

The Geopolitical Context for Institutional Change: The Case of Prussia in the 17th and 18th Century*

By Christian Berker**

Abstract

After the “institutional turn” economists are now in a lively debate about the role of institutions for growth as well as the sources of institutional change. This paper discusses institutional change in Prussia in the 17th and 18th century. It shows the importance of the *geopolitical context* for understanding institutional change. Using three political events, the paper combines geographical, institutional and political arguments and highlights how context-sensitive institutional change can be. Prussia’s institutional change was heavily influenced by its many direct neighbours and the political necessities of that time. Therefore, time and space (location) are highly relevant for institutional change.

JEL Codes: N13, O43

1. Introduction

“The Prussian population was Teutonic, and it was also Protestant. Why then did it turn its back so pointedly on liberty? Look at the frontier. Frederick William’s territory was the least defensible in Europe (Seeley 1896, 133).”

There seems to be a mounting interest of economists in economic history. A variety of authors have put forward different points of view on how to look at and understand economic history. As Mokyr (2016) shows, they can be generally regarded as representing four distinct schools of thought.¹ The main issue is to understand what triggered the Industrial Revolution in 18th century England, which would deliver an explanation of the great divergence in income per capita (Pomeranz 2000), or – to state it in Galor and Weil’s terms – what trig-

* I should like to thank V. Caspari and G. Rehme for helpful suggestions and fruitful discussions.

** Department of Economic Theory, Technical University Darmstadt, Hochschulstrasse 1, 64289 Darmstadt, Germany.
The author can be reached at berker@vwl.tu-darmstadt.de.

¹ The four schools are The Social Change School, The Industrial Organization School, The Macroeconomic School, and The Technological School (Mokyr 2016, 5).

gered the change from Malthusian growth to sustained growth (Galor and Weil 1999). Besides explanations covering technology (Landes 1969; Mokyr 1990), trade (Frankel and Romer 1999), human capital (Glaeser et al. 2004; Putterman and Weil 2010; Galor and Weil 1999; Galor 2005), geography (Diamond 1997; Gallup, Sachs, and Mellinger 1999; Gallup and Sachs 2001; Sachs 2001), culture (Weber 2006; Landes 1998; Guiso, Sapienza, and Zingales 2006; Tabellini 2008, 2010; Alesina and Giuliano 2010; Gorodnichenko and Roland 2011; Zakaria 1994; Temin 1997b), and luck (Crafts 1977; Hall 2003) there is now a lively debate about the role of institutions (North and Weingast 1989; North 1990; Acemoğlu, Johnson, and Robinson 2001a; La Porta, Lopez-de-Silanes, and Shleifer 2008). This debate can be traced back to North (1981). After the *institutional turn*, economists are now engaged in a lively debate about the role of different sets of social, economic and political institutions for long-run growth perspectives. Institutions are, together with geography and trade, considered a *deep determinant*, the real explanatory variables of growth, in order to distinguish them from *proximate determinants*, i.e., all other variables. Apart from this, understanding the nature and sources of institutional change is a logical consequence of this focus.

However, this focus brings economics back into the realm of social sciences (Mahoney and Rueschemeyer 2003) and by doing so effectively draws on insights gained by the *German Historical School* more than a hundred years ago.² With the institutional turn and its basic statement that “institutions matter” this forgotten school is undergoing a renaissance. Based on history, the fundamental insight of this school was that – in addition to time and space – institutions, customs, morals and conventions (today referred to as formal and informal institutions or “social infrastructure” (Hall and Jones 1999, 114) are of importance for understanding economics (Schefold 1989; Schneider 1962, 284–331; Schumpeter 1954, 800–824; Pierenkemper 2012, 181–91; Ziegler 2008, 86–94; Tribe 2003; Kurz 2008; Goldschmidt 2008). In the new economic history literature, England is very well studied for the obvious fact that it was the first country to experience what was later termed the Industrial Revolution and because institutional change happened continuously without much violence. The starting point is usually dated to the Glorious Revolution (North and Weingast 1989). France has also attracted a lot of attention as institutional change happened, contrary to England, abruptly and violently. The Americas and the Western off-shoots,³ or colonies in general, are frequently used as an object of study as their colonisation provides a turning point for institutional change (natural experiment) (Easterly and Levine 2016; Acemoğlu, Johnson, and Ro-

² One reaction to the worldwide financial and economic crisis in 2007 by economists was to rediscover the importance of history and soon hopefully also the history of their own subject, i.e., the History of Economic Thought.

³ Sometimes also referred to as Neo-Europes, a term coined by Crosby (2009, 2–3).

binson 2002; Feyrer and Sacerdote 2009; Henry and Miller 2009; Diamond and Robinson 2010). As compared to these examples, on the one hand Prussia has so far gained little interest in this respect by international researchers. For instance, in *Why Nations Fail* the term “Prussia” is mentioned only twice (Acemoglu and Robinson 2012a, 292–93). On the other hand, most studies about Prussia cover the early 19th century up until 1848, which exhibited heavy institutional change, shifting towards liberal reforms imposed from the top by Stein and Hardenberg (Vogler 1983; Ullmann and Zimmermann 1996; Kopsidis 1993; Koselleck 1967; Nolte 1990; Wehler 1987a).⁴ Heinrich von Treitschke consequently talked of Stein as an pioneer in this “era of reforms” (Treitschke 1937, 65) and Ulrich Wehler coined the term “defensive modernisation” to describe the nature of the “*Stein-Hardenberg’schen Reformen*,” the Prussian reaction to the French revolution that followed the Prussian defeat by Napoleon in 1806 (Wehler 1987b).

This paper instead focuses on institutional change in Prussia in the 17th and early 18th century since the Thirty Years’ War is generally regarded as the nation building war in Europe. With regard to institutional change, this means that many institutions were brought into place during this time or were established as a direct consequence of the war. Hence, the focus to this earlier period. The paper shows the importance of geography in association with politics, i.e., the *geopolitical context* for understanding institutional change. It tries to do so by taking three different events with a geopolitical moment to it as a case study: The aftermath of the Thirty Years’ War, the annexation of Ducal Prussia and the rise in rank of Frederick III. This way, the paper argues that in order to understand institutional change in general, and especially during that period in Prussia, it is *sometimes also* necessary to have a look beyond the country’s border(s).⁵ This argument doesn’t exclusively apply to Prussia. It also applies to other continental countries too, as for instance France, the Habsburg Empire, Russia and Poland. However, as Prussia is the country in continental Europe with the most direct neighbours, all of them well-established powers in Europe, the argument seems to be strongest in the Prussian case. As can be shown, most of the necessity for institutional change had a strong geopolitical component resulting from its central location, a well-established fact among German historians. The paper draws on the arguments of how Prussian history is told by Christopher Clark in his book *Iron Kingdom: The Rise and Fall of Prussia*.⁶ As

⁴ In the recent literature this is discussed in terms of big bang versus gradualism for institutional reform triggered by Rodrik (2009). See Zweynert (2011). For areas west of the Rhine, this argument is discussed in Tilly (1996), Simms (1997), Acemoglu et al. (2011), Zweynert (2011), Kopsidis and Bromley (2015).

⁵ To the best knowledge of the author, the only work explicitly considering geopolitics in its title is the work by Jones (2008): “The European Miracle: Environments, Economics and Geopolitics in the History of Europe and Asia.”

⁶ A well-received book among German historians.

usual it is a political history that is being told by Clark. Nevertheless, without rewriting history, the arguments put forward can very well be incorporated into the existing body of literature of the new economic history, adding some interesting insights. This paper in effect highlights how context-sensitive institutional change can be, especially in the political realm of 17th and 18th century continental Europe. It shows that in addition to geography in terms of the political location on the map having a direct effect (being politically land-locked), there are more complex permanent indirect effects of geography via institutions. In the case of Prussia, indirect effects of geography formed the foreign policy with the result of a tendency to balance it off to all sides.

The rest of this paper is structured as follows: Chapter 2 gives an overview of the related literature. Chapter 3 presents some important facts about Prussian history. Chapter 4 describes the three historical events that were chosen for the case study: The aftermath of the Thirty Years' War (1618–1648), the annexation of Ducal Prussia in 1657 and the rise in rank of Frederick III in 1701. Chapter 5 highlights the consequence of the geopolitical context for institutional change in historical perspective. Finally, chapter 6 summarises the results and concludes.

2. Related Literature

The economic growth literature of the early days emphasises the importance of capital accumulation, i.e., the savings rate, investment and technological progress (*proximate determinants*). The discussion in the 1980s saw a shift in the growth and development literature towards the importance of human capital, whereas the discussions in the last two decades have focused more and more on institutions. Besides this, it has not been queried whether a country's geographic location and the associated geographic condition play a major role. Published in 2001 and 2002, the seminal papers by Acemoglu, Johnson and Robinson extensively questioned the role of geography. The argument was put forward that it is rather a country's economic and political institutional framework that decides its long-run growth trajectory. Their argument can be summarised as follows: The possibility for a country to enter the stage of continued long-run growth increases with the inclusiveness of its institutions. Inclusiveness refers to the idea that a large part of economic and political power is distributed among the majority of its citizens, instead of a small elite holding power, and that private property rights are secured.⁷ Using this idea and applying it to colonised countries, they show the "reversal of fortune" in these countries (Acemoglu, Johnson, and Robinson 2002). This work triggered a whole

⁷ This is the New Institutionalism argument, that the quality of institutions is the key to growth. See North (1990) and Richter and Furubotn (1996).

new set of empirical studies which tried to explain cross-country income differences with institutions (new comparative economics) (Djankov et al. 2003). This research body focuses primarily on three variables known as *deep determinants* of economic development: institutions, geography and trade (Rodrik, Subramanian, and Trebbi 2004). The discussion centres on the question of which of these determinants can be considered as the primary factor accounting for long-run growth, ultimately culminating in the geography vs. institutions debate.⁸ This paper is generally motivated by this branch of literature. It deviates from this body of literature, however, in three important respects:

1. The term geography usually refers to climate related issues. This paper is neither concerned with Prussia's endowments such as the quality of the soil, the disease environment or the climatic conditions, i.e., the direct effect of geography.⁹ The paper uses the term geography always having in mind the geographical location in association with what was politically going on around Prussia that affected Prussia.
2. The paper is not concerned with the quality of institutions and their effect on long run growth or how they evolve politically.¹⁰ This paper looks primarily to institutional changes that were brought into place by outside pressure. The paper thereby focuses on institutions to levy taxes, which were first and foremost used to finance a standing army, rather than looking into economical and/or political institutions.
3. These studies are generally technical and try to quantify the long-run growth impact of either geography or institutions or both. This paper is rather a qualitative case study.

The paper discusses a well-established fact among German historians that the *geopolitical context* – in Prussia's case the central location within continental Europe – was a strong driving force for institutional change (Bracher 1963; Hinze 1981; Schöllgen 1992). Therefore, the paper combines arguments from both the geographical and political point of view in order to explain institutional change in the light of state formation due to pressure from outside. The paper is thus mostly related to the Charles Tilly Framework line of argument (1990).

⁸ Overviews are provided in Acemoğlu, Johnson, and Robinson (2005a) and Hemmer and Lorenz (2004, 204–25). See also Glaeser et al. (2004); Easterly and Levine (2003); Rodrik, Subramanian, and Trebbi (2004); and Spolaore and Wacziarg (2013).

⁹ This argument can be traced back to Montesquieu in 1748 (Montesquieu and Nugent 1952). For this line of research see for instance Lambert (1971); Diamond (1997); Engerman and Sokoloff (1997); Bloom and Sachs (1998); Gallup and Sachs (2001); Sachs (2001, 2003, 2012a, 2012b); Olsson and Hibbs (2005); Mayshar, Moav, and Neeman (2013).

¹⁰ For this line of research see for instance Mauro (1995); La Porta et al. (1997, 1998, 1999); Hall and Jones (1999); Acemoglu et al. (2001a, 2002, 2005a); Feyrer and Sacerdote (2009); Manca (2010); Thelen (2003).

