



STUDY ON ABORTION TRENDS IN THE EUROPEAN UNION

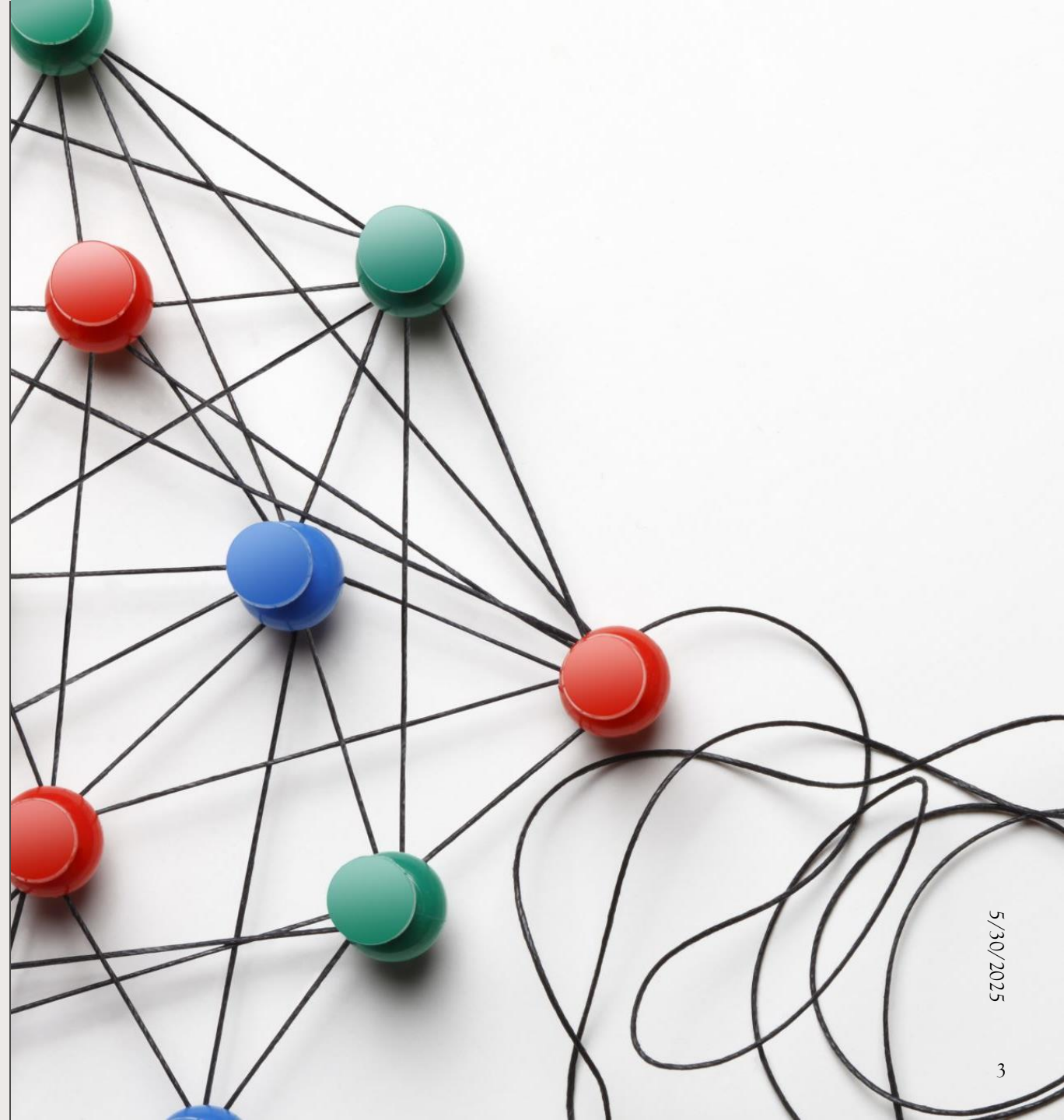
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Objectives of the Study

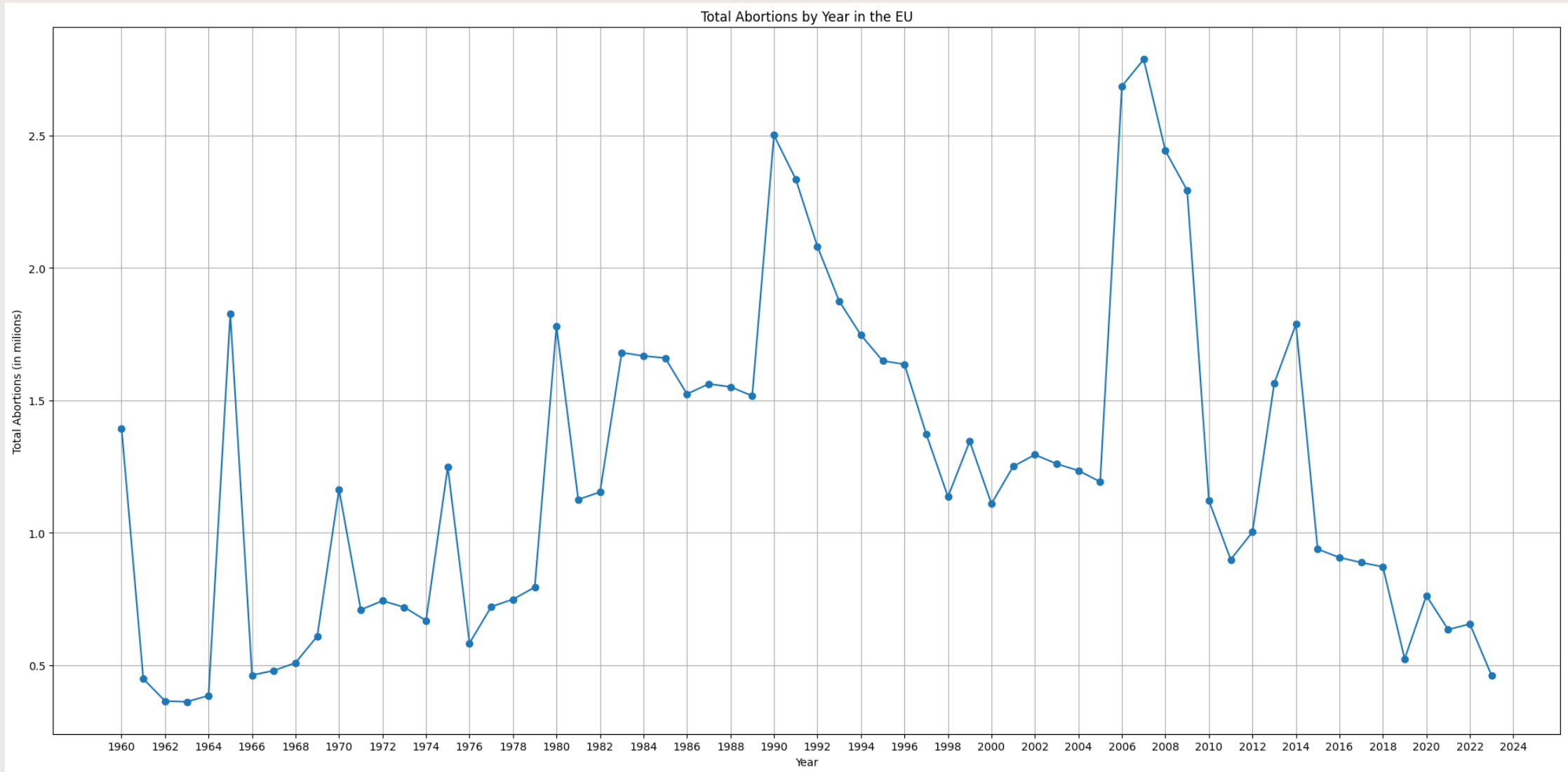
- Analyze trends in abortion across EU countries.
- Examine correlations with natality and demographic changes.
- Focus on Romania in EU context.
- Evaluate legislative impact on abortion rates.

