

## Quantifying Small State Survival: The Small States Data Set

On the basis of the small state's definition developed in the previous chapter, I will now work towards a data set of small and non-small states for the period 1648 to today. First, I will suggest how the small state definition can be operationalized for data collection. Second, I will explore existing data sets and evaluate their usefulness for the historical study of small state survival. Finding that no currently available data set can be used for this project, I will, third, discuss the process of putting together a customize data base of small states and non-small states. Fourth, I will present the thus generated small states data set in a summary fashion and use descriptive statistics to prepare the data for detailed analysis in the succeeding chapters. I will conclude by pointing towards distinct trends in the development of small state numbers and their match with shift in the structure and operation of the international states system, 1648 to today.

The purpose of the data set is to help make a broader claim about the connection between small state survival and proliferation and the core features of the states system. For this purpose, the data does not have to be absolutely correct, assuming this was possible in the first place. What is needed, however, is a data set that is accurate enough to support the overall argument. Where precise numbers and percentages are given below and throughout the later chapters in is in full recognition of a margin of error. Nevertheless, the data set is certainly reliable and robust enough to meet the requirements of this study.

### 1. Identifying and counting small states

In the previous chapter, the small states has been defined as a negligible unit of the state system due to the individual small state's irrelevancy with regard to the state system's overall structure. In order to use this definition to build up a data set, statehood and state size have to be made codeable. With respect to the former, the problem is the evolution of the meaning and content of statehood over time. With regard to the latter, the problem is how to measure insignificance.

The decisive criterion for consideration of a state in the present study is its adoption as a unit in the system. In order for a unit to be considered here, it is sufficient for it have significant and demonstrable foreign policy autonomy. Moreover, the modern and largely legally informed concept of statehood does not fit older arrangements of international governance and of constrained sovereignty particularly well. For example, many units that were under nominal dominance of the High Porte in the 19<sup>th</sup> century, for example, still need to be counted in a study of small states, since they were still part of the make-up of the overall international states system. For example, Wallachia was ruled by a "client-ruler" of the Ottoman Empire, but it was nevertheless free enough to negotiate with the Austrians who were fighting the Turks in the late 1680s.<sup>1</sup> Because Wallachia had – in reality – sufficient autonomy to do this, it passes the test of a unit of the states system at the time. Today, too, small states may have their actual autonomy restricted, However, as the current literature on "vulnerability"<sup>2</sup> demonstrates degrees of economic dependence and a broad spectrum of vulnerabilities remains characteristics of the small state but do not hinder its operation as a unit in the states system. For the purpose of this study, I apply a standard of autonomy in foreign policy action

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<sup>1</sup> Jeremy Black, *European International Relations 1648 - 1815* (Houndmills: Palgrave, 2002), 81.

<sup>2</sup> Charles et al., *A Future for Small States, Overcoming Vulnerability*; Eliawony J. Kisanga and Lino Briguglio, *Economic Vulnerability and Resilience of Small States* (London: Commonwealth Secretariat, 2004); Kisanga and Dancie, *Commonwealth Small States, Issues and Prospects*.

that is significant enough to be an external factor for other states.

In order to decide on structural insignificance, I use a hypothetical. States were considered small if their disappearance (but not necessarily their usurpation by a neighboring state) would not trigger a noticeable balancing maneuver in the international states system. This study does not concern itself with regional and sub-systems, and any adjustments to the equilibrium would have to be at the top-level states system. The sudden extinction of, for example, Costa Rica, Liechtenstein, or Palau would not require re-balancing. Thus, each unit that was considered to be included in this study's data set had to feature a meaningful amount of autonomy but be negligible as far as the system-wide equilibrium was concerned.

## 2. Considering existing data sources and data sets

An intriguing amount of historical small state total numbers have been suggested. Unfortunately, they do not provide a complete picture of small state survival and are sometimes inconsistent.

For example, for the years after 1648, an estimate of "some 300 petty states"<sup>3</sup> is contrasted by "more than 300 sovereigns"<sup>4</sup> or a count of 355 small states,<sup>5</sup> most of them on German lands and under the umbrella of the Holy Roman Empire. Other historians' numbers vary "somewhere between 294 and 348 different states after 1648."