3. Historical Background

As the Prussian history¹¹ is an important basis for the following discussions, this chapter supplies foundation information about important political events and institutional changes that made up the ties between Prussia and the Holy Roman Empire.¹² Those ties can be traced a long way back into history and show a strong path dependency. Hence, they play an important role for the geopolitical events discussed in chapter 4. This chapter discusses the connection between Prussia and the Holy Roman Empire along political and religious lines. In addition to this, some important aspects about the Prussian territory are presented.

3.1 Prussia and the Holy Roman Empire: Political Ties

The Hohenzollern were a dynasty of former south-German magnates, forming the core of an expanding territory within the *Holy Roman Empire of German Nation*¹³ (Wienfort 2008, 7; Clark 2006, 4). The purchase of the Margraviate of Brandenburg in 1415 by the burgrave of Nuremberg (a member of the Hohenzollern) elevated the burgrave into a small exclusive elite of German princes. In addition to being one of the more than 300 sovereign entities that made up the Holy Roman Empire, Brandenburg became the Electorate of Brandenburg during the 13th century and has belonged since then to the group of the seven electorates (*Kurfürstentümer*) of the empire (Stürmer 2007, 109). This means that the Elector of Brandenburg was one of the (only) seven electors who had the right to elect the king of the Holy Roman Empire (King of the Romans).¹⁴ This right established a very powerful position within the empire and finally got codified with the Golden Bull of 1356.¹⁵ The Golden Bull was issued at the imperial diet of Nuremberg, headed by Emperor Charles IV on January 10th, 1356.¹⁶ It codifies many important aspects of the constitutional structure of the Holy Roman Empire. The Golden Bull was considered the body of the Basic Law (*leges fundamentalis*).¹⁷ The Golden Bull can be

¹¹ For complete surveys of Prussian history in German language, see Büsch and Neugebauer (1981); Neugebauer (2009a and 2009b). Full overviews of Prussian history in English language are available in Carsten (1964); Dwyer (2000 and 2001); and Clark (2006).

¹² The first complete history of the Holy Roman Empire of the early modern period in English was recently published in Whaley (2013a) and Whaley (2013b). See North (2015). The role of institutional factors for the economic history of the empire is discussed in North (2004).

¹³ This was the official name from 1512 onwards. I will use Holy Roman Empire here for convenience.

¹⁴ Frederick Hohenzollern got this right in 1423 (Dann 1989, 6).

¹⁵ The decree carried a golden seal, hence the name. A translation to English of the Golden Bull is available in The Avalon Project (2016).

thought of as an equivalent to the Magna Carta of 1215. Therefore, with the Golden Bull – as with the Magna Carta – the nobility was strengthened against the king.¹⁸ The electors, and hence also the Elector of Brandenburg, were strengthened for several reasons: First, it reduced the electors to seven, explicitly named them, and determined the order in which they cast their votes according to rank. Second, all privileges of the electors that emerged over time, and had thus far the status of customary law, were codified. Third, no papal approbation was needed any longer in order to become emperor. Therefore, it formalised the Declaration of Rhense (Mitteis 1987, 226). Fourth, it prohibited any collusion. Fifth, an elector could be elected king and hence directly become emperor. Finally, with the Golden Bull the voting system was switched from unanimity to a majoritarian voting system (Stollberg-Rilinger 2013). The last two institutional changes are most significant as a power enhancing device for the electors since their effect is that any of the electors could be elected to the throne by four out of seven votes (Mitteis 1987). That in turn forced the emperor to make concessions to the electors if he wanted his dynasty to succeed him on the throne, which he certainly wanted the most. An increasing dependency of the emperor on the favours of the electors is the main result of the Golden Bull.

This clearly shows the character of the Holy Roman Empire: the emperor was the *de jure* sovereign of the empire. Yet, the power was *de facto* much more decentrally distributed among the electors and estates. Thus, the emperor had more the character of a ceremonial figurehead. He was only the suzerain.¹⁹ With this in mind it is straightforward and clear why the election capitulations (*capitulatio caesarea*) were of such an outstanding importance: Since the emperor needed the favours of the seven electors in order to ensure members of his dynasty to become elected in future, the electors were able to use this dependency in order to be guaranteed that their rights, freedom and privileges were inviolable, basically ensuring their territorial rights.²⁰ In addition to this, they ensured that all affairs of the empire had to be confirmed by the electors

¹⁶ Charles IV's intention in issuing the Golden Bull was to increase the welfare of the empire by codifying for all time the process of the emperor's election, the unity of the electors and therefore securing order and peace (Zeumer 1972, 185; Mitteis 1987, 222).

¹⁷ Later extended by the Peace of Augsburg (1555) and the Peace of Westphalia (1648) (Stollberg-Rilinger 2013, 14).

¹⁸ The Golden Bull of 1356 was not the only document of that time on the continent. Similar documents contain among others the Golden Bull of Hungary (1222), the Privileges of Aragon (1283, 1287), and the *Tübinger Vertrag* (1514) (cf. Carsten 1959; Näf 1951).

¹⁹ The emperor had a reciprocal relationship to his vassals via the fealty. He was therefore no sovereign (Anderson 1978, 180).

²⁰ As history shows, until the formal abolition of the empire in 1806 the choice fell almost every time in favour of the eldest member of the Habsburg family (Clark 2006, 5).

(Stollberg-Rilinger 2013, 27). Since the election capitulations were of cumulative character, over the centuries the electors accumulated more and more power.

3.2 Prussia and the Holy Roman Empire: Religious Ties

In addition to these political ties between the Holy Roman Empire and the Elector of Brandenburg, there was a strong tie along religious lines. Historically, the emperor and his territories were Catholic. However, from the 14th century onwards disagreements about some Christian rites (sacraments) of the Roman Catholic Church evolved, ultimately leading to a schism in the Catholic Church.²¹ This process started 1517 in Wittenberg with Martin Luther's Ninety-Five Theses and ended in 1648 with the Peace of Westphalia.²² Peace came in 1555 with the Peace of Augsburg. It legalised the schism of Christendom into Catholic and Lutherans and therefore became the second milestone in the *leges fundamentalis*. The Peace of Augsburg ignored all theological issues and instead focused on solving the problem of both religious faiths peacefully coexisting next to each other (Gotthard 2004, 88). The Peace of Augsburg in 1555 made the Reformation legal (Schmidt 1992, 4). Generally speaking, the north became the reformed region and the south stayed Catholic. Figure 1 shows Germany and its confessions before the Peace of Augsburg. In Brandenburg, the switch from Catholicism to Calvinism was done in three steps: In 1539 the Lutheran reforms started under Joachim II Hector (Dann 1989, 6). A major shift towards Lutheranism happened under John George in 1571.²³ Finally, the Elector of Brandenburg, John Sigismund, converted first to Lutheranism and made a second conversion to Calvinism in 1613 (Clark 2006, 116).²⁴ Figure 2 shows the adoption of Calvinism in Germany up until 1600. The elector thought he was able to send a signal for a second reformation within Brandenburg (Clark 2006, 116).²⁵ Unfortunately, he completely misinterpreted the

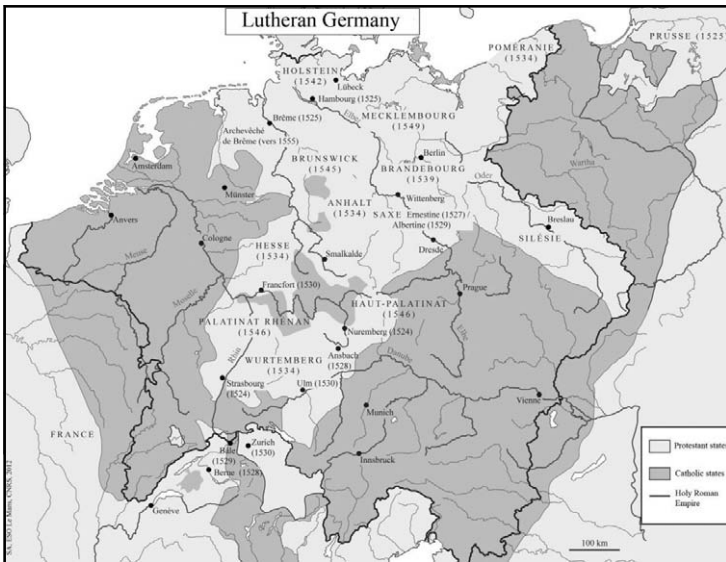
²¹ Disagreements contain among others, the simony, the indulgence, the Last Supper and in connection with that the question of transubstantiation (Köhler 1924).

²² Martin Luther, a monk originally named Martin Luder started signing his letters with "Eleutherius", meaning the freed one. The new version of his name was probably derived therefrom (Roper 2015, 43).

²³ Universities were stocked with Calvinists and the reformation process was overseen by a Church Council (Clark 2006, 6, 116).

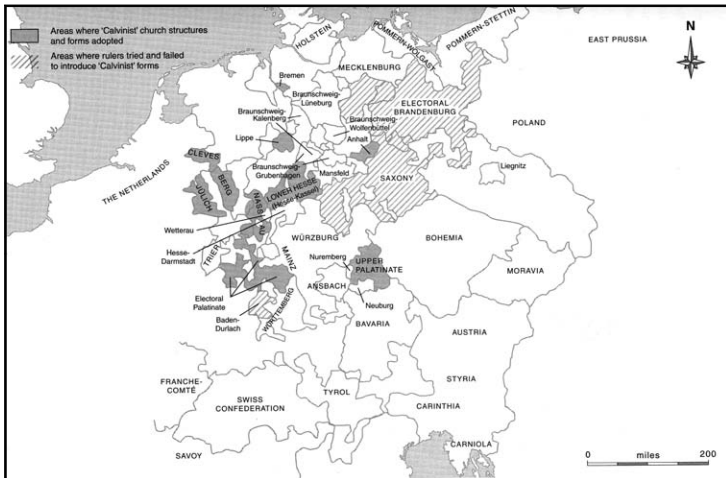
²⁴ This was about to become an interesting issue and field of study almost 300 years later when in 1904 Max Weber published his *The Protestant Ethic and the Spirit of Capitalism* in which he hypothesises that the protestant work ethic, especially in the form of Calvinism, is an important momentum for the rise of modern capitalism (Weber 2006; Becker and Woessmann 2009; Woodberry 2004, 2012).

²⁵ The term "second reformation" was coined by Heinz Schilling and claims to fulfil the Lutheran "first reformation" that reformed the doctrine, by a "reform of life" (Schmidt 1992, 80).



Source: Roper (2015, 74).

Figure 1: Germany before the Peace of Augsburg.



Source: Eire (2015, 107).

Figure 2: The spread of Calvinism in the German Empire to 1600.

situation and faced resistance on every level of society (Clark 2006, 117). He was forced to let his subjects have a different religion than himself.²⁶ This shows that the same distribution of power that existed between the emperor of the Holy Roman Empire and the Elector of Brandenburg also existed on the lower level of the Margraviate of Brandenburg. The elector relied heavily on the nobility and estates within the Margraviate of Brandenburg. Therefore, his power was limited and he had to get permission for almost everything he wanted to do, especially raising taxes (Clark 2006, 13–14). In case of a dispute with the elector, the estates no longer used violence but instead went to court (Wienfort 2008, 19). More important for the discussion in chapter 4 is the fact that by switching to Calvinism he violated the formalities of the Augsburg Settlement (Wienfort 2008, 21).²⁷

3.3 Prussia and her Territory and Population

The region later to become Prussia was initially, in the early 15th century, a rather small territory around Berlin in today's north-eastern part of Germany called Margraviate of Brandenburg. Figure 3 shows this territory in 1415 when



Source: Clark (2008, 18).