In this study I tried to answer the following questions:

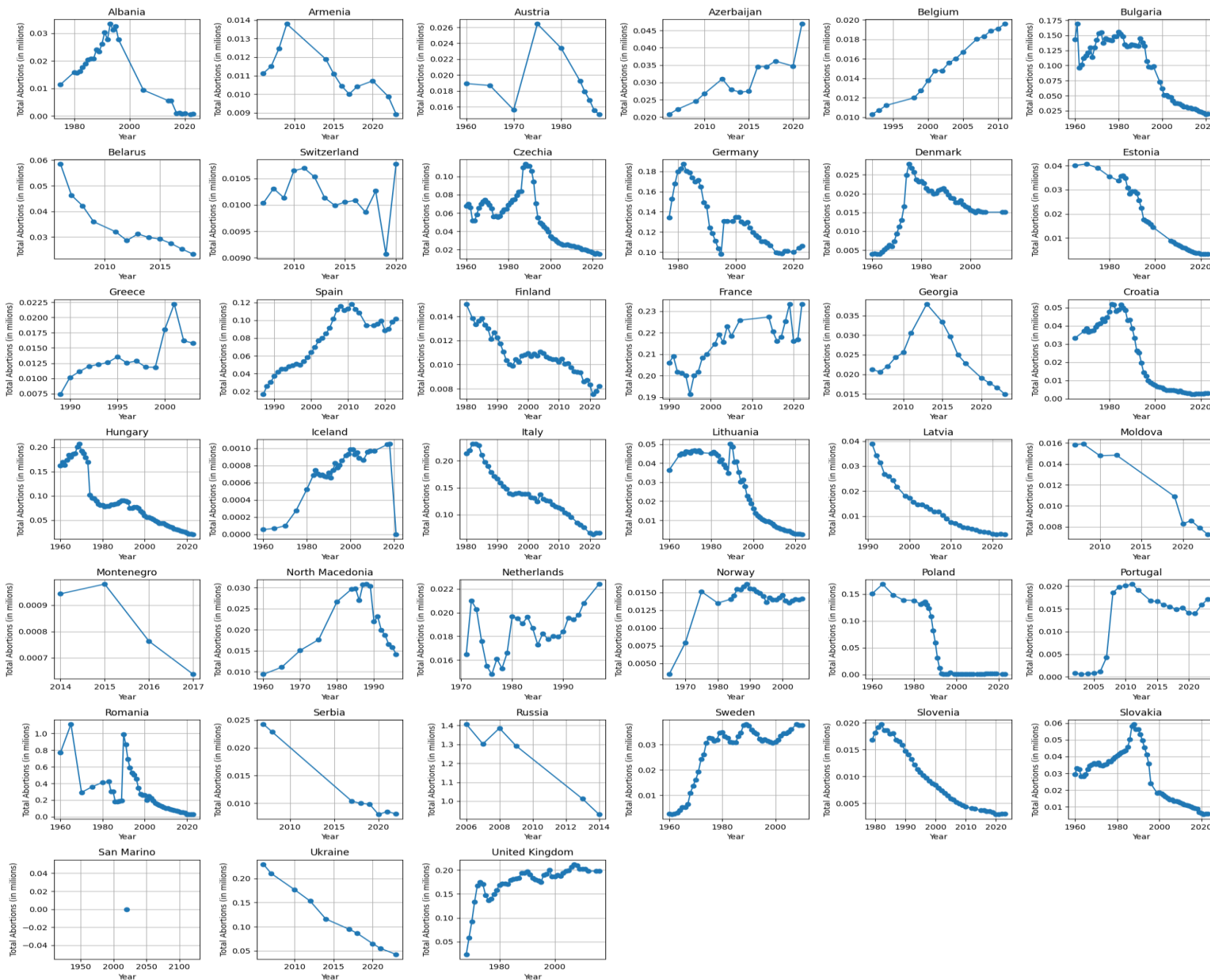
1. How have abortion rates changed over time across EU countries?
2. How do EU countries rank in terms of abortion numbers?
3. Is there a correlation between the natality and the number of abortions?
4. How do demographics (age) affect abortion rates?
5. Do major events or new legislation impact the number of abortions?