If one counted all territories that existed in Germany in the early 18<sup>th</sup> century, even if the majority does not qualify as units of the international states system, the resulting number would be around 1,800 entities according to M. S. Anderson,<sup>6</sup> and "more than 2,300 different jurisdictions" according to Mark Almond et al.<sup>7</sup>

Clearly, the occasional numbers provided sporadically by diplomatic historians do not allow for a systematic analysis of the small state's fate. Data sets developed for other research projects offer a more promising alternative.

Various COW data sets provide well researched and widely accepted data that include lists of states. Despite some limitations of these data sets with respect to their temporal domain and in particular their minimum population requirement, the data provide well-researched lists of unitary state actors within the present data sets' definitional boundaries. The COW data serves as a useful starting point for developing a states data base.

Singer's and Small's data set on the *Interstate System Nation Membership* for the time span 1816 – 1997,<sup>8</sup> event data on "Major-Minor Power Wars, 1495 – 1815," compiled by Midlarsky and Park,<sup>9</sup> and the data of Michael Haas' study on "International Subsystems, 1649 – 1963"<sup>10</sup> were considered.

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<sup>3</sup> S.Arthur Hassall, *The Balance of Power, 1715 - 1789* (New York: The Macmillan Company, 1907), 10.

<sup>4</sup> Kissinger, *Diplomacy*, 65.

<sup>5</sup> Morgenthau, *Politics among Nations, the Struggle for Power and Peace*.

<sup>6</sup> Matthew Smith Anderson, *Europe in the Eighteenth Century, 1713 - 1783* (New York: Holt, Rinhart and Winston, 1961), 197.

<sup>7</sup> Mark Almond et al., *The Times Atlas of European History* (London: Times Books, 1994), 127.

<sup>8</sup> J. David Singer and Melvin Small, "Interstate System, 1816 - 1997," J. David Singer, Melvin Small, <http://cow2.la.psu.edu/cow2dlist.htm>.

<sup>9</sup> Manus I. Midlarsky and Kun Y. Park, "Major - Minor Power Wars, 1495 - 1815," Champaign-Urbana, IL: Data Development in International Research, <http://vdc-prod.hmdc.harvard.edu/VDC/Study/MainView.jsp?bean=vdc.beans.Repository&cmd=AccessDDI&purl=http://purl.thedata.org/VDC/0.1/PURL/1.1.2/06321>.

<sup>10</sup> Michael Haass, "International Subsystems, 1649 - 1963," University of Hawaii, <http://www.icpsr.umich.edu:8080/ABSTRACTS/05011.xml?format=ICPSR>.

In their data set the “Interstate System,”<sup>11</sup> Singer and Small distinguish only between “Major Powers” and all other states. Their standard classification, great powers and all other states, is therefore the reverse of the small states vs. non-small states categorization needed here.

Midlarsky’s and Park’s data set was created in order to extend the temporal domain of the earlier “Interstate System” data set of Singer and Small backwards in time, to 1495.<sup>12</sup> The identical problem as with Singer’s and Small’s data set arises. The Midlarsky and Park data set does not show the proliferation of small states as a separate category but indicates only the numerical development of non-great powers. The data set “International Subsystems, 1649 – 1963” by Michael Haas<sup>13</sup> poses particular problems for a focused study of the small state. Its “Membership Identification Information” which gives the status of units<sup>14</sup> as major powers, middle powers, or minor powers and the dates for their membership is useful, but the division into sub-systems, the standards for inclusion as a unit in a system, and the category of “satellites” create difficulties for studying small states within the context of the top-level international states system. To be sure, his coding standards provide Haas’s data with a high level of precision. Unfortunately, they also shape the data set in a way that make it of little use for a focused study of the fate of small states as a distinct type of unit in the international states system.

Overall, existing data sets do not provide the data needed for an investigation of the small states. Thus, a new data set that is focused on the small state is required to explore small state survival and proliferation quantitatively.