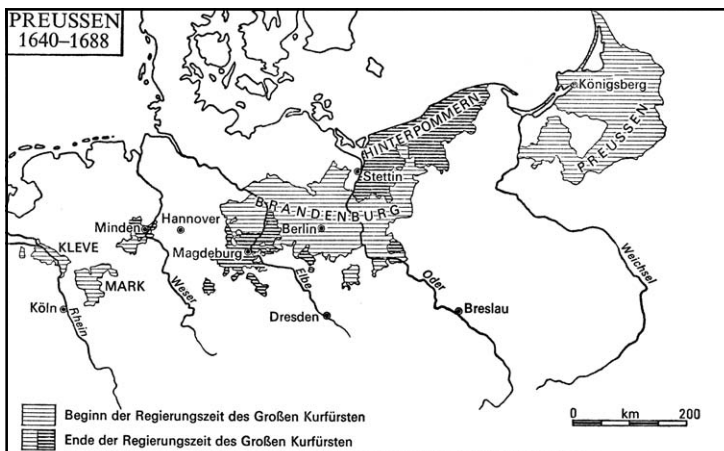
Figure 3: The Electorate of Brandenburg at the time of its acquisition by the Hohenzollern in 1415. Source: Clark (2008, 18).

²⁶ In effect deviating from the rule of *cuius regio, eius religio*. This way Prussia became tolerable with respect to different religions which was rather uncommon in Europe during that time (Clark 2006, 21).

²⁷ Only Catholicism and Lutheranism was accepted (Schmidt 1992, 4; Gotthard 2004, 123).

it was purchased by the Burgrave of Nuremberg named Frederick Hohenzollern, a member of the House of Hohenzollern. In the course of history the name as well as the size of the Prussian territory changed considerably. In 1614 the areas of Kleve, Mark and Ravensburg near the border with the Netherlands in the west were added (5,470 km²) (Mieck 2009, 50). In 1618 the area of the Duchy of Prussia in the far east (a Polish fief since 1466 with 36,000km²) (Diwald 1978, 500; Mieck 2009, 450) became part of the Brandenburg administration and the territory was therefore from 1618 to 1701 referred to as Brandenburg-Prussia. Full sovereignty over the Duchy of Prussia followed in 1657 with the Treaty of Wehlau. In the meantime, from 1618–1657, Brandenburg and the Duchy of Prussia constituted a personal union when the Elector of Brandenburg also became the Duke of Prussia. In 1660 Pomerania became part of Brandenburg-Prussia. From 1701 onwards, after Elector Frederick III of Brandenburg crowned himself “King in Prussia,” the territory’s name changed to “Kingdom of Prussia.” Figure 4 shows the location of the territory up until 1688. As Clark summarises:

“After 1648, [...] [f]or the first time in its history, Brandenburg was bigger than neighbouring Saxony. It was now the second largest German territory after the Habsburg monarchy. And all this was achieved without discharging a single musket, at a time when Brandenburg’s tiny armed force still counted for little (2006, 48–49).”



Source: Feuchtwanger (1972, 271).

Figure 4: Prussian Territory 1640–1688.

It becomes immediately obvious that the territory features a huge east-west territory and fragmentation. Table 1 summarises the territorial area covered as well as the population size.

Table 1
Prussian Population and Area 1440–1920
(Dann 1989, 13)

Year	Population (in mil.)	Area (in km ²)
1440		29,478
1598		39,413
1619		81,064
1688	1.5	110,836
1786	5.4	194,891
1805	10.8	346,908
1807	4.9	158,009
1815	10.4	278.042
1861	17.7	279.030
1888	29.9	352.260
1913	40.1	352.260
1920	36.6	294.535

The increase in population during the 17th and 18th century is mostly due to the increase in territory and a settlement policy. Among them are, for instance, the accepted immigration of oppressed Huguenots with the Edict of Potsdam in 1685 as a reaction to the revocation of the Edict of Nantes from 1598 (Neuhaus 1997, 252).²⁸ As Prussia was a fiefdom of the Holy Roman Empire, table 2 shows the population size of Germany from 1500 to 1800.

The slowdown in the population's growth rate from 1560–1630 was due to both a bad climate (rains only in mid-summer), leading farmers also to cultivate soils with low crop yields, and a plague epidemic (Pfister 1994, 12). It is however important to note that the increase in population was region specific with a high housing density in the Black Forest and Württemberg area with 8–10 buildings per square kilometre and a low of two buildings per square kilometre in the northeast, i.e., Prussia (Pfister 1994, 13). Consequently, even in 1778 only about 28% of the Prussian population lived in cities whereas 72% lived in the countryside (Hinze 1981, 308).

²⁸ As the Huguenots were well-qualified in manufacturing, handicrafts and the production of luxury goods (they fled from France) they were considered as enriching Berlin. This is emphasised by an article titled "Immigration as development aid" (Jersch-Wenzel 2001, 114–15).

Table 2
Population Size and Growth Rates in Germany, 1500–1800
(Pfister 1994, 10)

Year	Population (in Mill.)	Growth rate (in%)	Year	Population (in Mill.)	Growth rate (in%)
1520	10.0	5	1590	15.7	4.1
1530	10.8	7.2	1600	16.2	3.2
1540	11.7	7.5	1618	17.1	3.2
1550	12.6	7.2	1650	10.0	–13.4
1560	13.5	7.1	1700	14.1	8–10
1570	14.4	5.8	1750	17.5	4
1580	15.0	4.6	1800	22.0	4

The most important aspect of the Prussian territory is, however, its central location and thus being surrounded by many direct neighbours. The territory under study is located between France and Netherlands (west), the states of the Holy Roman Empire of the German Nation (so-called from 1512 onwards) in the south, the Habsburg Empire including Spain (south and south-east), Sweden and Denmark (north) and the Kingdom of Poland-Lithuania in the east and north-east, England in the north-west.

To summarise important aspects of chapter 3: By the time of the outbreak of the Thirty Years' War, Prussia had Lutheran citizens and a Calvinist elector. The territory was centrally located in continental Europe without natural borders and its territory stretched from the edge of the Netherlands in the west to the Duchy of Prussia in the east and was far from being a connected land mass. In 1618 there remained “a gross discrepancy between commitments and resources” (Clark 2006, 17).

4. Three Events of Institutional Change due to Geopolitical Context

4.1 The Aftermath of the Thirty Years' War

“An account of institutional change cannot leave aside the exchange of bullets and cannonballs any more than it can ignore the flow of ideas about political and economic institutions” (Bogart et al. 2010, 72).

The example of the aftermath of the Thirty Years' War provides a good illustration of how the geopolitical context played a major role with respect to Prus-

sian institutional change.²⁹ Initially a conflict between the German Catholic League and the Protestant Union, the war quickly developed into a battle for European supremacy between France and the Habsburg Empire. With the Haager Alliance,³⁰ it finally encompassed all of the great powers of 17th century Europe. As figure 5 shows, the war primarily took place on German territory, including especially the territory of the Electorate of Brandenburg. Consequently, Protestant cities were hit much more severely (Cantoni 2015, 561). Due to its lack of power, the Elector of Brandenburg, George William, inten-



Source: Black (1996, 67).

Figure 5: Battlefields of the Thirty Years' War.

²⁹ The catalyst for the Thirty Years' War was the Defenestration of Prague in May 1618 as an act of rebellion by Protestant Bohemian estates against the on-going restriction of their rights (Schormann 1985, 25). The characterisation of the course of action of the Thirty Years' War follows mostly Clark (2006, chapter 2).

³⁰ Members of the 1625 anti-Habsburg alliance were Denmark, England, United Provinces (Netherlands) and the Protestant Union (Roeck 1996, 251).

tionally wanted to remain neutral.³¹ Since the war took place over his entire territory and he was unable to provide security for his people, he entered an alliance with the emperor of the Holy Roman Empire with dire consequences: The citizens had to feed the imperial soldiers.³² He returned to a policy of neutrality, finally forming a Protestant block between Sweden in the north and the empire in the south. Once Sweden had entered the war, strengthening the Protestants and moving southwards, he was forced to sign an alliance with Sweden. The alliance proved short-lived as the imperial troops started to gain ground. He again allied himself with the emperor, only to see his territory plundered by Swedish, imperial and his own troops.

“The rapid alternation of alliances also reflected the complexity of Brandenburg’s security needs. The integrity of the western territories depended on good relations with France and the United Provinces. The integrity of Ducal Prussia depended on good relations with Poland. The safety of Brandenburg’s entire Baltic littoral depended on holding the Swedes at bay. The maintenance of the elector’s status and the pursuit of his inheritance claims within the Empire depended upon good (or at least functional) relations with the emperor. All these threads crossed at various points to form a neural net generating unpredictable and rapidly shifting outcomes (Clark 2006, 51 – 52).”

Prima facie, this disparate array of allies may look confusing and even bewildering. It is, however, the result of the geographical location in association with the political landscape of 17th century Europe, i.e., the *geopolitical context*. The pendulum policy (*Schaukelpolitik*) he followed, which is a stable policy pattern that can be traced throughout the whole of Prussian history, was not due to his personal indecisiveness or hesitant personality, but had structural roots (Clark 2006, 26–27): he was forced to make obviously difficult decisions in a situation in which he first and foremost wished to avoid making a decision at all. The best outcome for his country could not be realised due to an outside political event. Instead, he had to fight a war lasting 30 years, a well-recognized growth killer. As the war was fought in the form of siege warfare, which saves on soldiers, it meant detrimental consequences for the population. Table 2 also shows the devastating effects of the Thirty Years’ War. As far as the size of the population in Germany is concerned, the Thirty Years’ War meant a fall-back to the population size of 150 years earlier, i.e., to 1520. However, this decrease in population size was less due to huge numbers of deaths on the battle field but rather due to three other causes (Pfister 1994, 14): First, a huge wave of the plague which was transmitted around the country by soldiers. Second, a quick spread of the plague within cities (with catastrophic medieval hygiene and sanitation standards) as people fled into the cities in order to hide from the war.

³¹ In the midst of the war in 1640 Brandenburg had only around 4,600 soldiers (Diwald 1978, 503).

³² Each soldier requiring 2.2 pounds of bread, 1 pound of meat and 3 litres of beer on a daily basis (Wienfort 2008, 22).

Third, famines due to crop shortages, which also made the price of labour and grain rise in two distinct waves (Abel 1978, 158–160 and 183).

George William had at this point in time no apparatus at hand with which to collect taxes. Therefore, everything had to be organised via the estates (Clark 2006, 28). During the war it was learned, that in times of misery it is necessary to remove the privileges of the estates, implying a move towards absolutist rule (Clark 2006, 29). This involved curtailing the people’s rights first. One of these rights was the right to ratify taxation (*Steuerbewilligungsrecht*). Consequently, this ultimately led to a fiscal autocracy (Clark 2006, 29). Thus, the Thirty Years’ War is considered the fundamental European state building war (Burkhardt 1995, 54). For Prussia this meant basically two things: First, building a powerful standing army and second building a public administration, i.e., getting a certain degree of centralisation and thus homogenisation. From this finally followed the change to Enlightened absolutism.³³ A powerful standing army is in the first instance an expensive venture. And, as mentioned above, levying taxes was a prerogative of the estates, which tended to use this right as a vehicle to further their own goals (Diwald 1978, 503–4). The funding of the army was therefore based on three financial sources. First, a minor part was financed via subsidies from foreign countries. Table 3 exemplarily shows contracts with France with respect to subsidies France paid for Prussia.

Table 3
French Subsidies to Brandenburg 1669–1683
(Mieck 2009, 517).

