Homework 3: Computational Methods for Economists

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Why Do Some Civil Wars Last So Much Longer than Others? (Fearon, 2004)

In this paper (Fearon, 2004) investigates why some civil wars last longer than others. I took this data from his website and I try to replicate some of his figures, as follows.

The data I used does not perfectly match his data. So the figures are slightly different, but the main idea does not change.

Figure 1 shows the average duration of civil wars from 1945 to 2000. We easily observe that civil wars in progress in the period under review have recorded significant fluctuations, reaching a peak of 32 years around 1968 - 1969, and then saw a dramatic drop to 4 years in 1970.

Figure 2 on the other hand shows the average number of deaths resulting from civil wars, over the same period. Finally in figure 3 I merge the two graphs together to understand the pattern more clearly. We see that on average there is a strong positive correlation between the duration of civil wars and number of deaths. It is also important to note that number of deaths tend to lead average duration of wars. This means that if the initial number of deaths is high, it informs that the war will be a protracted one.
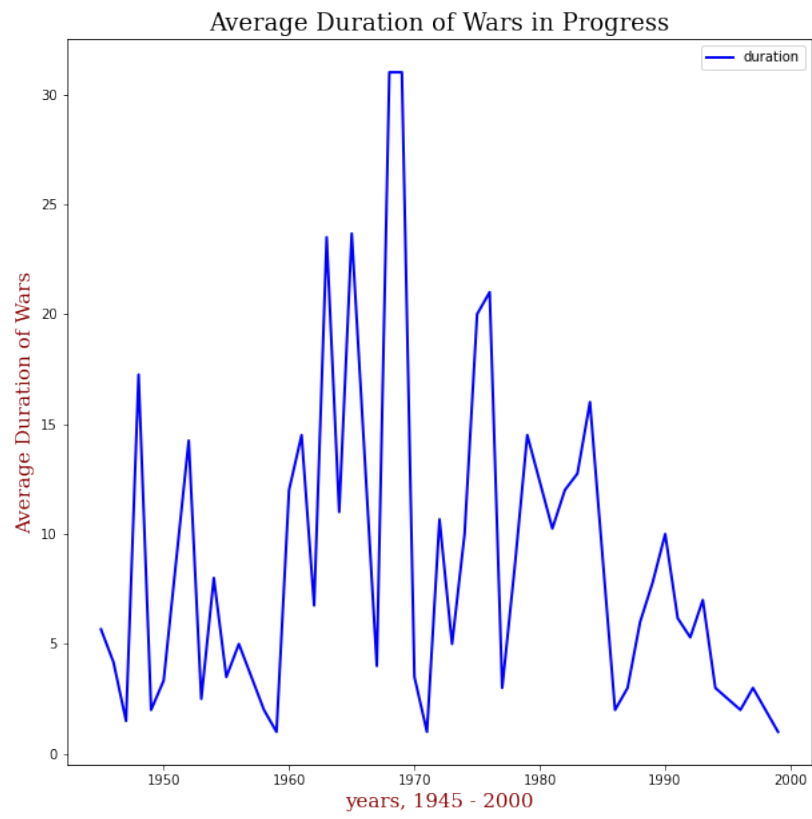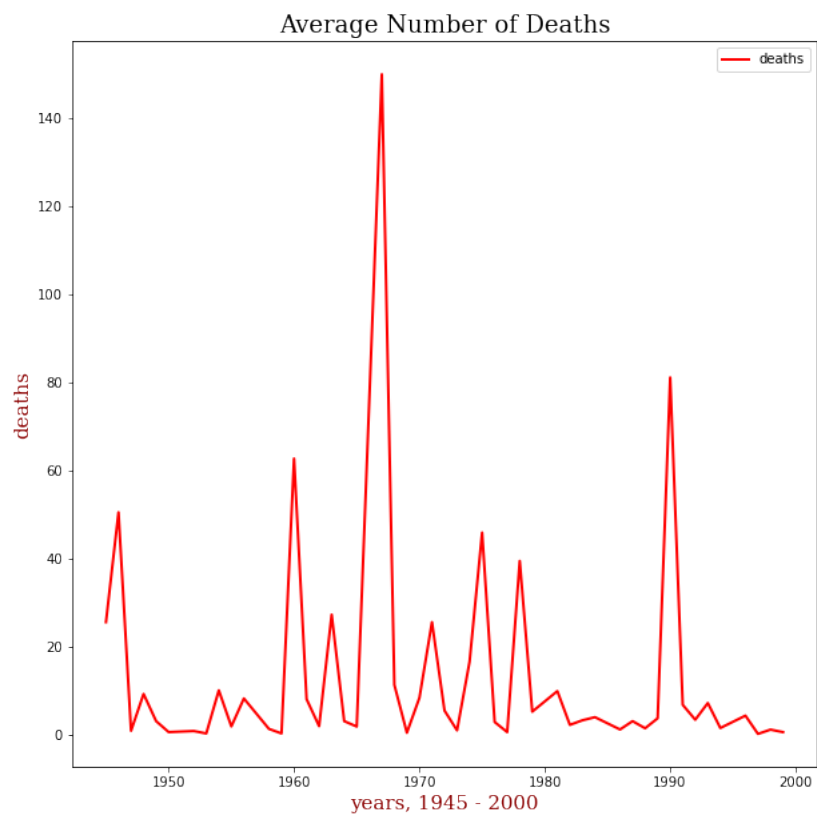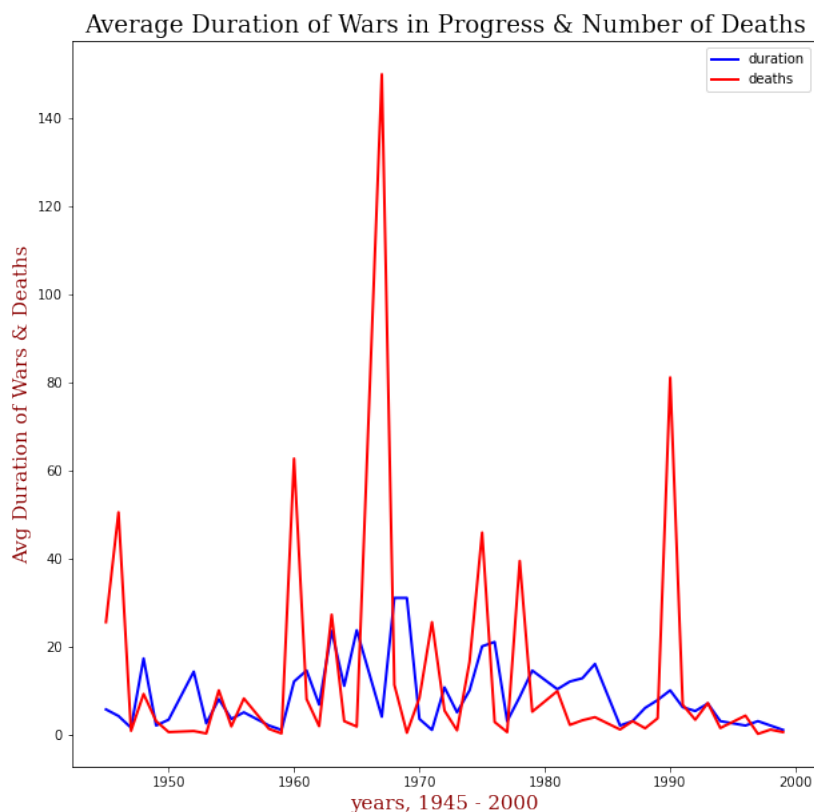
Figure 1:

Figure 2:

Figure 3:

THE PERMANENT EFFECTS OF TRANSPORTATION REVOLUTIONS IN POOR COUNTRIES: EVIDENCE FROM AFRICA (Jedwab & Moradi, 2016)

In this study (Jedwab & Moradi, 2016) investigate the construction and eventual demise of colonial railways in Ghana, and other African countries, to determine the impact of transportation investments in poor countries. They found that even though the colonial rail roads have collapsed, they generated economic activity in surrounding areas during colonial times, and these effects have been permanent. One of the significant results they found is the growth of cities and urbanisation rates in the rail-road areas. This is shown in figure 4. The full operation of the railroads commenced in 1901.
Notes: The plot is not well drawn. There should be a plot line for the number

of cities just like the urbanisation rate. It is either the replication files do not contain all the data or I couldn't write a proper code for that.
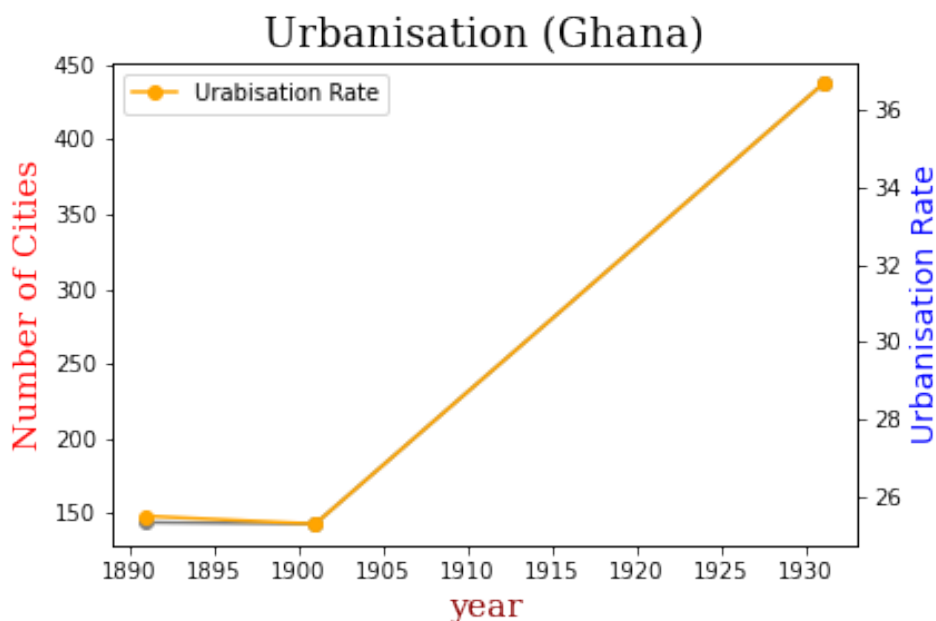

Figure 4:

References

Fearon, J. D. (2004). Why do some civil wars last so much longer than others? *Journal of peace research*, *41*(3), 275–301.

Jedwab, R., & Moradi, A. (2016). The permanent effects of transportation revolutions in poor countries: evidence from africa. *Review of economics and statistics*, *98*(2), 268–284.