

2017 EM1 Week 17 Investigation

Will China Become The World's Most Powerful Nation?

Let's see if we can answer this by comparing the economic power of the US, China, and Australia. Specifically, we'll try to use Gross Domestic Product, or GDP for short, (which measures the size of an economy) for these three countries as a measurement of economic power. This is what it looks like, as of 2015:

US current GDP - \$16.77 trillion

China current GDP - \$9.24 trillion

Australia current GDP - \$1.56 trillion

As of 2015, the case looks pretty clear. Out of the three countries that we've picked, the US is No. 1, China is No. 2, and Australia is No. 3. But just looking at the numbers makes it hard to get a feel about just how different the sizes of the economies are, and the best way to do this is to make a column graph.

Making A Table

The first step to making a graph is making a table. A table is also good if you want to present the figures in writing, as no-one wants to read a block of text with numbers in it. To make a table, we first need to decide what size of table we want. The first row should generally be used for the labels, and since we have three countries to compare, we will have three more rows for data, bringing the total to four rows. We will also have one column for each "variable", and in this case there are two types ("country name" and "GDP").

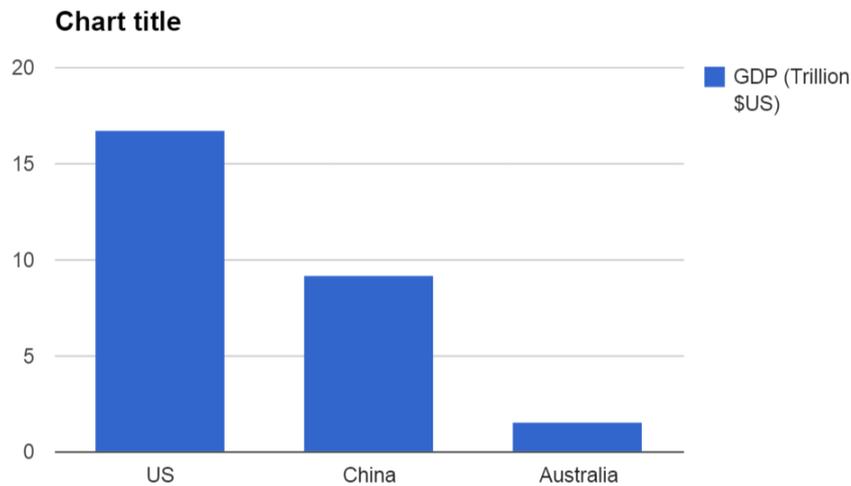
Country Name	GDP (Trillion \$US)
US	16.77
China	9.24
Australia	1.56

Note that the 'spacing' of the table and bold headings make the table look neat.

Making a Column Graph

When you draw a column graph keep the following in mind:

- The columns should be of equal width
- The vertical axis should start at 'zero' (to avoid being misleading)
- The chart should be labelled.
- Make sure you use a 'key' if necessary ie if you use 5 instead of 5 000 000 000



As you can see, the visual impact of this graph is much more than that of the table. The economy of the US is really big. And the economy of Australia is really small in comparison. And the economy of China is somewhere in the middle.

Making Things More Complicated - Using Two Sets of Data

We can now go one step further, and add in some more complicated data. Try looking for the [GDP of each of these countries in 2000](#). Add that information into your table, by putting an extra column in the middle.

For the year 2000 the GDP's were; US 10.28 trillion, China 1.19 trillion, Australia 0.41 trillion

For you to do

1. Draw up a neat table GDP in 2000 and 2015
2. Draw a column graph but this time each country will have two columns side by side (one column for 2000 and one for 2015 – these can 'touch'). Make sure your graph has a heading and the axis are clearly labelled so that you can quickly see what data is being presented.

As you can see, your new graph says more than boring numbers ever could. You can see that within 15 years or so, China's GDP has increased from barely larger than Australia's to more than half of America's, whilst the US and Australia have not grown by anywhere near as much. So, at the moment, the US is the most economically powerful nation in the world, but as this graph shows, China may well overtake them [sometime soon](#).