Contract	payment on a yearly base in livres	length in years
31.12.1669	120,000	10
06.06.1673	800,000	6
25.10.1679	100,000	10
11.01.1681	300,000	10
22.01.1682	400,000	10
30.04.1683	900,000	unspecified
25.10.1683	500,000	4

As long as a tax-financed standing army was non-existent, the elector needed the subsidies as a financial source. Alliances started to comply with reason of

³³ The term “Enlightened absolutism” is alternatively used to “reform absolutism” to distinguish it from the absolutism of Louis XIV of France and to emphasise that reforms gained a certain momentum during this period (Demel 2010, 61–62).

state only after the army was paid for by taxes (Kunisch 1990, 29–30). As Clark bluntly and appropriately puts it:

“Playing the system [alliance switching] effectively meant being on the right side at the right moment, and this in turn implied a readiness to switch allegiances when an existing commitment became burdensome or inopportune. [...] There was method in the madness, however. In order to pay for his growing army, Frederick William needed foreign subsidies. Frequent alliance-switching forced would-be partners into a bidding war and thereby pushed up the going price for an alliance” (Clark 2006, 51–52).

The second financial source were compulsory contributions which were later replaced by excise (indirect tax) in cities. The third financial sources were direct taxes which had to be negotiated. Besides this fact, the estates of Brandenburg did not want to pay for military campaigns conducted in far-away regions like Kleve or the Duchy of Prussia. However, in 1653 the estates granted the right to pay a certain amount for the standing army (Diwald 1978, 504). This is, looking at it from today’s point of view, the beginning of their loss of power (Dann 1989, 6). The second problem in addition to financing a standing army was the recruitment. Table 4 gives an overview of the development of the Prussian army’s head count.

Table 4
Size of the Prussian Army

Year	Number of soldiers	Year	Number of soldiers
1477	12,000 (Jany 1967a, 4)	1740	81,000 (Jany 1967b, 8)
1640	4,650 (Diwald 1978, 503)	1752	136,000 (Oppeln-Bronikowski 1941, 7)
1646	8,000 (Clark 2008, 66)	1768	154,000 (Oppeln-Bronikowski 1941, 7)
1655	25,000 (Clark 2008, 66)	1789	195,000 (Jany 1967c, 181)
1675	38,000 (Clark 2008, 66)	1813	271,000 (Jany 1967d, 93–94)
1678	45,000 (Jany 1967a, 274)	1867	264,000 (Jany 1967d, 228)
1680	25,000 (Jany 1967a, 632)	1870	313,000 (Jany 1967d, 254)
1715	45,000 (Jany 1967a, 660)	1888	377,000 (Jany 1967d, 287)

As can be seen, shortly after the war there was a huge upsurge in the size of the army, which basically kept on rising throughout the centuries. How was it possible to recruit such a number of soldiers so rapidly (Pfister 1994, 24–32)? There are basically two explanations: One answer has deep roots in the organisation of society. It was possible because of what is known as the “*demographische Reservearmee*,” that is an amount of roughly 20% unmarried men in each cohort. This is a result of the European Marriage Pattern (EMP) (Hajnal 1965). The pattern’s characteristic is that west of a hypothetical line stretching

from Saint Petersburg to Trieste women married relatively late (at the age of 25), effectively reducing the fertile span of life. This has two effects: First, less children per woman and therefore reduced population growth. Second, an amount of roughly 20% of unmarried men and women in each cohort.

In addition to this aspect of demographics, the second answer to the recruitment problem lay in the canton system which was established in 1733 (Neuhaus 1997, 459). This device also brought “the nobility into subordination” as everyone (also sons of the nobility) had to serve in the army (Clark 2006, 98).³⁴ Putting these two aspects together one gets a great pool of potential recruits: “Further orders assigned a specific district (canton) to each regiment, within which all the unmarried young men of serving age were enrolled (*enrolliert*) on the regimental lists” (Clark 2006, 97). The permanent army acted for Friedrich William I as a “*perpetuum militem*” (Jany 1967a, 277).³⁵

The financing of a standing army also required the establishment of a functional institutional framework (public administration), which ultimately creates a financial autonomy in the hands of the state. For Frederick William this meant primarily a fight against the estates as they traditionally held many rights with respect to tax collection (Diwald 1978, 503–4). This conservatism should, however, not be confused with saying that the nobility and estates can be considered as institutional delayers, as they also engaged in investments in their respective territory. Hence, they rather play an ambivalent role with opposing changes on the one hand and trying to keep their privileges untouched and creating change themselves by investing into the region. The establishment of the public administration begun under Frederick William (the Great Elector) in 1650 and followed Jean-Baptiste Colbert (mercantilism) (Clark 2006, 85–86).³⁶ Later, under Frederick William I (1713–1740), it turned away from a Colbertian organisation of the state, as he started realising that excessive taxation harms productivity (Clark 2006, 90). Frederick William I’s ultimate goal was absolute control over tax collection, getting subsidies from abroad as an income source, empowering the economy, financing new manufactures and equalising jurisdiction, all part and parcel of the greater goal of setting up a functional public administration (Diwald 1978, 505). The following institutional changes were of great importance in reaching these goals (Clark 2006, 90–94):

- Excise (1660s): An indirect duty on goods and services. This was levied among others on sales and cattle (Diwald 1978, 504). The excise, which was

³⁴ In order to get the nobility used to serving in the army, a cadet school was set up in Berlin for military training of their sons (Feuchtwanger 1972, 39).

³⁵ These were still small numbers as compared to France. In 1678 the French army had a head count of 279,610 men and in 1684 (during times of peace) still a size of 162,000 men (Jany 1967a, 278).

³⁶ Colbert was a protagonist of French mercantilism (Schmidt 2002, 47).

collected at the doors of towns, became the main tool of taxing imported goods (Feuchtwanger 1972, 48).

- General Hide Tax (*Generalhufenschöß*, 1715): All landholdings were classified and taxed according to soil quality, ultimately leading to increased agrarian productivity.
- Allodification of the fiefs (*Allodifikation der Lehen*, 1717–1728): Removed red tape connected to the sales of land that was left over from feudal times (abolition of the *nexus feudalis*). This way the transparency increased of what an estate is really worth (Schenk 2013, 120).
- Guilds (1720s): Privileges of the guilds were dismantled and created a more unified labour market.³⁷
- Administrative offices: Personnel was chosen from commoners in order to avoid solidarisation with the interests of the nobility.³⁸

Table 5 gives an overview of important institutions that were set up in order to manage the state's finances.

As can be seen, the centralisation was a process of reforming and restructuring institutions again and again, finally culminating in two institutions: The General War Commissariat and the General Finance Directory. Overlapping tasks of those two institutions ultimately led to a unification into a central ministry named General Directory (Neuhaus 1997, 356). It is important to know that not only were existing institutions reformed but also the way they were managed took a dramatic turn with the death of Frederick I and the beginning of his son's (Frederick William I) reign (Feuchtwanger 1972, 41). In the course of time, the policy based on force and coercion dissolved away Brandenburg-Prussia from the jurisdiction of the empire (Schenk 2013, 215–16).

³⁷ It is important to note that this can be considered the beginning of a process that would take almost a full century to be completed. This is a good case in point to show how slow institutional change can be when privileges dating back long into history are to be dismantled. Full freedom of trade was only guaranteed from October 1810 onwards, when the reforms under Stein and Hardenberg were introduced (Vogler 1983, 165–87).

³⁸ As Clark notes, sometimes these were talented noblemen even if the motivation remains unclear: "Some were simply won over to the monarch's administrative vision, others may have been motivated by disaffection with the corporate provincial milieu, or joined the administration because they needed the salary (2006, 94)." Among these men were Eberhard von Dackelman and Dodo zu Knyphausen (Feuchtwanger 1972, 30–31). It is noteworthy that in 1807 Hardenberg wrote his Riga Memorandum, together with Altenstein, in which he lay down necessary reforms of which he thought that they were of utmost importance. In the chapter concerning reforms to domestic policies he says that "*Jede Stelle im Staat ohne Ausnahme sei nicht dieser oder jener Kaste, sondern dem Verdienst und der Geschicklichkeit und Fähigkeit aus allen Ständen offen.*" basically showing that the goal (also appointing commoners to administrative offices) has not yet been fully reached. This again implies that institutional change which started in the 1720s was still of concern almost a century later (Ranke 1877, 21).

Table 5

Important Prussian institution 1650–1750
(Vierhaus 1984, 78; Neuhaus 1997, 356–77; Clark 2006, 85–88)

Year of establishment	Name (German)	Name (English)	Function
1651	Geheimer Rat	Privy Council	Electoral office for the state's politics and legislation.
1660	Generalkriegs-kommissariat	General War Commissariat	Managing the collection of a new tax called "excise" which was levied in towns to finance military expenditure.
1689	Geheime Hof-kammer	Central Revenues Office	Management of all non-tax revenues.
1699	Oberdomänen-direktorium	Chief Domains Directory	Management of the crown lands.
1713	Generalfinanz-direktorium	General Finance Directory	Central Revenues Office and Chief Domains Directory were put together due to a need for more centralisation.
1723	General-direktorium	General Directory	The new directory resulting from a connection of the General War Commissariat and the General Finance Directory to solve the problem of overlapping tasks.

4.2 Annexation of Ducal Prussia in 1657

As the previous chapter showed, after the Thirty Years' War, building a standing army and a public administration started as a result of the experiences made in the war. Shortly afterwards another event caused a major change in Brandenburg. From 1654–1667 the Kingdom of Poland was at war with Russia and at the same time from 1654–1660 Sweden tried to conquer Poland-Lithuania in the Second Northern War. As the Polish crown wanted to avoid fighting a war in the north, east and west, the Polish king John II Casimir Vasa bargained with Brandenburg over military aid.³⁹ The Great Elector used this geopolitical constellation in order to get the full sovereignty over Ducal Prussia,⁴⁰ which was settled in 1657 in the Treaties of Wehlau (Neuhaus 1997, 238–44). European acceptance of Prussian sovereignty over Ducal Prussia followed in 1660 with the Treaty of Oliva (Neuhaus 1997, 244–48). Ducal Prussia ceased to exist as a Polish fief after almost two centuries.⁴¹ At this point in

³⁹ The description of this passage follows in large parts Clark (2006, chapter 3).

⁴⁰ Ducal Prussia and Duchy of Prussia can be used interchangeably.

time, the fragmentation of Brandenburg-Prussia reached a new height as it now stretched from the edge of the Netherlands all the way to the east. Of course, the Great Elector saw the three geographically separated regions as one, i.e., “his” country (*membra unius capitis*) (Diwald 1978, 505). As a consequence he was anxious to establish public administration everywhere. This however was not as easy as it may seem. In the western regions of Kleve and Mark, Frederick William was considered a foreign invader and the estates were much more oriented towards the Dutch Republic than to Berlin. In Brandenburg resistance from the estates was due to the fact that they “viewed the respective territories as discrete constitutional parcels, bound vertically to the person of the elector, but not horizontally to each other” (Clark 2006, 55). Why, then, support the elector with monetary or real resources? In the eastern region of Ducal Prussia the estates were additionally used to have the traditional right of appealing to the Polish crown. Therefore, the time after the Thirty Years’ War was one of continuous civil disturbances. The Elector encountered resistance in each of the three regions. The resistance was, however, strongest in Ducal Prussia, where Frederick William was rejected as the sovereign. He finally had to resort to violence in order to establish his public administration and be accepted as the new sovereign.⁴² This of course meant disempowerment of the East Prussian estates together with a loss of their privileges. The following four actions of Frederick William played a major role in establishing public administration and thereby increasing the degree of centralisation within Brandenburg-Prussia (Clark 2006, 56–57):

1. Appointment of administrative offices: He handed over the highest administrative offices to Calvinists, which was both an insult for a Lutheran population and a break with tradition of the “Indigenat”, according to which only locals should be considered for the administration. This action also served as a demonstration of his authority (Clark 2006, 61).
2. Levying of taxes: The estate’s right to ratify taxes (*Steuerbewilligungsrecht*) was pushed back, being partly ignored at best, with enforced tax collection in the worst case.
3. Abolition of local militia: Up until the annexation of Ducal Prussia, provincial militia men served as an effective defence. Frederick William replaced them with the standing army he was about to set up, which stood under Berlin’s control.⁴³

⁴¹ Ducal Prussia became a Polish fief in 1466 (Diwald 1978, 500).