### 3. Building the small states data set

In order put together a customized small states data set, a proper process to gather and filter data was required. In a first step, candidates for inclusion as small or large states were gathered from a variety of sources.

Data from the COW project, historical maps, atlases, a collection of international treaties, a compilation of territories of the HREGN, Peter Truhart’s *Systematic Chronology*, Köbler’s *Historisches Lexikon*, the 2 volume *Territorien Ploetz*,<sup>15</sup> and a substantial list of secondary sources were used.<sup>16</sup> Using these resources, a list of “candidates” for inclusion in the data set was put together. Entries were also verified

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<sup>11</sup> Singer and Small, "Interstate System, 1816 - 1997".

<sup>12</sup> Midlarsky and Park, "Major - Minor Power Wars, 1495 - 1815".

<sup>13</sup> Haas, "International Subsystems, 1649 - 1963".

<sup>14</sup> From here on, I will use Haas terminology of “powers” when discussing his data set in order to provide consistency in terminology with his study.

<sup>15</sup> Sante, *Territorien Ploetz Vol. 1; Geschichte Der Deutschen Länder, "Territorien - Ploetz," Vol. 2: Die Deutschen Länder Vom Wiener Kongreß Bis Zur Gegenwart*, 2 vols., vol. 2 (Würzburg: A. G. Ploetz - Verlag, 1971).

<sup>16</sup> Peter Truhart, *Regents of Nations, Systematic Chronology of States and Their Political Representatives in Past and Present, Part 4, Vol. 1 (West and Southern Europe)*, 2 ed. (München: K. G. Saur, 2004); Gerhard Köbler, *Historisches Lexikon Der Deutschen Länder: Die Deutschen Territorien Und Reichsunmittelbaren Geschlechter Vom Mittelalter Bis Zur Gegenwart*, 6 ed. (München: Beck, 1999); Clive Parry, *Index-Guide to Treaties : Based on the Consolidated Treaty Series, Edited and Annotated by Clive Parry, Ll.D., and All Other Series Therein Utilised* (Dobbs Ferry, NY: Oceana Publications, 1979-1986); Conrad Bornhak, *Deutsche Verfassungsgeschichte Vom Westfälischen Frieden An*, ed. August Schoetensack, Bibliothek Des Öffentlichen Rechts (Stuttgart: Ferdinand Enke Verlag, 1934). Gerhard Benecke, *Society and Politics in Germany, 1500 - 1750*, ed. Harold Perkin, Studies in Social History (London: Routledge & Kegan Paul, 1974); William Carr, *A History of Germany, 1815 -1990*, 4 ed. (London: E. Arnold, 1991); Lauro Martines, *Power and Imagination, City - States in Renaissance Italy* (New York: Vintage Books, 1980); Harry Hearder, *Italy in the Age of the Risorgimento 1790 - 1870*, ed. Denys Hay, Longman History of Italy (London: Longman, 1983); Daniel Frigo, *Politics and Diplomacy in Early Modern Italy, the Structure of Diplomatic Practices, 1450 - 1800*, ed. Gigliola Fragnito et al., trans. Adrian Belton, Cambridge Studies: Italien History and Culture (Cambridge: Cambridge UP, 2000).

through cross-referencing. Using the definition in the way explained previously, all candidates that qualified as units of the system were coded as either small or non-small, i.e. larger. The end result was a year-by-year account of the number of small and larger states. I refer to it as the small states data set.

The data set and its codebook are available online at <http://www.mmaass.net>.

It is recognized that a list that spans such a long time must rely on informed judgments instead of sharp quantifiable definitions for state size and statehood, can neither be fully comprehensive nor absolutely correct in each single case. The statistical data assembled here does not claim to be flawless. Nevertheless, the data derived at by using the methods and tools described above is nevertheless robust enough to support the overall argument of this study, that the fluctuations in the number of small states corresponds with systemic changes if looked at in historical perspective.