1. How did the abortion rates change over time across EU countries?



Total Abortions by Year in the EU



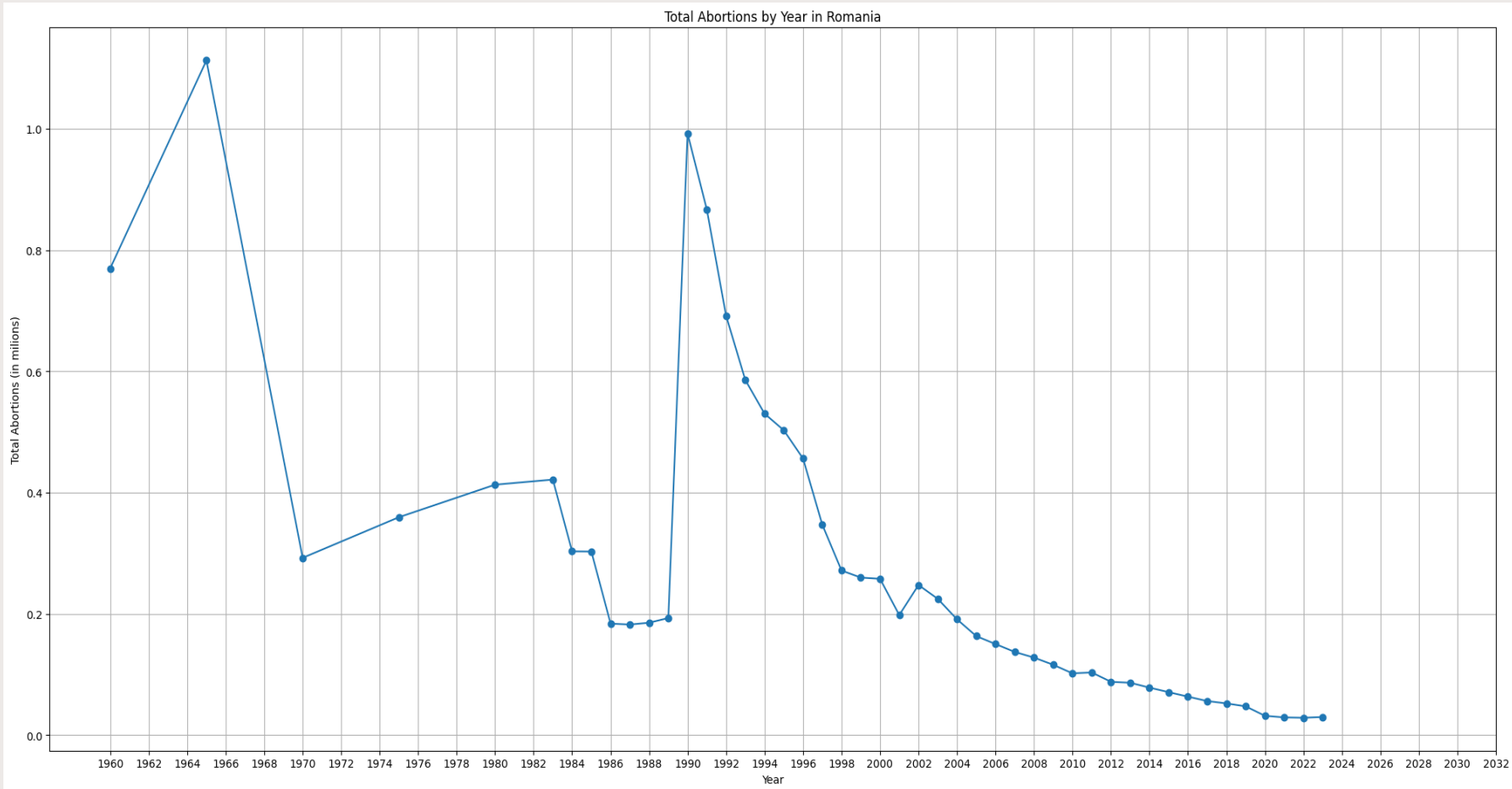
We notice a decreasing trend in a lot of countries in Europe.

I wonder why?

Two hypotheses I have are:

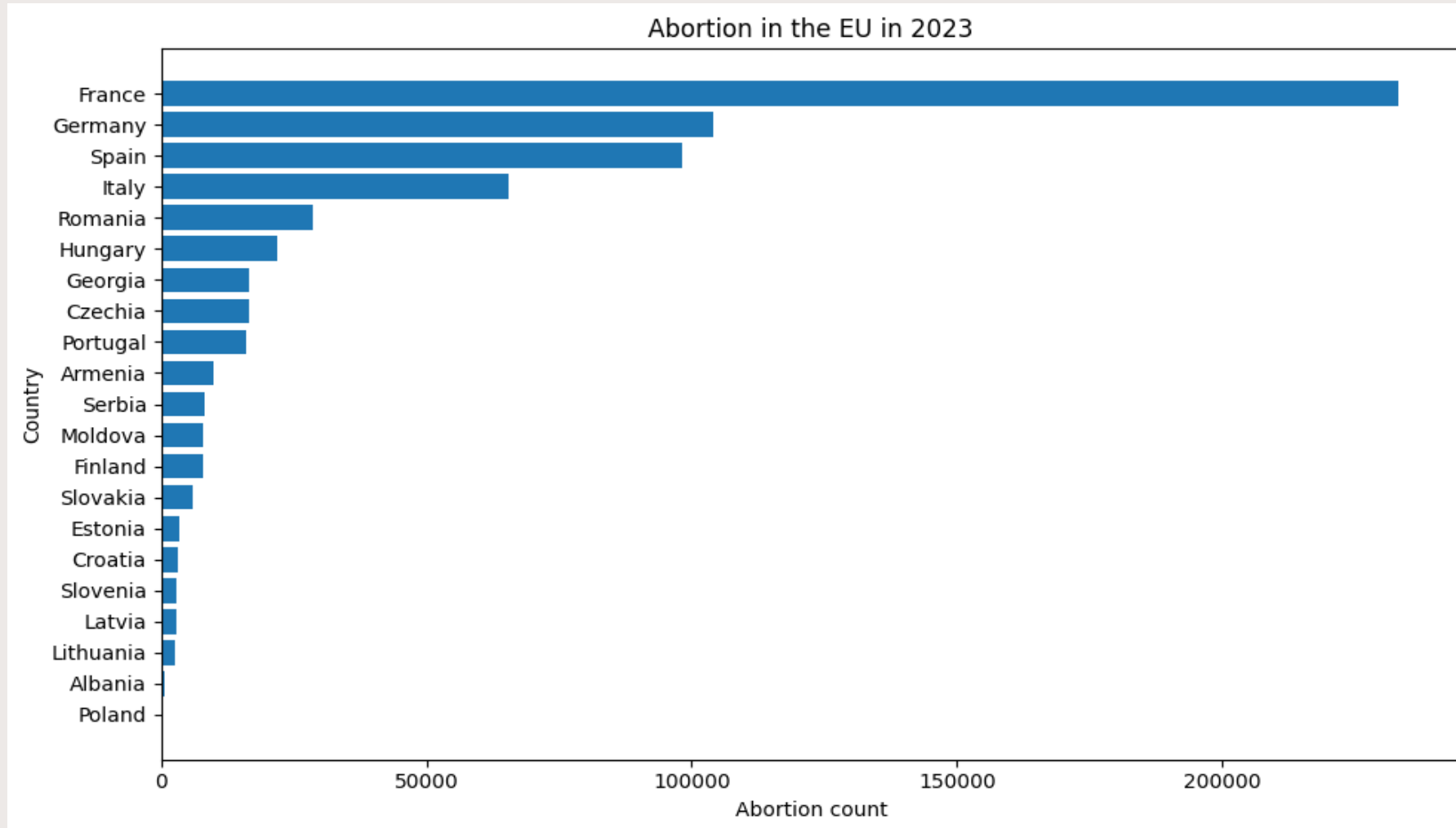
1. The declining birth rate
2. Increased use of other methods of contraception