⁴² Frederick William had at this point in time (1656) an army of over 20,000 men at hand, enough for collecting taxes (Diwald 1978, 504). He entered Königsberg, the centre of resistance in 1662 with almost 3,000 troops and arrested Hieronymus Roth, one of the leaders of the opposition (Opgenoorth 1990, 104).

⁴³ This can be considered as the “third doorstep condition” discussed in North, Wallis, and Weingast (2013).

4. Replacement of the Polish sovereign: The transfer of sovereignty from the Polish Crown to Brandenburg-Prussia forced the estates to deal with a new sovereign, Frederick William, with a much more absolutist attitude.

Of course the fiercest disputes concerned levying taxes. This clearly shows the mirror-inverted problematic structure of the Holy Roman Empire (Diwald 1978, 504). However, Frederick William got some support in this respect from a parallel development taking place in the Holy Roman Empire. In 1654, a decree codified that the subjects of a sovereign within the Holy Roman Empire were from now on legally obligated to pay taxes in order to finance an effective national defence. With the outbreak of the Second Northern War in 1655, getting tax revenues to support troops gained momentum (Clark 2006, 57). Coercion and force played a certain role but in the long-run balancing off different interests via negotiations was far more significant (Clark 2006, 63).

4.3 The Rise in Rank in 1701

“As you can see, the geographic location makes us neighbours of all the great rulers of Europe. All of these neighbours are potentially envious of us or secret enemies of our power” (Simms 1997, 71).⁴⁴

Hugo Grotius (1583–1645) developed his international law based on natural law, stating that all sovereign states are equal (Neuhaus 1997, 268). However, in 17th century Europe, rank, etiquette and ceremonies played a major role to be respected as a ruler. Brandenburg-Prussia had to realize again and again that they were literally ignored in international events by other European powers (Baumgart 2001, 166). This happened last in 1697 at the Treaty of Ryswick, which settled the War of the League of Augsburg in which Brandenburg-Prussia participated with numerous soldiers but hardly got any territorial gains since their presence was ignored (Oster 2010, 22). At the same time, an epidemic of attempts to get a royal title swept through Europe:⁴⁵ In Italy both the Grand Duke of Tuscany (1691) and the Duke of Savoy (1693) could call themselves “His Royal Highness” (Neuhaus 1997, 268), in 1697 the Protestant Elector of Saxony became King of Poland after converting to Catholicism (Feuchtwanger 1972, 32), and the Elector of Palatinate, the Duke of Lorraine and the Elector of Bavaria were all seeking a royal title (Baumgart 2001, 166; 1987, 70; Oster 2010, 25). The most obvious example was that in Brandenburg-Prussia’s direct neighbourhood, in Hanover: Following the 1689 Glorious Revolution in Eng-

⁴⁴ The original is from Frederick the Great in his 1752 *Political testament*: “*Wie ihr seht macht uns diese geographische Lage zu Nachbarn der größten europäischen Herrscher. Alle diese Nachbarn sind ebenso viele Neider oder geheime Feinde unserer Macht*” (cited in Oppeln-Bronikowski 1941, 46).

⁴⁵ “*C’était j’ose ainsi parler, chez tous les princes d’Allemagne, une épidémie de désirs et d’aspirations vers le titre roya*” (Waddington 1888, 43).

land, Catholics were not permitted to succeed the English throne. This implied that Sophia of the Palatinate, married to the Elector of Hanover, might become the English queen as she was the closest Protestant relative to Queen Anna, who had no surviving children (Oster 2010, 25; Feuchtwanger 1972, 32).

With this increased competition about rank in Brandenburg-Prussia's direct proximity, the Elector of Brandenburg-Prussia had to make a move to keep up.⁴⁶ His idea was to crown himself "King in Prussia" in the territory of Ducal Prussia which would help to make Prussia a major power in Europe (Duchhardt 1983, 84).⁴⁷ The region was wisely chosen because of three reasons: First, Ducal Prussia did not belong to the Holy Roman Empire, meaning no elector votes were needed. Second, since 1657 it was no longer a Polish fief. Third, he did not depend on any dynastic succession (Baumgart 1987, 71; Oster 2010, 27). However, his idea encountered fierce opposition from the emperor, other German Electors, European monarchs as well as from his own prime minister Danckelman, who was concerned about the deeply indebted state finances (Baumgart 2001, 166; 1987, 68). Therefore, the pivotal point of the whole project (getting himself a royal title) was the acceptance of others, especially by the emperor (Mieck 2009, 549). In order to increase the likelihood of a positive outcome, he was advised to convert to Catholicism, which was for him no option at all (Feuchtwanger 1972, 32; Oster 2010, 31).

At this point in time, it was a dead-end road for the Elector of Brandenburg (Frederick III), when suddenly the contemporaneous geopolitical context dramatically changed and altered the situation in Frederick III's favour. In 1700, the Spanish King Charles II died without issue, effectively ending the Spanish line of the Habsburg dynasty and ultimately leading to the War of Spanish Succession. In this war, France together with Bavaria fought against an Alliance composed of England, the Netherlands and the Holy Roman Empire. The emperor now wanted to get Frederick III to fight on his side against the House of Bourbon (Oster 2010, 32). From a neglected elector he became a valuable partner for an ally (Baumgart 1987, 73). Therefore, Frederick III was able to use a lucky constellation in international politics in his favour. Immediately in November 1700 he signed a contract with the emperor (*Krontraktat*) in which Frederick III agreed to help with 8,000 soldiers in case of war and to vote for the Habsburg dynasty as far as the emperor's succession in the empire was concerned in return for the emperor accepting him to crown himself "King in Prussia" (Neuhaas 1997, 269). By January 1701 Frederick III crowned himself Fre-

⁴⁶ This is usually referred to as "keeping up with the Joneses". Of course, the elector's rank did not change in absolute terms. But the rise of others was implicitly a descent in his relative rank.

⁴⁷ A complete survey about the elector's rise in rank and its preparation, including the procedure of the ceremonial as well as music, culture, arts, architecture and science can be found in *Deutsches Historisches Museum und der Stiftung Preußischer Schlösser und Gärten Berlin-Brandenburg* (2001).

derick I *King in Prussia* with an expensive (tax-rise) coronation ritual.⁴⁸ The ceremonies were part of the political communication system in order to display and document to the outside world the rank of the Prince (Clark 2006, 75). Since he was now fighting alongside the Empire, the acceptance of the Netherlands and England followed rather quickly. Consequently, the French and Spanish acceptance followed only in 1713.⁴⁹ The only entity not accepting his rise in rank was the Catholic Church of Ducal Prussia (Feuchtwanger 1972, 39–40).

5. The Consequence of the Geopolitical Context for Institutional Change in Historical Perspective

Being geographically located in the middle of Europe and therefore having the most direct neighbours in continental Europe, but not having any natural borders, was a blessing and a curse at the same time. During peace times, having many direct neighbours means a lot of economic contacts to other countries and thus a huge potential for trade exchange. However, in case of war (which was the case most of the time in Europe during the 16th to 18th century), having many direct neighbours could mean the fall of the nation. This argument is linked to the discussion of land-locked countries in the development literature with the difference that the important dimension is not about resources and transport costs but about politics (Collier 2007).

The first event considered is the Thirty Years' War. The Thirty Years' War and its aftermath clearly shows how the *geopolitical context* (of course war is an extreme case) leads to massive pressure for institutional change in Prussia. As is highlighted, the war showed Prussia quite plainly where her greatest weakness was. Prussia had neither a standing army nor any institutions for efficiently collecting taxes. This put a high burden on the Prussian population. As far as Prussian politics are concerned, on the one hand it caused a behaviour of continuously switching alliances during the war. On the other hand, the war experience led to a complete turnaround that went hand in hand with a variety of dramatic institutional changes. Institutions for efficiently collecting taxes were established, new taxes were levied and a standing army was formed centring the whole system on militarism and thus forcing everyone to “*travailler pour le Roi de Prusse*” (Hintze 1970, 71). The continuous rearrangement of tax levying institutions also shows that once institutions are in place they get shaped and reshaped in order to fit the necessities of the time. All of this was

⁴⁸ It is however important to remember that this is the early 18th century, the epoch of Baroque, when all over Europe the primary form of government is absolutist monarchy characterised by representation, grandiosity and ceremonials (Baumgart 1987, 69).

⁴⁹ With the Treaty of Utrecht (Mieck 2009, 549).

connected to a redistribution of power away from the estates towards the state. This redistribution meant a homogenisation as well as centralisation, ultimately leading to a state that was governed by an absolutist hand. In essence, the Great Elector transformed the Hohenzollern's real-estate into a modern state with a coinage of absolutism.⁵⁰ However, in the long run, the redistribution of power also reduced privileges and made society "more equal" in a sense or as Schumper put it,

"In Germany, economic and political trends were broken by the course of events centring in the Thirty Years' War (1618–48), which created an entirely new situation and changed the political and cultural pattern of Germany for good" (1954, 147).

The second event was the annexation (getting the full sovereignty) of Ducal Prussia in 1657, which again became possible only due to a favourable *geopolitical context*. The Polish-Russian War as part of the Second Northern War forced the King of Poland into a position in which he had to make concessions to Brandenburg-Prussia. This was followed again by dramatic institutional changes. On the one hand, Brandenburg-Prussia became even more fragmented as far as their territory was concerned, making homogenisation difficult. The electors of Brandenburg (The Great Elector, Friedrich III, and finally Friedrich William) were, on the other hand, not accepted as the sovereign within Ducal Prussia. The institutional changes imposed on the population were again connected with a sharp decrease in power of the estates, ultimately breaking with long traditions (*de jure* and *de facto*) which the centralisation contradicted. Thus, the process of institutional reform and change, and hence the struggle between the state and the estates, kept on going for quite a while. It is in this respect important to note that this process of state consolidation from 1650–1750 needed a full century to be established and function properly (Clark 2006, 85). This insight calls to mind that even under huge pressure for institutional change one might need a long breath to accomplish it. Path dependency of tradition, culture, customs and legal rights, which are deeply rooted in the organisation of society, are of slow changing character.⁵¹ Change is therefore probably best achieved by a piecemeal strategy if a sustainable political and economic institutional framework is pursued.⁵²

⁵⁰ "Der Große Kurfürst hinterließ bei seinem Tod 1688 ein Land, das sich aus einem Hausbesitz der Hohenzollern in einen Territorialstaat modern absolutistischer Prägung verwandelt hatte" (Diwald 1978, 506).

⁵¹ Roland (2004, 4, 14) talks about slow-moving, such as culture, and fast-moving institutions, such as political and legal institutions (which do not necessarily change often). Pierson (2003, 178–79) provides a framework of a quick/long-term causal process and a quick/long-term outcome which is not only applicable to phenomena in natural science (tornados and earthquakes), but also to institutional change.

⁵² Wilhelm von Humboldt said with respect to the French Revolution: "*Zwei ganz entgegengesetzte Zustände sollen also auf einander folgen. Wo ist das Band, das beide verknüpft? (...) Staatsverfassungen lassen sich nicht auf Menschen, wie Schösslinge auf*

Finally, the third event was the rise in rank of Frederick III to “King in Prussia” in 1701, which was only possible due to a favourable *geopolitical context*. To be precise: The rise in rank would have been possible irrespective of the geopolitical context. However, the ultimate goal (rising in rank) was to be considered as a ruler of European rank, as many others, who were surrounding Frederick III. Therefore, the pivotal point was the European acceptance of the elector’s rise in rank. The acceptance only became possible as soon as the war of Spanish Succession (geopolitical context) broke out. The emperor of the Holy Roman Empire did not want to see Prussia fighting on the French side. This put him into a position in which he had to make concessions to Prussia: the rise in rank. This exemplarily shows that both luck in terms of timing and again the geopolitical context played a major role in creating institutional change and a redistribution of power. This time not only was the personal role of the Elector strengthened, he was no longer simply elector but rather a major king, but also the international role his country played.