#### 4. Describing small state survival and proliferation statistically

The small states data set provides the data for the statistical investigation of the fluctuations in the numbers of small states over time. I claim that the larger fluctuations represent changes in the states system that shape small states' overall changes for survival. I use descriptive statistics here strictly to demonstrate the validity of the causal link and agree that “[s]tatistical argumentation, ..., is essentially deductive. The role of a statistical test is not to find a pattern in the data but to assess whether the data being analyzed are consistent with a particular pattern the investigator has predicted to exist among them.”<sup>17</sup>

The object in the statistical presentation are small states. Large states are included in the database in order to complete the composition of the “universe we wish to study.”<sup>18</sup> The mix of small and large states in the state system is expressed as a coefficient, arrived at by dividing the number of small states by the number of large states at each observation point. This particular way of calculating the coefficient was decided to make the numbers behave better. I refer to it here as small state index.

State size is differentiated only as either small or non-small, i.e. larger than small. The values are collected annually for the entire observation period 1648 – 2016, and are presented as a time series; each year is one observation point.

Small states and non-small states are quantitative variables and are paired with a qualitative variable<sup>19</sup> (the particular states system or an era). However, the qualitative variable, the particular international environment of a historical era, has not been coded. First, there was not dataset available. Second, the argument here only refers to three major epochs, making proper coding for statistical evaluation unnecessary. For the argument presented in this study, coding the states systems' set-up provides no analytical advantages. Instead, the relationship between the two variables will be argued theoretically and abstractly and then demonstrated through an examination of the historical record.

The number of small states per year is the quantitative variable and has a simple number value. The particular type of the states system that was in operation during a particular period, however, appears as a qualitative variable. The former is the dependent variable, the latter the independent variable. The independent variable, the type of states system, its characteristic features, and their impact on small state survival will be developed in detail in the following chapters.

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<sup>17</sup> Thomas J. Archdeacon, *Correlation and Regression Analysis. A Historian's Guide* (Madison, WI: University of Wisconsin Press, 1994), 12.

<sup>18</sup> Hand, *Statistics, a Very Short Introduction*, 22.

<sup>19</sup> Archdeacon, *Correlation and Regression Analysis. A Historian's Guide*, 15 - 32.

Neither robust time series analysis or time series forecasting<sup>20</sup> nor event history analysis<sup>21</sup> will be used in this study in order to keep the analytical focus on the causal link between system-level factors and small state survival. Similarly, advanced analytical and predictive statistical methods and models are not needed here because the goal is restricted to demonstrate the major fluctuations in the number of small states over time. Therefore, the further investigation will be derived from summary and descriptive statistics. A set of graphs will show the distribution of values, provide visual representations of the data, and assist in proper description and explanation of the data.