Let's take a closer look at Romania



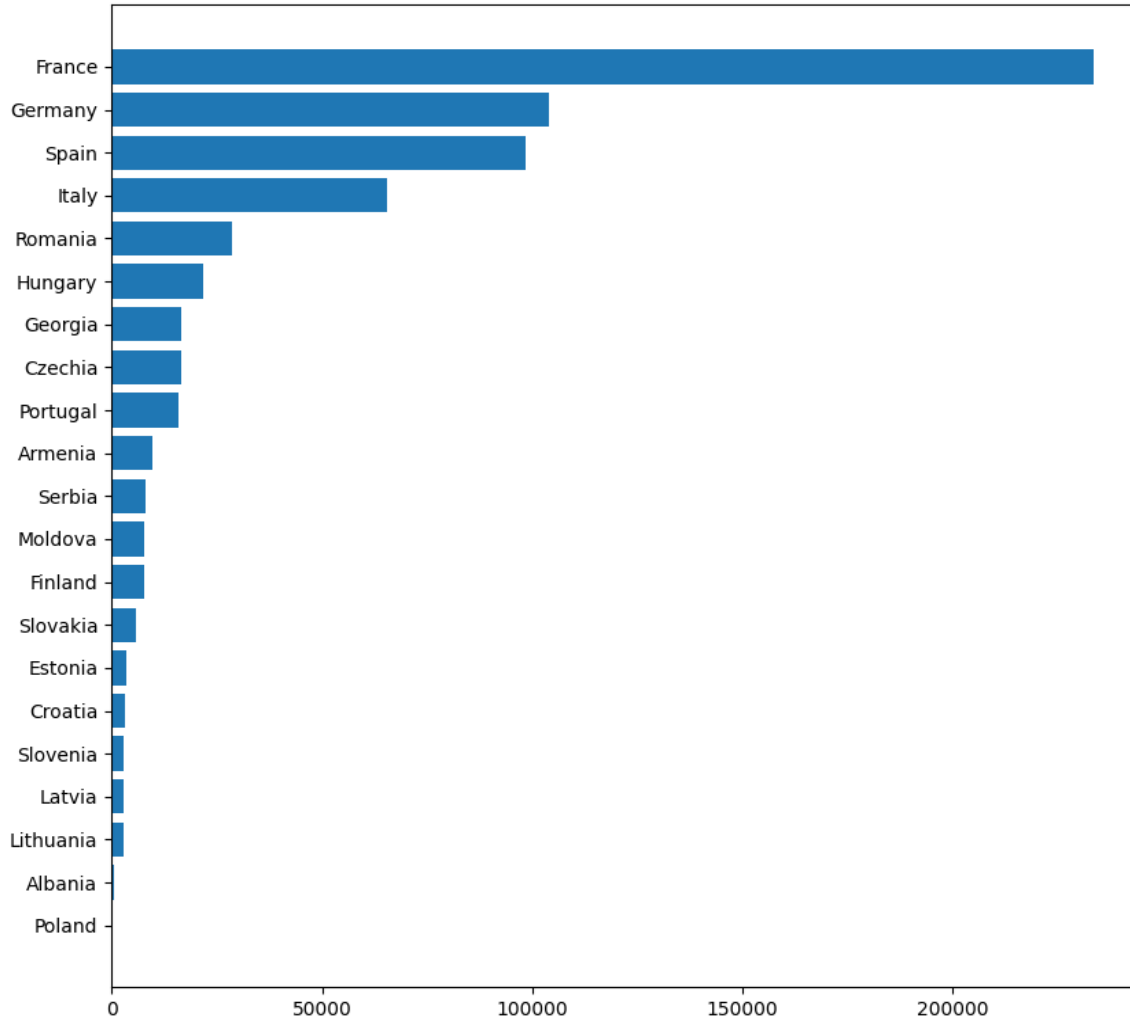
We notice two significant spikes in 1966 and 1990; we will examine the latter in more detail.