The general argument that the geopolitical context is a driving force for institutional change is not restricted to Prussia. Following Perry Anderson in his “Lineages of the Absolutist State,” France increased its headcount of the army from 50.000 to 300.000 in the second half of the 17th century (Anderson 1979, 129). Sweden heavily tried to expand into the East European countries between 1630 and 1720, continuously putting Prussia, Poland and Russia under pressure (Anderson 1979, 241–42). The Habsburg Empire always had trouble with Hungarian sectionalism and its proximity to the Ottoman Empire, putting Habsburg permanently under pressure (Anderson 1979, 401). Finally, Russia doubled its number of soldiers from 100,000 to 200,000 between 1630 and 1680 (Anderson 1979, 435). These examples show that the geopolitical context and its effects on institutional change, at least in terms of tax collection in order to finance a standing army, is a generally observable pattern in continental Europe during the 17th and early 18th century.

6. Conclusion

The purpose of this paper is to highlight the importance of the geopolitical context as a potential cause for institutional change. Three important events of the 17th and 18th century are discussed and their effects on Brandenburg-Prussia’s institutional change analysed. The three events comprise the aftermath of the Thirty Years’ War, the annexation of Ducal Prussia and the rise in rank of Frederick III to “king in Prussia.”

Bäume pflöpfen. Wo Zeit und Natur nicht vorgearbeitet haben, da ists, als bindet man Blüten mit Fäden an. Die erste Mittagssonne versengt sie” (cited in Geier 2012, 353).

The paper makes two fundamental points: First, it is obvious that geography plays a major role especially in association with politics. This becomes most clear during war times. Levying, raising and collecting taxes via the establishment of the General War Commissariat in order to finance a standing army were a consequence of both the central location and the political landscape. Thus, a substantial part of Prussian institutional change is attributable to the geopolitical context. In the case of Prussia, indirect effects of the geopolitical context formed the foreign policy with the result of a tendency to balance it off to all sides. Hence, geography and politics were finally absorbed within the institutional framework. Or as Clark aptly formulates:

“This is worth emphasizing, because it draws our attention to one of the continuities of Brandenburg (later Prussian) history. Again and again, the decision-makers in Berlin would find themselves stranded between the fronts, forced to oscillate between options. [...] This was not a consequence of ‘geography’ in any simplistic sense, but rather of Brandenburg’s place on the mental map of European power politics” (Clark 2006, 27).

This means a lasting effect of geography via institutions. Second, to understand institutional change in a certain country, it is not sufficient to take into account the political system, the organisation of society, and the incentives of different classes in that country. To understand the way institutions change, it is *sometimes also* necessary to have a look beyond the country’s border(s). The paper exemplified this view using Prussia. However, the large and increasing headcount of the army in France, the Habsburg Empire, Poland and Russia suggests that the relevance of the argument is not restricted to the example of Prussia. Also, the qualitative results are further supported by recent empirical studies that show that not only the geopolitical context matters as a driving force of local institutional change but also the neighbour’s institutions. Bosker and Garretsen (2009) use spatial econometrics and conclude that a “country’s GDP per capita does not only depend on own-country institutions but on the quality of institutions in its neighbouring countries as well. This is our main result and it shows that economic development does not take place in isolation” (2009, 317). This empirically supports the general argument put forward in this paper and shows that the geopolitical context and its effects on institutional change do not only apply to the isolated case of Prussia, they rather seem to be also quantitatively observable in general.

However, the effect is probably increasing with the number of neighbours and therefore particularly strong if the country is not an island.⁵³ This would be a plausible explanation for why we do not see a lot of geopolitically motivated institutional changes in either the UK or the US. The idea presented in this

⁵³ With markets getting more intertwined due to the globalisation process, the influence of other countries institutions, even if they are further away, should consequently be increasing.

paper cannot articulate any better than has already been done by Sir J. R. Seeley:

“This generalisation illustrates two principles which I would recommend you never to lose sight of in trying to generalise upon history. The one is, never be content with looking at states purely from within; always remember that they have another aspect, which is wholly different, their relation towards foreign states. This is a rule which it is particularly necessary to impress upon English students, for there is no nation which has disregarded it so much as our own” (1896, 133).

Appendix

Table 6

List of Rulers of Brandenburg 1608–1786 (Kroll 2006)

German name	English name	Reign
Johann Sigismund	John Sigismund	1608 – 1619
Georg Wilhelm	George William	1619 – 1640
Friedrich Wilhelm „der große Kurfürst“	Frederick William “the Great Elector”	1640 – 1688
Friedrich III. ⁱ	Frederick III	1688 – 1713
Friedrich I. ⁱⁱ	Frederick I	1688 – 1713
Friedrich Wilhelm I. „der Soldatenkönig“	Frederick William I “Soldier King”	1713 – 1740
Friedrich II. „der Große“ „Alter Fritz“	Frederick II “Frederick the Great”, “Old Fritz”	1740 –1786

ⁱ Up until 1701 he was Elector of Brandenburg.

ⁱⁱ From 1701 onwards he was “King in Prussia”.

References

- Abel, W. 1978. *Agrarkrisen und Agrarkonjunktur: Eine Geschichte der Land- und Ernährungswirtschaft Mitteleuropas seit dem hohen Mittelalter*. 3rd edition. Hamburg: Verlag Paul Parkey.
- Acemoğlu, D., D. Cantoni, S. Johnson, and J. A. Robinson. 2011. “The Consequences of Radical Reform: The French Revolution.” *American Economic Review* 101 (7): 3286–3307.
- Acemoğlu, D., S. Johnson, and J. A. Robinson. 2005a. “Institutions as a Fundamental Cause of Long-Run Growth: 6.” In *Handbook of Economic Growth*, edited by P. Aghion and S. N. Durlauf, 385–472: Elsevier.
- 2001a. “The colonial origins of comparative development: An empirical investigation.” *American Economic Review* 91 (5): 1369–1401.

- 2002. “Reversal of fortune: Geography and institutions in the making of the modern world income distribution.” *Quarterly Journal of Economics* 117 (4): 1231–94.
- Acemoğlu, D. and J. A. Robinson. 2012a. *Why nations fail: The origins of power, prosperity, and poverty*. New York, New York: Crown Business.
- Alesina, A. and P. Giuliano. 2010. “The power of the family.” *Journal of Economic Growth* 15 (2): 93–125.
- Anderson, P. 1978. *Von der Antike zum Feudalismus: Spuren der Übergangsgesellschaft*. Frankfurt am Main: Suhrkamp Verlag.
- 1979. *Die Entstehung des absolutistischen Staates*. Frankfurt am Main: Suhrkamp Verlag.
- Baumgart, P. 1987. “Die preußische Königskrönung von 1701, das Reich und die europäische Politik.” In *Preußen, Europa und das Reich*, edited by O. Hauser, 65–86. Köln: Böhlau Verlag.
- 2001. “Ein neuer König in Europa. Interne Planung, diplomatische Vorbereitung und internationale Anerkennung der Standeserhöhung des brandenburgischen Kurfürsten.” In *Deutsches Historisches Museum und der Stiftung Preußischer Schlösser und Gärten Berlin-Brandenburg 2001*, 166–76.
- Becker, S. O. and L. Woessmann. 2009. “Was Weber Wrong? A Human Capital Theory of Protestant Economic History.” *Quarterly Journal of Economics* 124 (2): 531–96.
- Black, J. 1996. *Cambridge Illustrated Atlas of Warfare: Renaissance to Revolution; 1492–1792*. Cambridge: Cambridge Univ. Press.
- Bloom, D. E. and J. D. Sachs. 1998. “Geography, demography, and economic growth in Africa.” *Brookings Papers on Economic Activity* 2: 207–95.
- Bogart, D., M. Drelichman, O. Gelderblom, and J.-L. Rosenthal. 2010. “State and private institutions.” In *The Cambridge Economic History of Modern Europe: 1700–1870*. Vol. 1, edited by S. N. Broadberry and K. H. O’Rourke, 70–95. Cambridge: Cambridge Univ. Press.
- Bosker, M. and H. Garretsen. 2009. “Economic development and the geography of institutions.” *Journal of Economic Geography* 9 (3): 295–328.
- Bracher, K. D. 1963. “Kritische Betrachtung über den Primat der Außenpolitik.” In *Faktoren der politischen Entscheidung: Festgabe für Ernst Fraenkel zum 65. Geburtstag*, edited by G. A. Ritter and G. Ziebura, 115–48. Berlin: Walter de Gruyter & Co.
- Burkhardt, J. 1995. “Der Dreißigjährige Krieg.” In *Scheidewege der deutschen Geschichte: Von der Reformation bis zur Wende; 1517–1989*, edited by H.-U. Wehler, 52–64. München: C. H. Beck.
- Büsch, O. and W. Neugebauer. 1981. *Moderne Preussische Geschichte 1648–1947: Eine Anthologie* 1–3. Berlin: De Gruyter.
- Cantoni, D. 2015. “The Economic Effects of the Protestant Reformation: Testing the Weber Hypothesis in the German Lands.” *Journal of the European Economic Association* 13 (4): 561–98.

- Carsten, F. L. 1959. *Princes and Parliaments in Germany: From the Fifteenth to the Eighteenth Century*. London: Oxford Univ. Press.
- 1964. *The Origins of Prussia*. Oxford: Clarendon Press.
- Clark, C. M. 2006. *Iron Kingdom: The Rise and Downfall of Prussia, 1600–1947*. London: Penguin Books.
- 2008. *Preußen Aufstieg und Niedergang 1600–1947*. München: Pantheon.
- Collier, P. 2007. *The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It*. Oxford: Oxford Univ. Press.
- Crafts, N. F. R. 1977. “Industrial-Revolution in England and France: Some Thoughts on the Question “Why Was England First?” *Economic History Review* 30 (3): 429–41.
- Crosby, A. W. 2009. *Ecological Imperialism: The Biological Expansion of Europe, 900–1900*. 2nd edition. Cambridge: Cambridge Univ. Press.
- Dann, O. 1989. *Preußen Entwicklung und Probleme eines modernen Staates*. Stuttgart: Klett-Cotta.
- Demel, W. 2010. “Vom aufgeklärten Reformstaat zum bürokratischen Staatsabsolutismus.” In *Enzyklopädie Deutscher Geschichte*, edited by L. Gall. 2nd ed. Vol. 23. München: Oldenbourg Verlag.
- Deutsches Historisches Museum und der Stiftung Preußischer Schlösser und Gärten Berlin-Brandenburg, ed. 2001. *Preußen 1701. Eine europäische Geschichte*. Essayband zur gleichnamigen Ausstellung in der Großen Orangerie des Schlosses Charlottenburg. Berlin: Henschel.
- Diamond, J. M. 1997. *Guns, Germs, and Steel: The Fates of Human Societies*. New York: Norton.
- Diamond, J. M., and J. Robinson. 2010. *Natural Experiments of History*. Cambridge, MA: Belknap Press of Harvard Univ. Press.
- Diwald, H. 1978. *Geschichte der Deutschen*. Frankfurt am Main: Propyläen.
- Djankov, S., E. Glaeser, R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. 2003. “The new comparative economics.” *Journal of Comparative Economics* 31 (4): 595–619.
- Duchhardt, H. 1983. “Die preuische Königskrönung von 1701. Ein europäisches Modell?” In *Herrscherweihe und Königskrönung im frühneuzeitlichen Europa*, edited by H. Duchhardt, 82–95.
- Dwyer, P. G. 2000. *The Rise of Prussia 1700–1830*. Harlow: Longman.
- 2001. *Modern Prussian History 1830–1947*. London and New York: Routledge.
- Easterly, W. and R. Levine. 2003. “Tropics, Germs, and Crops: How Endowments Influence Economic Development.” *Journal of Monetary Economics* 50 (1): 3–39.
- 2016. “The European origins of economic development.” *Journal of Economic Growth* 21 (3): 225–57.
- Eire, C. 2015. “Calvinism and the Reform of the Reformation.” In *The Oxford Illustrated History of the Reformation*, edited by P. Marshall, 76–114. Oxford: Oxford Univ. Press.

