

Historical Appendix to: “Culture and institutions: economic development in the regions of Europe”

by
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Historical appendix: data on literacy

Belgium: percentage of population over 6 years old able to read and write 1880. Source: Flora(1983).

Britain and Wales: percentage of brides and grooms signing the Marriage Register in 1870. Data were disaggregated by counties and were aggregated using the county population statistics in 1870 contained in Mitchell(1988). Source: Stephens(1973).

France: percentage of population over 6 years old able to read and write (in 1872). Source: ICPSR 0048 (2001).

Germany: percentage of population able to read in 1871. Source: Cipolla(1969).¹

The Netherlands: data extrapolated from literacy of military recruits (percentage of recruits able to read) around 1870. The extrapolation was obtained from a regression of the available literacy data on the variable literacy of recruits in Austria, Belgium, France, Germany, Italy (data aggregated at country level).

Ireland: percentage of population over 10 years old able to read in 1880. Source: Flora(1983).

Italy: percentage of population over 6 years old able to read in 1881. Source Flora(1983).

Portugal: percentage of population over 7 years old able to read and write in 1890. Data not regionally disaggregated. Source: Cipolla(1969).

Scotland: percentage of brides and grooms signing the Marriage Register in 1880. Source: Flora(1983).

Spain: percentage of population over 10 years old able to read and write in 1877. Source Núñez(1990).²

Historical Appendix: data on urbanization rates in 1850

Except for three regions (Madeira, Azore Islands and Canary islands), the size city data are from Bairoch, Batou and Chèvre (1988).

¹ For the cities of Bremen and Hamburg we took the simple arithmetic average of their respective regions (Hannover and Schleswig-Holstein). The correspondence between the regions in the dataset and the regions in the source data is the following: Hessen: Hessen-Nassau; Niedersachsen: Hannover; NordRhein-Westfalen: Vestfalia; Rhineland-Pfalz: Rhineland; Schleswig-Holstein: Schleswig-Holstein. For the regions Baden-Wuerttemberg and Bayern we took a simple arithmetic average of Cipolla’s data, excluding the most eastern regions of the Prussian Kingdom which are not part of today’s Germany. Data for East Germany is given by the simple arithmetic average of the Prussian regions which approximately constitute today’s eastern German part (Brandburg, Pomeran, Sachsen).

² The correspondence between the regions in the dataset and the regions in the source data is the following (excepts regions which had the same name): Asturias-Cantabria: Astur; Pais Vasco: Basque Country; Navarra-Rioja: Navarra; Castilla-Leon: Old Castilla+Leon; Castilla-La Mancha: New Castile; Extremadura: New Castile; Comunidad Valencia: Levante; Andalucia: Western+Eastern Andalusia; Murcia: Levante. Whenever two regions needed to be aggregated, since we had no data on population, we used a simple arithmetic average.

City size data for Madeira (apart from Ponta Delgada), Azore Islands and Canary islands are from the University of Utrecht population statistics database (<http://www.library.uu.nl/wesp/populstat/populhome.html>)

Regional population data are from the University of Utrecht population statistics database (<http://www.library.uu.nl/wesp/populstat/populhome.html>), which in turn relies the following specific sources:

Belgium	Year: 1862 estimate, Source: Almanach de Gotha
France	Year: 1861 census, Source: French Statistical Institute INSEE
Germany	Year: 1867 estimate, Source: Almanach de Gotha
Italy	Year: 1861 census, Source: Almanach de Gotha
Netherlands	Year: 1859/60 census, Source: Almanach de Gotha
Portugal	Year: 1862 estimate, Source: Almanach de Gotha
Spain	Year: 1860 census, Source: Almanach de Gotha
U.K.	Year: 1861 census, Source: Almanach de Gotha

Historical appendix: data on political institutions

A.3.1 Constraints on the executive

Our measure of political institutions refers to the variable “constraint on the executive” in the POLITY IV dataset. This variable ranges from 1 to 7, with higher values corresponding to more checks and balances on executive powers and a more accountable executive.