2. How do EU countries rank in terms of abortion numbers?

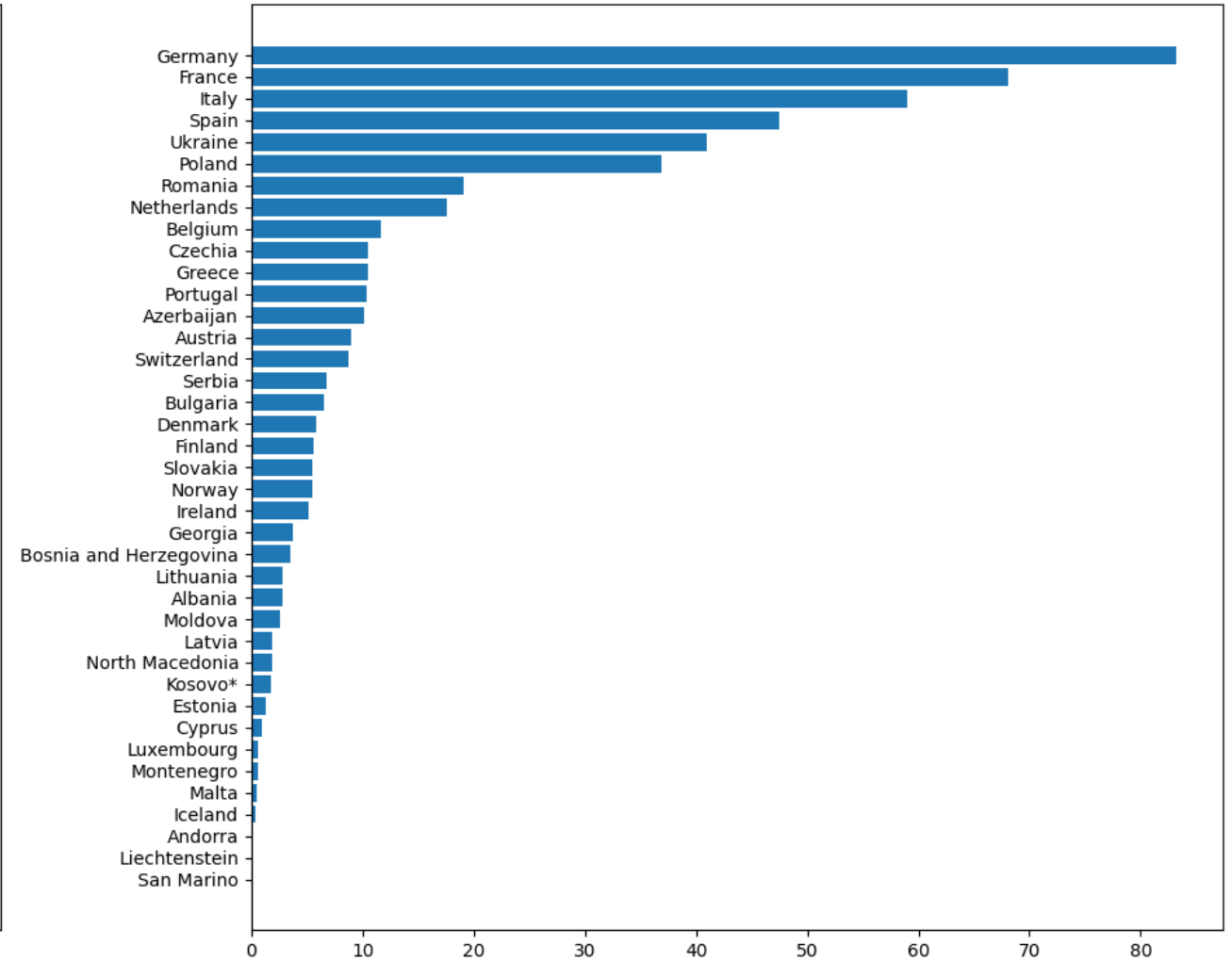


Interesting results, but I think that maybe we'd get a better understanding if instead of only abortions, we'd compare abortions to population for each country

Abortions in the EU (2023)

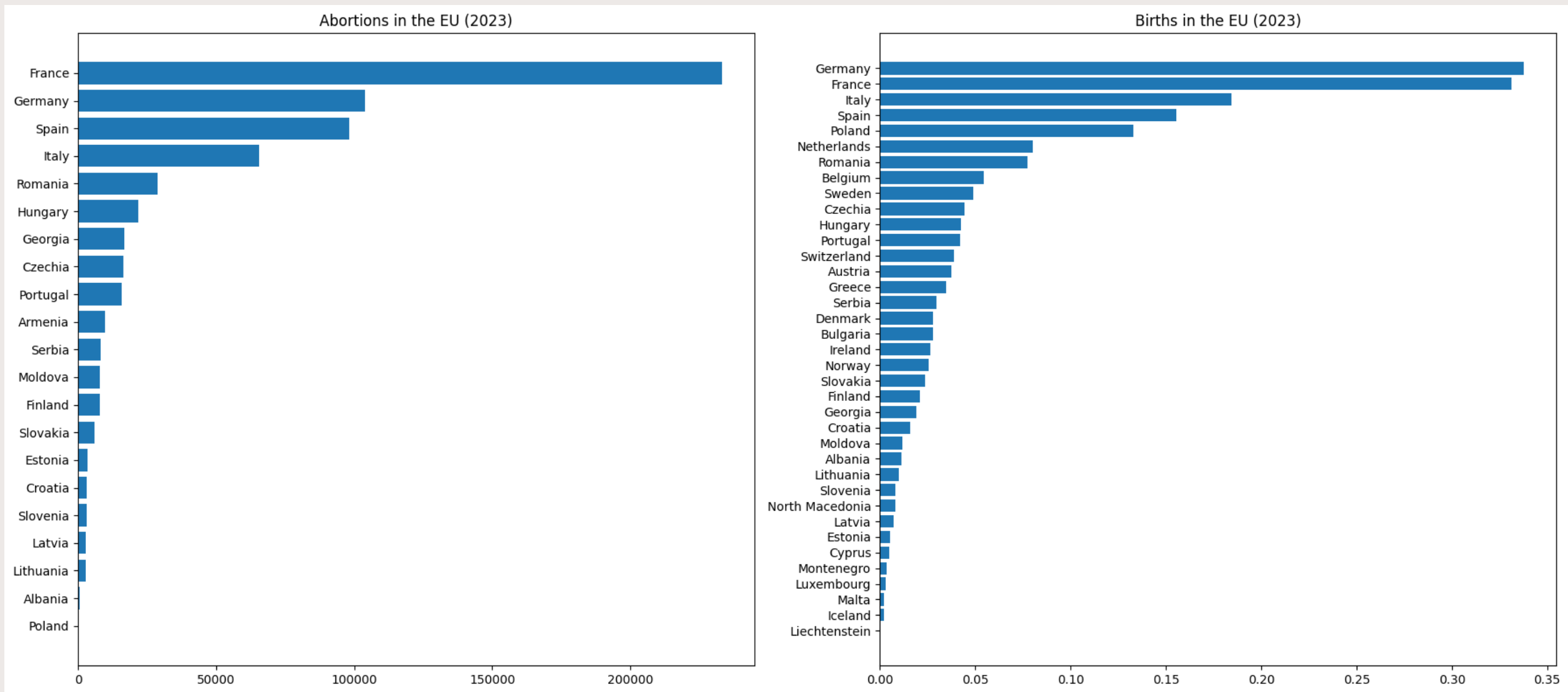


Population in the EU (2023)