- Engerman, S. L., and K. L. Sokoloff. 1997. "Factor endowments, institutions, and differential paths of growth among New World economies." In *How Latin America Fell Behind: Essays on the Economic Histories of Brazil and Mexico, 1800–1914*, edited by S. Haber, 260–304. Stanford: Stanford University Press.
- Feuchtwanger, E. J. 1972. *Preußen: Mythos und Realität*. Frankfurt am Main: Akademische Verlagsgesellschaft Athenaion.
- Feyrer, J. and B. Sacerdote. 2009. "Colonialism and Modern Income: Islands as Natural Experiments." *Review of Economics and Statistics* 91 (2): 245–62.
- Frankel, J. A. and D. Romer. 1999. "Does Trade Cause Growth?" *American Economic Review* 89 (3): 379–99.
- Gallup, J. L. and J. D. Sachs. 2001. "The Economic Burden of Malaria." *American Journal of Tropical Medicine and Hygiene* 64 (1–2): 85–96.
- Gallup, J. L., J. D. Sachs, and A. D. Mellinger. 1999. "Geography and Economic Development." *International Regional Science Review* 22 (2): 179–232.
- Galor, O. 2005. "From Stagnation to Growth: Unified Growth Theory: 4." In *Handbook of Economic Growth*, edited by P. Aghion and S. N. Durlauf, 171–93.
- Galor, O. and D. N. Weil. 1999. "From Malthusian Stagnation to Modern Growth." *American Economic Review* 89 (2): 150–54.
- Geier, M. 2012. *Aufklärung das europäische Projekt*. Reinbek bei Hamburg: Rowohlt.
- Glaeser, E. L., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. 2004. "Do Institutions Cause Growth?" *Journal of Economic Growth* 9 (3): 271–303.
- Goldschmidt, N. 2008. "Gustav Schmoller." In *Klassiker des ökonomischen Denkens: Von Adam Smith bis Alfred Marshall*, edited by H. D. Kurz 2008, 287–305. München: C.H. Beck.
- Gorodnichenko, Y. and G. Roland. 2011. "Culture, Institutions and Development: Which Dimensions of Culture Matter for Long-Run Growth?" *American Economic Review* 101 (3): 492–98.
- Gotthard, A. 2004. *Der Augsburger Religionsfrieden*. Münster: Aschendorff.
- Guiso, L., P. Sapienza, and L. Zingales. 2006. "Does Culture Affect Economic Outcomes?" *Journal of Economic Perspectives* 20 (2): 23–48.
- Hajnal, J. 1965. "European Marriage Patterns in Perspective." In *Population in History: Essays in Historical Demography*, edited by D. V. Glass and D. E. C. Eversley, 101–43. Chicago: Aldine Publishing Company.
- Hall, P. A. 2003. "Aligning Ontology and Methodology in Comparative Research." In *Comparative Historical Analysis in the Social Science*, edited by J. Mahoney and D. Rueschemeyer, 373–427. Cambridge: Cambridge Univ. Press.
- Hall, R. E. and C. I. Jones. 1999. "Why Do Some Countries Produce So Much More Output Per Worker Than Others?" *Quarterly Journal of Economics* 114 (1): 83–116.
- Heinrich, G., ed. 1990. *Ein sonderbares Licht in Teutschland: Beiträge zur Geschichte des Groen Kurfürsten von Brandenburg (1640–1688)*. Zeitschrift für historische Forschung, Beiheft 8. Berlin: Duncker & Humblot.

- Hemmer, H.-R. and A. Lorenz. 2004. *Grundlagen der Wachstumsempirie*. Vahlens Handbücher der Wirtschafts- und Sozialwissenschaften. München: Vahlen.
- Henry, P. B. and C. Miller. 2009. "Institutions versus Policies: A Tale of Two Islands." *American Economic Review* 99 (2): 261–67.
- Hintze, O. 1970. *Staat und Verfassung: Gesammelte Abhandlungen zur allgemeinen Verfassungsgeschichte*. Göttingen: Vandenhoeck & Ruprecht.
- Hinze, K. 1981. "Die Bevölkerung Preußens im 17. und 18. Jahrhundert nach Qualität und Quantität." In *Moderne Preußische Geschichte 1648–1947*, edited by O. Büsch and W. Neugebauer, 282–315. Berlin: De Gruyter.
- 1967a. *Geschichte der Preußischen Armee vom 15. Jahrhundert bis 1914*. 2nd ed. Vol 1: Von den Anfängen bis 1740. Osnabrück: Biblio Verlag.
- 1967b. *Geschichte der Preußischen Armee vom 15. Jahrhundert bis 1914*. 2nd ed. Vol. 2: Die Armee Friedrichs des Groen 1740–1763. Osnabrück: Biblio Verlag.
- 1967c. *Geschichte der Preußischen Armee vom 15. Jahrhundert bis 1914*. 2nd ed. Vol. 3: 1763–1807. Osnabrück: Biblio Verlag.
- Jany, C. 1967d. *Geschichte der Preußischen Armee vom 15. Jahrhundert bis 1914*. 2nd ed. Vol. 4: Die Königlich Preuische Armee und das Deutsche Reichsherr 1807 bis 1914. Osnabrück: Biblio Verlag.
- Jersch-Wenzel, S. 2001. "Zuwanderung als Entwicklungshilfe." In *Deutsches Historisches Museum und der Stiftung Preußischer Schlösser und Gärten Berlin-Brandenburg 2001*, 109–20.
- Jones, E. L. 2008. *The European Miracle: Environments, Economies and Geopolitics in the History of Europe and Asia*. 3rd. Cambridge: Cambridge Univ. Press.
- Köhler, W. 1924. *Zwingli und Luther. Ihr Streit über das Abendmahl nach seinen politischen und religiösen Beziehungen*. Quellen und Forschungen zur Reformationsgeschichte 1–2. Leipzig: Heinsius.
- Kopsidis, M. 1993. "Liberale Wirtschaftspolitik im Zeitalter der Industrialisierung." In *Geschichte der Wirtschaftspolitik: Vom Merkantilismus zur sozialen Marktwirtschaft*, edited by R. H. Tilly, 34–68. München: De Gruyter.
- Kopsidis, M. and D. W. Bromley. 2015. "The French revolution and German industrialization: Dubious models and doubtful causality." *Journal of Institutional Economics* FirstView (7): 1–30.
- Koselleck, R. 1967. *Preußen zwischen Reform und Revolution: Allgemeines Landrecht, Verwaltung und soziale Bewegung von 1791 bis 1848*. Stuttgart: Klett-Cotta.
- Kroll, F.-L. 2006. *Preußens Herrscher: Von den ersten Hohenzollern bis Wilhelm II*. München: C. H. Beck.
- Kunisch, J. 1990. "Kurfürst Friedrich Wilhelm und die Groen Mächte." In *Ein sonderbares Licht in Teutschland: Beiträge zur Geschichte des Groen Kurfürsten von Brandenburg (1640–1688)*, edited by G. Heinrich, 9–32. Berlin: Duncker & Humblot.
- Kurz, H. D., ed. 2008. *Klassiker des ökonomischen Denkens: Von Adam Smith bis Alfred Marshall*. Volume 1. München: C. H. Beck.

- 2008. “Johann Heinrich von Thünen (1783–1850).” In *Klassiker des ökonomischen Denkens: Von Adam Smith bis Alfred Marshall*, edited by H.D. Kurz, 140–58. München: C. H. Beck.
- La Porta, R., F. Lopez-de-Silanes, and A. Shleifer. 2008. “The Economic Consequences of Legal Origins.” *Journal of Economic Literature* 46 (2): 285–332.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. W. Vishny. 1997. “Legal Determinants of External Finance.” *Journal of Finance* 52 (3): 1131–50.
- 1998. “Law and Finance.” *Journal of Political Economy* 106 (6): 1113–55.
- 1999. “The Quality of Government.” *Journal of Law Economics & Organization* 15 (1): 222–79.
- Lambert, L. D. 1971. “Role of Climate in Economic Development of Nations.” *Land Economics* 47 (4): 339–344.
- Landes, D. S. 1969. *The Unbound Prometheus: Technological Change and Industrial Development in Western Europe from 1750 to the Present*. Cambridge: Cambridge Univ. Press.
- 1998. *Wealth and Poverty of Nations: Why Some are so Rich and Some are so Poor*. New York: Norton.
- Mahoney, J. and D. Rueschemeyer, eds. 2003. *Comparative Historical Analysis in the Social Science*. Cambridge: Cambridge Univ. Press.
- 2003. “Comparative Historical Analysis: Achievements and Agendas.” In *Comparative Historical Analysis in the Social Science*, edited by J. Mahoney and D. Rueschemeyer 2003, 3–38. Cambridge: Cambridge Univ. Press.
- Manca, F. 2010. “Technology Catching-up and the Role of Institutions.” *Journal of Macroeconomics* 32 (4): 1041–53.
- Marshall, P., ed. 2015. *The Oxford Illustrated History of the Reformation*. Oxford: Oxford Univ. Press.
- Mauro, P. 1995. “Corruption and Growth.” *Quarterly Journal of Economics* 110 (3): 681–712.
- Mayshar, J., O. Moav, and Z. Neeman. 2013. “Geography, Transparency and Institutions.” CEPR Discussion Paper No. 9625, September 2013.
- Mieck, I. 2009. “Große Themen der preußischen Geschichte.” In *Handbuch der Preussischen Geschichte. Das 17. und 18. Jahrhundert und Große Themen der preußischen Geschichte*, edited by W. Neugebauer. Vol. 1. Berlin: Walter de Gruyter.
- Mitteis, H. 1987. *Die deutsche Königswahl ihre Rechtsgrundlagen bis zur Goldenen Bulle*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Mokyr, J. 1990. *The Lever of Riches: Technological Creativity and Economic Progress*. New York: Oxford Univ. Press.
- 2016. “Editor’s Introduction: The New Economic History and the Industrial Revolution.” In *Economic History of Warfare and State Formation. Studies in Economic History*, edited by J. Eloranta, E. Golson, A. Markevich, and N. Wolf. 2nd ed., 1–127. Singapore: Pringer.