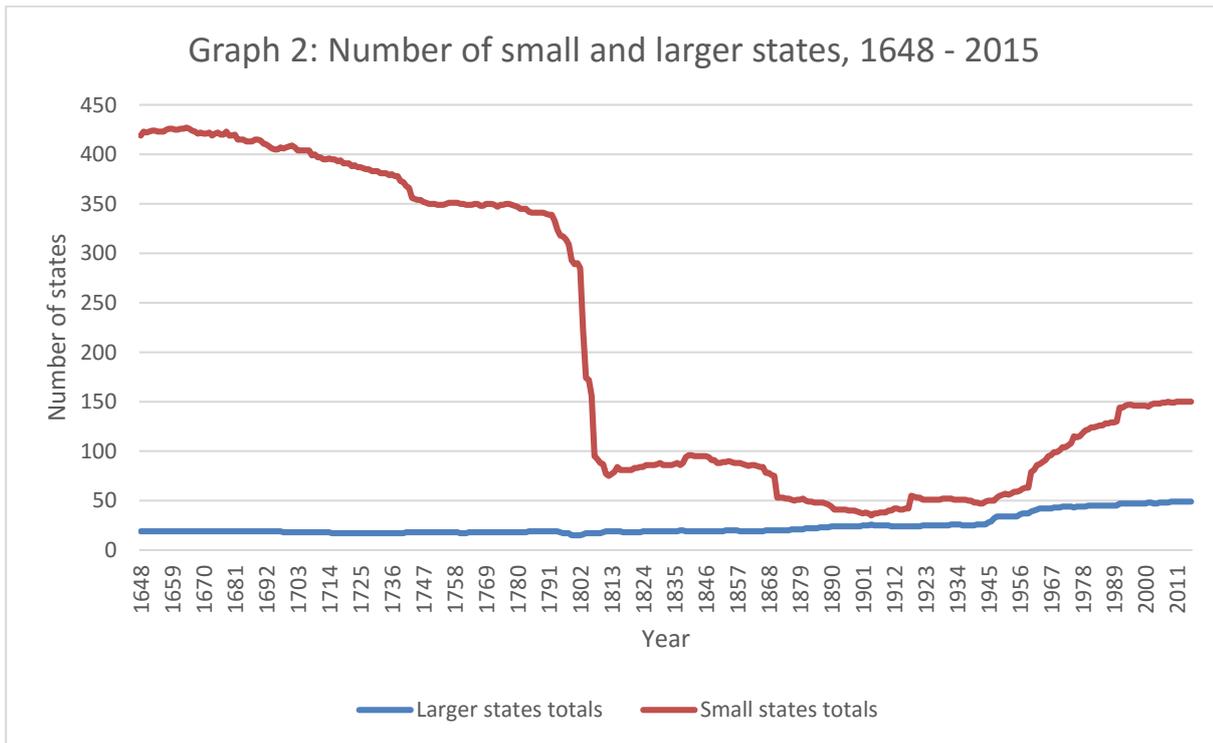
## 5. Data presentation: Small state decline, survival, and proliferation from 1648 to today

In 1648, the Westphalian states system started out with 438 states, of which 419 were small states and 19 larger states. A slow but steady downward trend in the number of small states persisted throughout the following 1 1/2 centuries, all the way to the French Revolutionary Wars. In 1792, the system still included 339 small states, but the year before Napoleon Bonaparte was defeated, the number of small states had collapsed to 79. Over the immediately following decades, the total number of small states recovered slightly and reached 96 in 1841, before declining again. Italian and German national unifications left their mark and in 1872, the year after German unification, only 53 small states were left in the system; they were accompanied by 20 larger states. The downward trend continued, and the number of small states reached its historic low-point in 1904 with 35 small states. After that, the numbers began to climb again. A first jump occurred when the First World War came to a close. In 1918, the number of small states was 55, an increase by 13 states to the preceding year. However, it was not until after the Second World War that small states proliferation truly set in. Whereas the count of small states had been 50 in 1945, it had reached 59 one decade later. The 100 units mark was broken in 1970, to which nearly 25% were added by the beginning of the following decade. Before the end of the Cold War, the world system consisted of 130 small states and 45 larger states. Once year later, 14 small states had joined. As of today, 150 small states exist in the states system, together with 49 non-small states. Graph 2 below summarizes these developments.

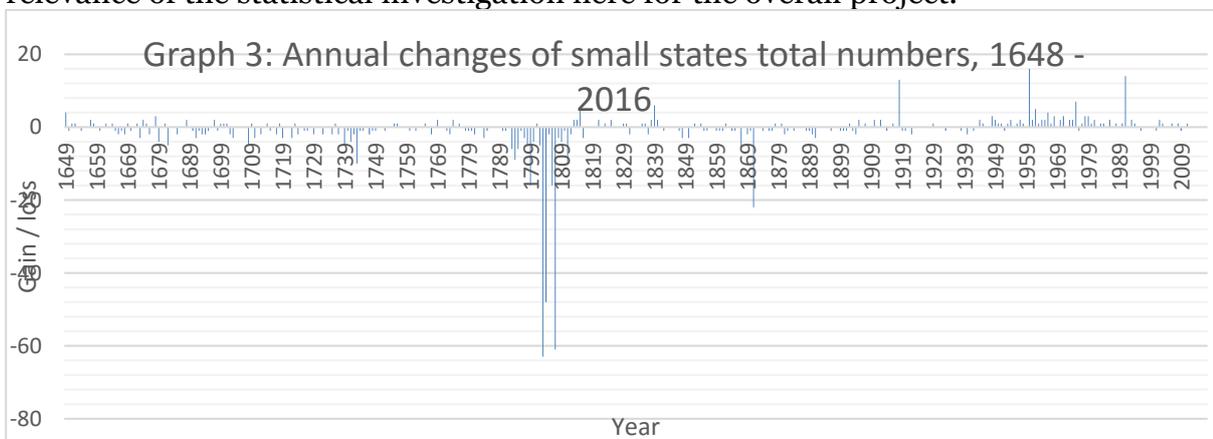
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<sup>20</sup> Hand, *Statistics, a Very Short Introduction*, 106.