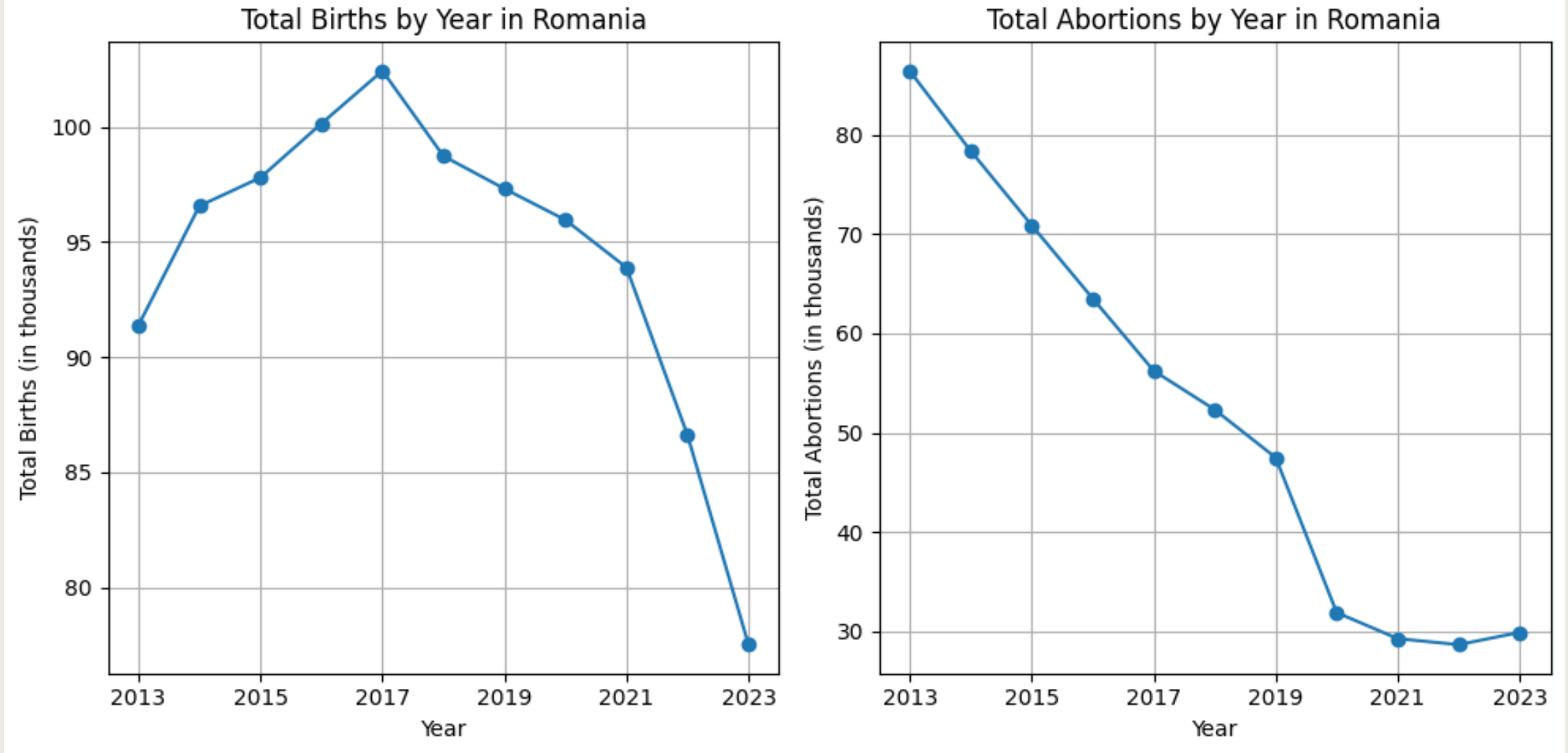
Abortion numbers seem to generally reflect population size, with some Eastern European exceptions. Maybe birth rates might provide more insight than just the raw population.

3. Is there a correlation between the natality and the number of abortions?



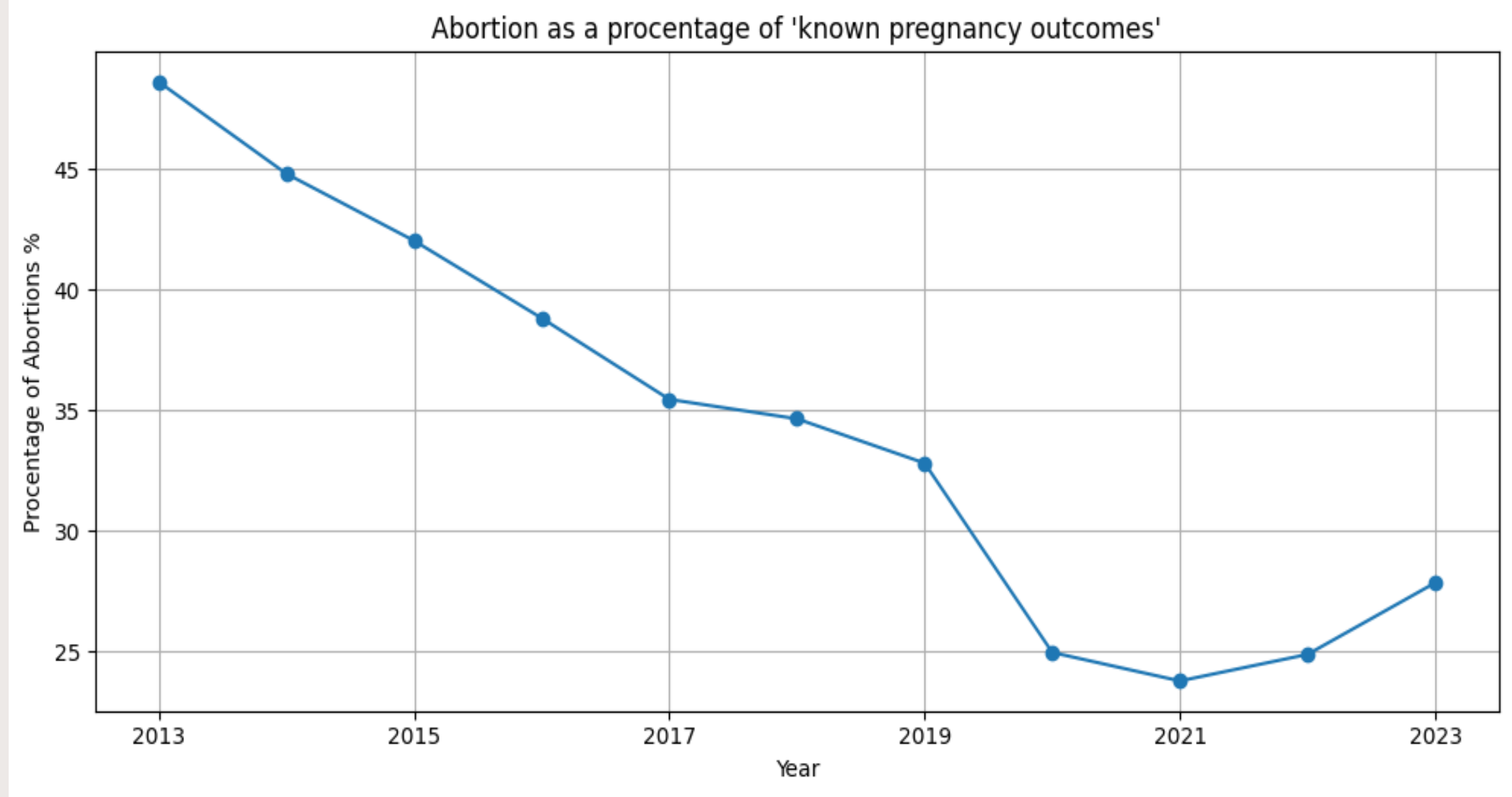
Now we can see an even stronger correlation than with the population!

Let's take a look on the values for just Romania



Now we can see that one of the main reasons for the decreasing number of abortions is the decreasing number of births!

