of the data, ...)

Our team decided to collect data that relates various social & economical activities in New Zealand; we will attempt to collect monetary policies data such as CPI, HPI, Exchange Rate as well as Inflation. Other economical activities data such as but not limited to “Transportation data”, “Ferry data”, “Tourism Satellite Account”.

The aforementioned data could come from different types of sources, we have observed data source type like “html”, “pdf”, “csv”, “excel file” and “Rest api”.

D. What difficulties you had to overcome to wrangle the data sources into the target data model

E. What techniques you did use

We plan to retrieve aforementioned data via these different sources first, then through the process of data wrangling to transform these data sources into relational database;

The final deliverable of our project should be a relationship database, that contains all aspects of New Zealand economic activities as well as government monetary policies. Such database can be utilized for further data mining analysis as well as data visualization tasks. We will plot a simple flow chart diagram to indicates the correlation between some of the chosen data, for example “Exchange Rate” VS. “Tourism Satellite Account”. It is anticipated that as exchange rate drops, New Zealand dollar becomes cheaper, we should be able to observe an increase of “Tourism account”.



F. What you managed to achieve and what you failed to do

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Freight Data :

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