<sup>21</sup> Paul D. Allison, *Event History Analysis. Regression for Longitudinal Event Data*, ed. Michael S. Lewis-Beck, Quantitative Applications in the Social Sciences (Newbury Park, CA: Sage Publications, 1984), 9.



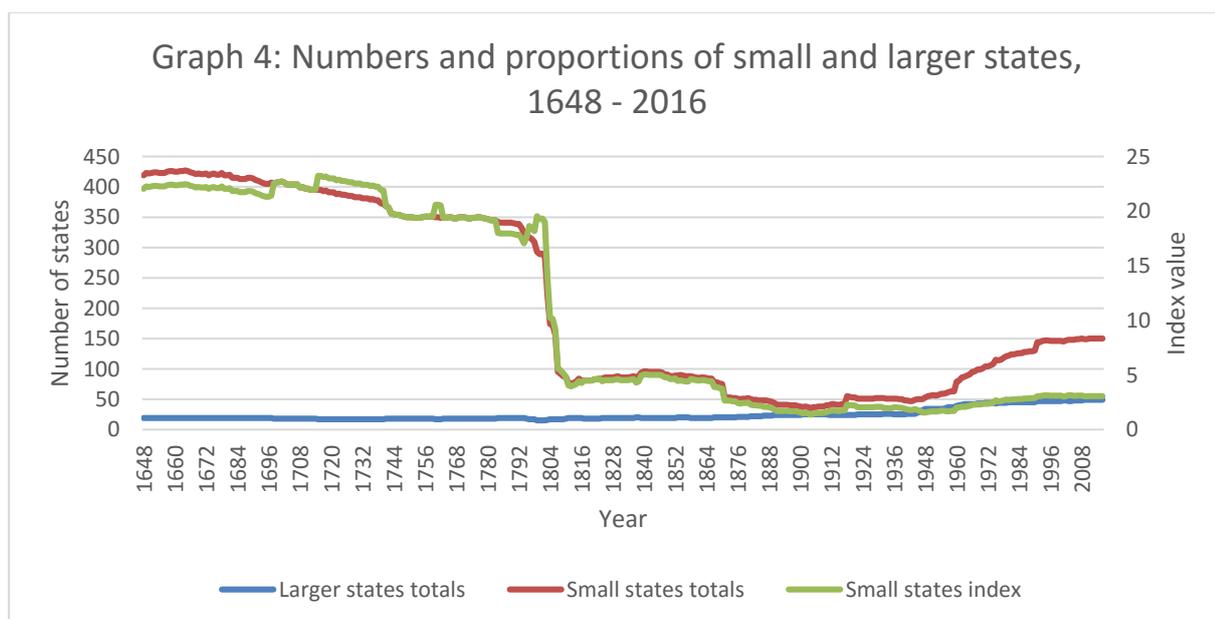
Graph 3 below shows the changes in small state totals from year to year. It brings to the forefront the broader developments. An era of slow erosion ended abruptly at the turn of the 19<sup>th</sup> century by a short period of massive losses of small states. It is followed by modest gains before losses again accumulate. A first spike in the number of small states in 1918 is not follow-up, but by mid-century, small states numbers show annual gains with almost no interruption until the early 21<sup>st</sup> century. These three larger trends in the accumulated small state death and creation, 150 years of erosion followed by one century of further losses before the trend is reversed in the 20<sup>th</sup> century, correspond to the major shifts in the states system, from a pure balance of power to the concert system and on to the current mixed system of power balancing and collective security. The latter will be demonstrated in the following chapter, but the claimed correlation between the fate of the small state over time with the larger shifts at the systemic level need to be pointed out here to signal the relevance of the statistical investigation here for the overall project.