- Montesquieu, C. L. de S. and T. Nugent. 1952. *The Spirit of Laws*. Chicago: Encyclopaedia Britannica.
- Näf, W. 1951. *Herrschaftsverträge des Spätmittelalters*. Bern: Herbert Lang & Cie.
- Neugebauer, W. 2009a. *Handbuch der Preussischen Geschichte. Das 17. und 18. Jahrhundert und Große Themen der preussischen Geschichte*. Vol. 1. Berlin: Walter de Gruyter.
- 2009b. *Handbuch der Preussischen Geschichte. Das 19. Jahrhundert und Große Themen der preußischen Geschichte*. Vol. 2. Berlin: Walter de Gruyter.
- Neuhaus, H. 1997. “Zeitalter des Absolutismus. 1648–1789.” In *Deutsche Geschichte in Quellen und Darstellung*, edited by R. A. Müller. Vol. 5. Stuttgart: Philipp Reclam.
- Nolte, P. 1990. *Staatsbildung als Gesellschaftsreform: Politische Reformen in Preußen und den süddeutschen Staaten: 1800–1820*. Frankfurt am Main: Campus-Verlag.
- North, D. C. 1981. *Structure and Change in Economic History*. New York: Norton.
- 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge Univ. Press.
- North, D. C., J. J. Wallis, and B. R. Weingast. 2013. *Violence and social orders a Conceptual Framework for Interpreting Recorded Human History*. Cambridge: Cambridge Univ. Press.
- North, D. C. and B. R. Weingast. 1989. “Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England.” *Journal of Economic History* 49 (4): 803–32.
- North, M. 2004. “Institutionelle Faktoren in der Wirtschaftsgeschichte des alten Reiches.” In *Die Wirtschaftsgeschichte vor der Herausforderung durch die New Institutional Economics*, edited by K.-P. Ellerbrock, 81–91. Münster: Ardey.
- 2015. “Joachim Whaley, Germany and the Holy Roman Empire.” *Unpublished review*.
- Olsson, O. and D. A. Hibbs. 2005. “Biogeography and long-run economic development.” *European Economic Review* 49 (4): 909–38.
- Opgenoorth, E. 1990. “‘Nervus rerum’. Die Auseinandersetzung mit den Ständen um die Staatsfinanzierung.” In *Ein sonderbares Licht in Teutschland: Beiträge zur Geschichte des Groen Kurfürsten von Brandenburg (1640–1688)*, edited by G. Heinrich, 99–111. Berlin: Duncker & Humblot.
- Oppeln-Bronikowski, F. v. 1941. *Friedrich der Grosse: Die politischen Testamente*. München: Verlag Heinz Treu.
- Oster, U. A. 2010. *Preussen: Geschichte eines Königreiches*. München: Piper.
- Pfister, C. 1994. “Bevölkerungsgeschichte und historische Demographie 1500–1800.” In *Enzyklopädie Deutscher Geschichte*, edited by L. Gall. Vol. 28. München: Oldenbourg Verlag.
- Pierenkemper, T. 2012. *Geschichte des modernen ökonomischen Denkens: Große Ökonomen und ihre Ideen*. Göttingen: Vandenhoeck & Ruprecht.

- Pierson, P. 2003. "Big, Slow-Moving, and ... Invisible." In *Comparative Historical Analysis in the Social Science*, edited by J. Mahoney and D. Rueschemeyer, 177–207. Cambridge: Cambridge Univ. Press.
- Pomeranz, K. 2000. *The Great Divergence: China, Europe, and the Making of the Modern World Economy*. Princeton: Princeton Univ. Press.
- Putterman, L. and D. N. Weil. 2010. "Post-1500 Population Flows and the Long-Run Determinants of Economic Growth and Inequality." *Quarterly Journal of Economics* 125 (4): 1627–82.
- Ranke, L. v. 1877. "Denkschrift Hardenbergs: Ueber die Reorganisation des preussischen Staates, verfat auf höchsten Befehl Seiner Majestät des Königs 1807, 12. September." In *Denkwürdigkeiten des Staatskanzlers Fürsten von Hardenberg vom Jahre 1806 bis zum Jahre 1813*, edited by L. v. Ranke, 1–108. Vol. 4. Leipzig: Verlag von Duncker & Humblot.
- Richter, R., and E. G. Furubotn. 1996. *Neue Institutionenökonomik: Eine Einführung und kritische Würdigung*. Tübingen: Mohr.
- Rodrik, D. 2009. *One Economics Many Recipes: Globalization, Institutions, and Economic Growth*. Princeton: Princeton Univ. Press.
- Rodrik, D., A. Subramanian, and F. Trebbi. 2004. "Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development." *Journal of Economic Growth* 9 (2): 131–65.
- Roeck, B. 1996. "Gegenreformation und Dreißigjähriger Krieg 1555–1648." In *Deutsche Geschichte in Quellen und Darstellung*, edited by R. A. Müller. Vol. 4. Stuttgart: Philipp Reclam.
- Roland, G. 2004. "Understanding Institutional Change: Fast-Moving and Slow-Moving Institutions." *Studies in Comparative International Development* 38 (4): 109–31.
- Roper, L. 2015. "Martin Luther." In *The Oxford Illustrated History of the Reformation*, edited by P. Marshall 2015, 42–75. Oxford: Oxford Univ. Press.
- Sachs, J. D. 2001. "Tropical Underdevelopment." National Bureau of Economic Research Working Paper No. 8119, February 2001.
- 2003. "Institutions Don't Rule: Direct Effects of Geography on Per Capita Income." National Bureau of Economic Research Working Paper No. 9490, February 2003.
- 2012a. "Review: Government, Geography, and Growth: The True Drivers of Economic Development." *Foreign Affairs* 91 (5): 142–150.
- 2012b. "Reply to Acemoglu and Robinson's Response to My Book Review." Accessed on 25 October 2017. http://jeffsachs.org/wp-content/uploads/2012/12/Reply-to-Acemoglu-and-Robinson-December-1-2012_final.pdf.
- Schefold, B. 1989. "Schmoller als Theoretiker." In *Gustav von Schmollers Lebenswerk – Eine kritische Analyse aus moderner Sicht. Vademecum zu einem Klassiker des historischen Denkens*, edited by J. Backhaus, Y. Shionoya, and B. Schefold, 77–101. Düsseldorf: Wirtschaft und Finanzen.
- Schenk, T. 2013. "Reichsjustiz im Spannungsverhältnis von oberstrichterlichem Amt und österreichischen Hausmachtinteressen: Der Reichshofrat und der Konflikt um

- die Allodifikation der Lehen in Brandenburg-Preußen (1717–1728).” In *Geld, Handel, Wirtschaft: Höchste Gerichte im Alien Reich als Spruchkörper und Institution*, edited by A. Amend-Traut, A. Cordes, and W. Seller, 103–219. Abhandlungen der Akademie der Wissenschaften zu Göttingen. Vol. 23. Berlin: De Gruyter.
- Schmidt, H. R. 1992. “Konfessionalisierung im 16. Jahrhundert.” In *Enzyklopädie Deutscher Geschichte*, edited by L. Gall. Vol. 12. München: Oldenbourg Verlag.
- Schmidt, K.-H. 2002. “Merkantilismus, Kamerlasimus, Physiokratie.” In *Geschichte der Nationalökonomie*, edited by O. Issing, 37–66. 4th ed. München: Vahlen.
- Schneider, E. 1962. *Einführung in die Wirtschaftstheorie, IV. Teil Ausgewählte Kapitel der Geschichte der Wirtschaftstheorie*. München: Mohr Siebeck.
- Schöllgen, G. 1992. *Die Macht in der Mitte Europas: Stationen deutscher Außenpolitik von Friedrich dem Groen bis zur Gegenwart*. München: C. H. Beck.
- Schormann, G. 1985. *Der Dreißigjährige Krieg*. Göttingen: Vandenhoeck & Ruprecht.
- Schumpeter, A. 1954. *History of Economic Analysis*. New York: Oxford Univ. Press.
- Seeley, J. R. 1896. *Introduction to Political Science: Two Series of Lectures*. London: Macmillan.
- Simms, B. 1997. *The Impact of Napoleon – Prussian high politics, foreign policy and the crisis of the executive, 1797–1806*. Cambridge: Cambridge Univ. Press.
- Spolaore, E., and R. Wacziarg. 2013. “How Deep Are the Roots of Economic Development?” *Journal of Economic Literature* 51 (2): 325–69.
- Stollberg-Rilinger, B. 2013. *Das Heilige Römische Reich Deutscher Nation vom Ende des Mittelalters bis 1806*. 5th ed. München: C. H. Beck.
- Stürner, W. 2007. “13. Jahrhundert 1198–1273.” In *Gebhardt Handbuch der deutschen Geschichte*, edited by W. Reinhard. Vol. 6. 10th ed. Stuttgart: Klett-Cotta.
- Tabellini, G. 2008. “Presidential Address – Institutions and Culture.” *Journal of the European Economic Association* 6 (2–3): 255–94.
- 2010. “Culture and Institutions: Economic Development in the Regions of Europe.” *Journal of the European Economic Association* 8 (4): 677–716.
- Temin, P. 1997. “Is it Kosher to Talk about Culture?” *Journal of Economic History* 57 (2): 267–87.
- The Avalon Project. 2016. *The Golden Bull of the Emperor Charles IV 1356 A.D.*
- Thelen, K. 2003. “How Institutions Evolve: Insights from Comparative Historical Analysis.” In *Comparative Historical Analysis in the Social Science*, edited by J. Mahoney and D. Rueschemeyer, 208–40. Oxford: Oxford Univ. Press.
- Tilly, C. 1990. *Coercion, Capital, and European States, AD 990–1990*. Cambridge, MA: Basil Blackwell.
- Tilly, R. 1996. “Perestroika a la Prusse – Preußens liberale Reformen zu Anfang des 19. Jahrhunderts im Lichte des Transformationsparadigmas.” *Jahrbuch für Wirtschaftsgeschichte* 1996 (2): 147–60.
- Treitschke, H. v. 1937. *Deutsche Geschichte im 19. Jahrhundert*. Berlin: Safari-Verlag.

- Tribe, K. 2003. "Historical Schools of Economics German and English." In *A Companion to The History of Economic Thought*, edited by W. J. Samuels, J. E. Biddle, and J. B. Davis, 215–30. Malden: Blackwell Publishing.
- Ullmann, H.-P., and C. Zimmermann. 1996. *Restaurationssysteme und Reformpolitik: Süddeutschland und Preußen im Vergleich*. München: R. Oldenbourg Verlag.
- Vierhaus, R. 1984. "Staaten und Stände – Vom Westfälischen bis zum Hubertusburger Frieden 1648 bis 1763." In *Propyläen Geschichte Deutschland*, edited by D. Groh. Vol. 5. Berlin: Propyläen Verlag.
- Vogler, B. 1983. *Allgemeine Gewerbefreiheit: Die Reformpolitik des preussischen Staatskanzlers Hardenberg (1810–1820)*. Kritische Studien zur Geschichtswissenschaft. Vol. 57. Göttingen: Vandenhoeck & Ruprecht.
- Waddington, A. 1888. *L'acquisition de la couronne royale de Prusse par les Hohenzollern*. Paris: Ernest Leroux.
- Weber, M. 2006. *Die protestantische Ethik und der Geist des Kapitalismus*. 2nd ed. München: C. H. Beck.
- Wehler, H.-U, ed. 1987a. *Deutsche Gesellschaftsgeschichte*. Vol. 1. München: C. H. Beck.
- Wehler, H.-U. 1987b. "Vom Feudalismus des Alten Reiches bis zur defensiven Modernisierung der Reformära 1700–1815." In *Deutsche Gesellschaftsgeschichte*, edited by H.-U Wehler. Vol. 1. München: C. H. Beck.
- Whaley, J. 2013a. *Germany and the Holy Roman Empire: Maximilian I to the Peace of Westphalia, 1493–1648*. Vol. 1. Oxford: Oxford Univ. Press.
- 2013b. *Germany and the Holy Roman Empire: The Peace Of Westphalia to the Dissolution of the Reich, 1648–1806*. Vol. 2. Oxford: Oxford Univ. Press.
- Wienfort, M. 2008. *Geschichte Preussens*. München: C. H. Beck.
- Woodberry, R. D. 2004. "The Shadow of Empire: Christian Missions, Colonial Policy, and Democracy in Postcolonial Societies." Unpublished Ph.D. diss., University of North Carolina.
- 2012. "The Missionary Roots of Liberal Democracy." *American Political Science Review* 106 (2): 244–74.
- Zakaria, F. 1994. "Culture Is Destiny – a Conversation with Lee Kuan Yew." *Foreign Affairs* 73 (2): 109–26.
- Zeumer, K. 1972. *Die Goldene Bulle Kaiser Karls IV*. Hildesheim: Georg Olms Verlag.
- Ziegler, B. 2008. *Geschichte des ökonomischen Denkens: Paradigmenwechsel in der Volkswirtschaftslehre*. München: Oldenbourg.
- Zweynert, J. 2011. "Shock therapy and the transfer of institutions: The new debate and some lessons from the post-1806 reforms in Prussia and in southwestern Germany." *Constitutional Political Economy* 22 (2): 122–40.