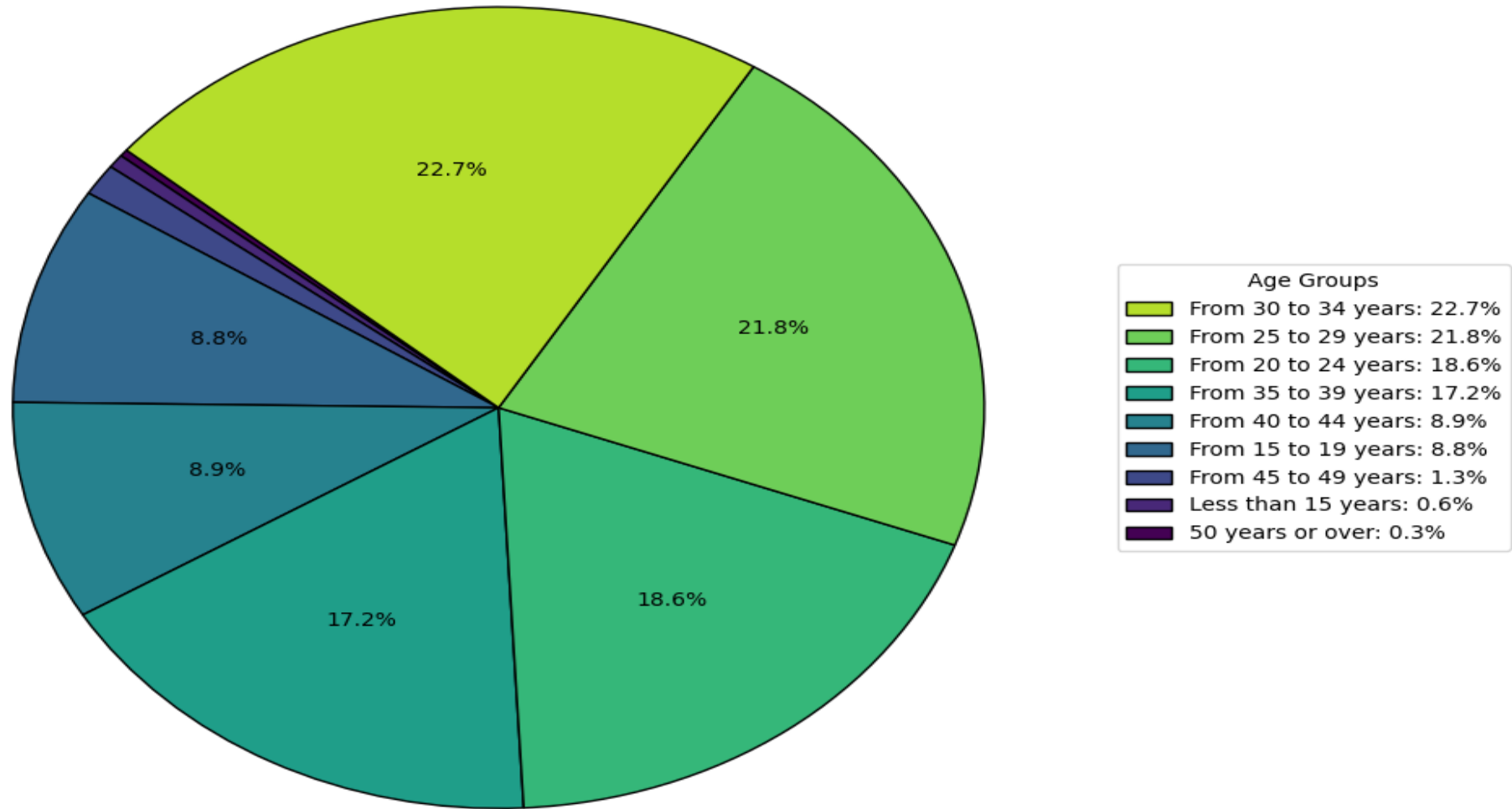
Looking at the percentages, now we see that decreasing natality is not the only reason for the decrease in abortions



'known pregnancy outcomes' means to the sum of abortion and birth, it does not account for miscarriages, stillbirths, and other pregnancy outcomes.

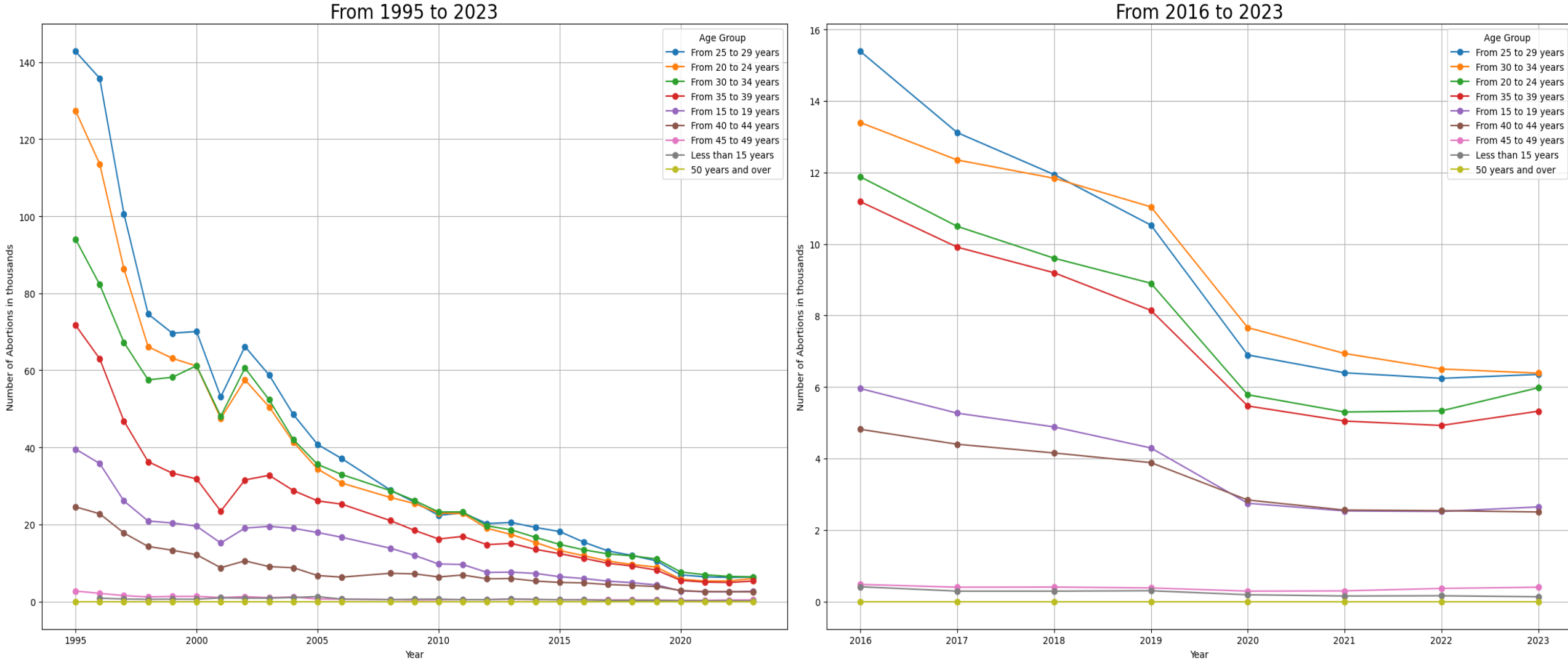
4. How do demographics (age) affect abortion rates?