An exclusive look at the *total* number of small and non-small states has analytical limitations because it cannot properly account for the expansion of the system itself. At the time of the full-scale and universal implementation of the international system of states with the Peace of Westphalia in 1648, this “international” system was essentially a European system, by-and-large limited to this continent. Practically all its members were European states. However, beginning in the early 19<sup>th</sup> century and than much more accelerated in the 20<sup>th</sup> century, more and more non-European states became part of the international system. The states system expanded over time from a European-centered system to a truly global one. This geographical expansion of the system also changed the total number of states that it included during times of geographic expansion of the system.

For this reason, trends in small state survival and in particular small state proliferation need to be considered within the historical expansion of the Westphalian states system in mind. In order to capture the trends in small state survival regardless of changes in the geographic size of the states system, a simple index value is used as a tool to identify the share of small states within the total number of states in the system. The small states index ‘filters out’ expansions or contractions of the system’ numerical dimension. In this fashion, the decline and rise in absolute numbers of small states can be considered in light of the system’s overall development. Graph Z gives a visual representation of the changes in the index values over time.

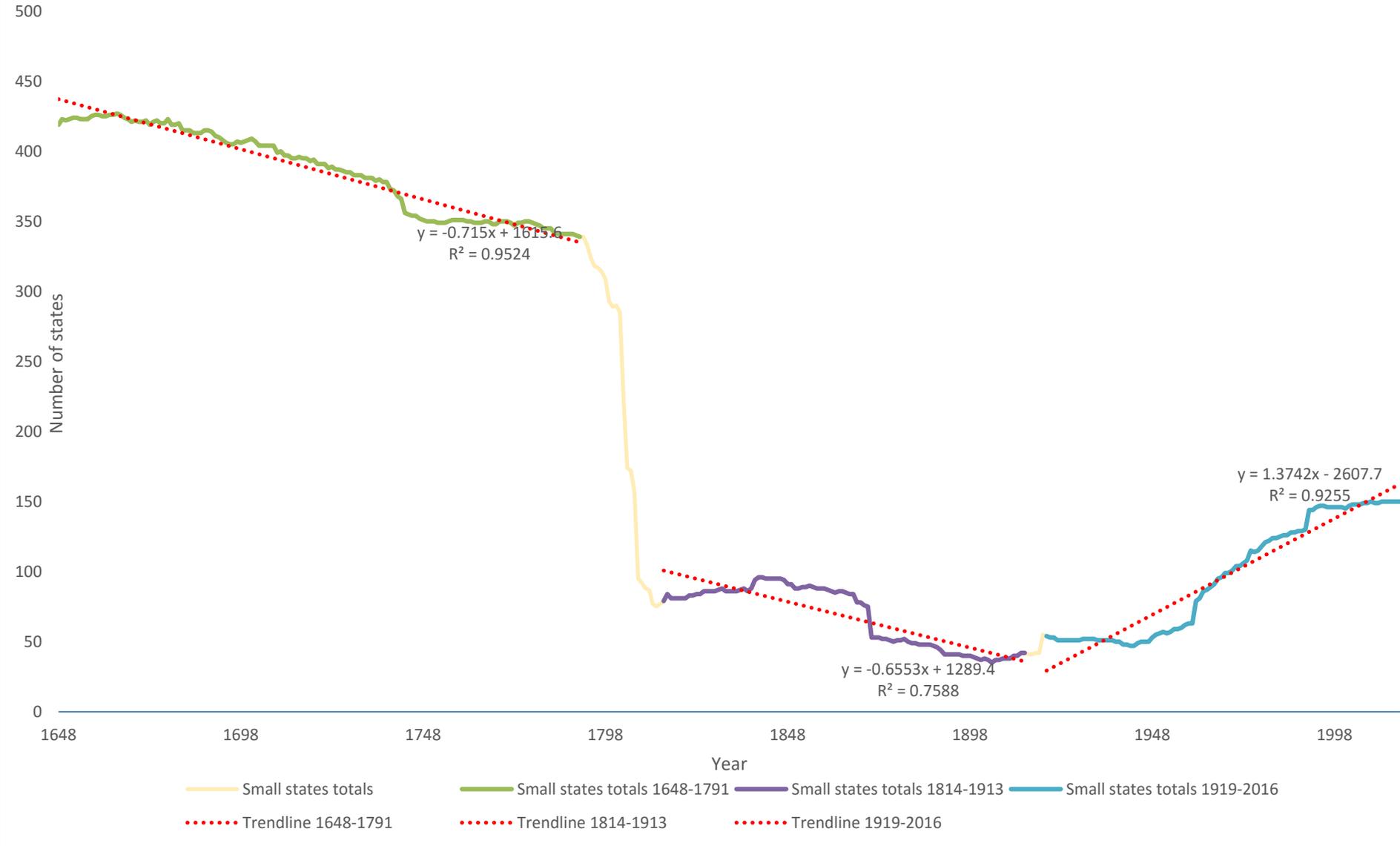
As Graph 4 shows, the index value tracks the changes in the small states total number fairly closely until the late 19<sup>th</sup> century. From there on, the trend is much shallower than the small states’ total. This is due to the parallel increase in the number of non-small states. This adds an important facet to the picture of small state proliferation. In light of the much shallower rise of the index value, 20<sup>th</sup> century small state proliferation changed the composition of the states system less than initially suspected. However, pursuing this line of investigation further goes beyond the scope of the present study, which is concerned with causal flow from the system level to small states’ changes for survival and proliferation and not with the reverse, i.e. the impact of small state proliferation on the structure and composition of the states system.