Abortion distribution by age group in Romania (2022)



How did each age group's number of abortions change by time?

Trends in Abortion Numbers by Age Group in Romania (Yearly)



5. Do major events or new legislation impact the number of abortions?

Here we will take a look over two countries in which abortion was made illegal:

A) Romania

B) Poland

A) ROMANIA

Abortion was legalized in Romania in 1957, followed by a ban on abortion in 1966. The ban was later lifted in 1989 after the fall of the communist regime.

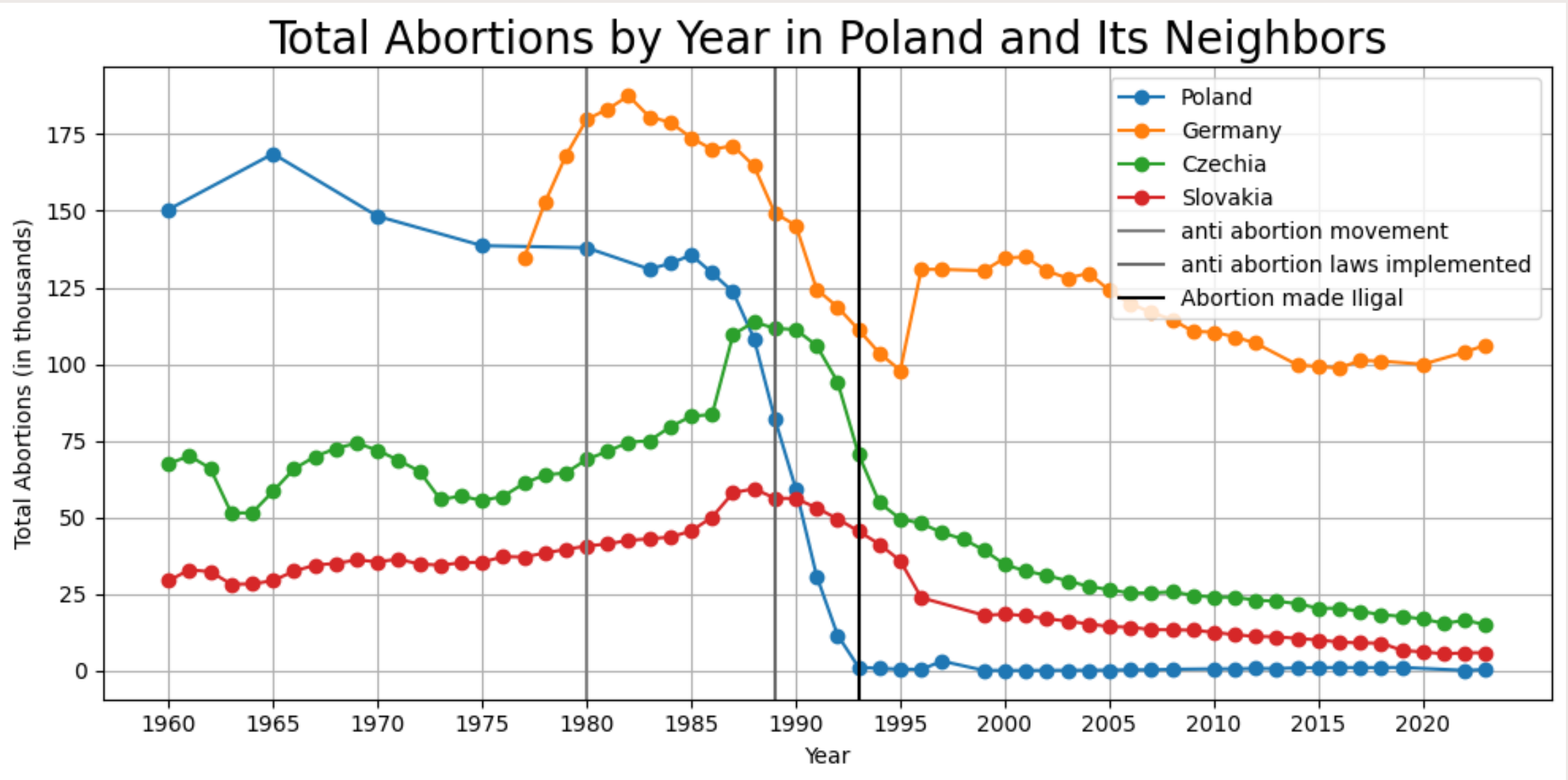


Observations:

1. Although data prior to 1957 is unavailable, we observe a rising trend in abortion rates from 1960 to 1965 – the year before abortion was criminalized.
2. In 1966, abortion was made illegal in Romania, leading to a sharp and sustained decline in recorded abortion rates. From that point onward, abortions were permitted only under strict medical exceptions. As a result, many women turned to unsafe, illegal procedures, and the ban is estimated to have caused the deaths of approximately 10,000 women. Due to the underground nature of these procedures, it is impossible to determine the exact number of illegal abortions that occurred between 1966 and 1989.
3. Following the fall of the Communist regime in 1989, abortion was legalized again. This led to a big increase in recorded abortion rates – not only because access was restored, but also because previously undocumented procedures could now be officially registered.

B) POLAND

Abortion was first legalized in Poland in 1956 and after that it was made illegal in 1993, now let's see Poland and also it's Neighbours abortion number by years:



OBSERVATIONS:

1. Before plotting the data I was thinking that after the ban of abortion in Poland, there will be a visible rise in it's neighbours number of abortions. This turned out to be FALSE!

I didn't take into account that Poland was not part of EU until 2004 so to leave the country to get an abortion was very hard at that point.

2. We can see clearly in the plot how the start of the anti abortion movent began the decrees in abortions and that the anti-abortion rules amplified this even more.



THANK YOU!