Graph 5 below supports the larger claim here, that small state death, survival, and proliferation played out in three larger steps. To demonstrate this, trend lines were added to the three distinct historical eras that frame the entire project here, the traditional balance of power, the concert system, and the modern mixed system of a power equilibrium and collective security. The time periods exclude the Napoleonic period and the First World War because each are extended end points of an era, times when the era's system was already in complete disarray.

For the period from the Peace of Westphalia to the Napoleonic era, a linear trend line was added. Its  $R^2$  of 0.9524 shows a strong relationship. A second trend line was added for the period from Waterloo to the First World War. With 0.7588 its  $R^2$  is lower but still gives a strong relationship. Both time periods' featured a downward trend in the number of small states and their trends are comparable in magnitude; the trend lines of both time periods have negative slopes in a close range. The first period's slope is -0.715 and the second era's is -0.655. These numbers stand in stark contrast to the following era, the 20<sup>th</sup> century. For the data 1919 to today, the trend line features an upward slope of +1.374. The trend line also features a strong relationship with an  $R^2$  of 0.9255. In light of these numbers, the claim that the fate of the small state over the last 3 1/2 centuries proceeded through distinct phases is supported again. A the first era featured a shallower downward trend than the second, but the third era saw a reversal and a strong upward trend in the numbers of small states.

Graph 5: Number of small and larger states, 1648 - 2015



Against the backdrop of the numerical data presented above, the claim that small state survival is largely shaped by the state system gains credit. The overall numbers, the annual changes, the share of small states, and the trend lines all suggest that small state survival and proliferation depends largely on the states system in operation at any given time. In each era, the total numbers of small states behave markedly different. The correlation covers the entire observation period.

To be sure, the specific form and shape a particular historical states system is not treated as a “complete” explanation of small state survival. Other dynamics most certainly impacted the rate of survival or proliferation during the course of over 3 ½ centuries. Nevertheless, I claim that there is strong relationship between the two variables and that this can be demonstrated by the descriptive statistics in this chapter, and the theoretical and historical investigations of the following chapters.