A value of 1 corresponds to a situation in which there are no regular limitations on the executive’s actions (as distinct from irregular limitations such as the threat or actuality of coups and assassinations). To quote from POLITY IV : “Absolutist monarchies, regardless of their openness to public dissent or respect for civil liberties, are typically coded here. In other words, this code is not used to differentiate between benevolent absolute monarchs and malevolent ones. So long as constraints on their power are non-existent, it is coded here.”

A value of 3 describes executives that face real but limited constraints. For instance, there is a legislative body which has more than just consultative functions, but can also delay implementation of executive decrees, or can initiate some categories of legislation.

A value of 5 corresponds to an executive having more effective authority than any accountability group but subject to substantial constraints by them. Examples are a legislature that often modifies or defeats executive proposals for action; a council or legislature that sometimes refuses funds to the executive; an accountability group that makes important appointments to administrative posts.

Finally, a value of 7 corresponds to a situation in which accountability groups have effective authority equal to or greater than the executive in most activity. Most consolidated democracies fall in this category.

The values of 2, 4 and 6 correspond to transitions between the above situations.

A.3.2 General sources and criteria

Our first task was to account for the territorial changes that took place in Europe between 1600 and 1850. In doing that we referred mainly to the historical maps provided in G. Duby (2001) and J. and A. Sellier (2002).

When regions did not have substantial political autonomy, we assigned to all regions in the same country the value of constraints in the executive coded by POLITY IV (if available) or by Acemoglu et al. (2002). This procedure took care of France, the

Netherlands, Belgium, Portugal and most of Spain and of the UK. Northern Ireland was given the same values Acemoglu et al. (2002) give to Ireland.

In all other cases, we coded the variable “constraints on the executive” ourselves, with the same criteria used in POLITY IV and considering the historical situation in a 40 year window around each date. For example to assign the values of constraints on executive in 1700, we considered the situation from 1680 to 1720. This is the same procedure used by Acemoglu et al. (2002).

Below we summarize some of the main stylized facts on which we based our coding decisions, when we could not rely on Acemoglu et al. (2002) nor on POLITY IV.

A.3.3 Italy in 1600, 1700 and 1750

Our main sources for this period are Galasso (1972), (1976) and Enciclopedia Italiana Treccani.

State of Milan.

From 1535 to 1713, the State of Milan was part of Charles V’s Empire, and at his abdication (1555) it passed under the control of the Spanish Monarchy. During this period Milan lost political autonomy in foreign affairs, although it maintained its own legal and administrative structures, at least to some extent. In 1541, the Emperor Charles V promulgated the “*New Constitutions*”. This act should not be read just as an attempt to centralize the political structure of the Lombard dominion and reduce its autonomy. Lombard jurists drafted the Chart on the basis of local legal traditions and when Charles adopted it, he acted like a successor of the Sforza and a caretaker of the local traditions. Charles V and his Spanish successors intervened to control the functioning of the Milan administration and to guarantee the obedience of their subjects; but they did that mainly when they had to deal with specific and concrete financial or military issues. Charles V and his Spanish successors left the administrative structures of Milan substantially as it was in 1535.

The State was organized in provinces that had large autonomy in matter of economic policies, taxation, public order and roads. Because of their long tradition of autonomy, the central government did not exert strong control on the provinces. At the level of central government, power was shared between the offices controlled by the Spanish Monarchy and those derived from the ducal age. The office more directly controlled by Spain was the Governor. This king’s “*alter ego*” was at the top of the administrative structure in Milan and had the authority of promulgating or changing laws. The Governor was usually in charge for few years and was mainly absorbed in military issues. He had to deal with the local collective bodies, first of all the Senate. These collective bodies had a deep knowledge of the Lombard reality and managed to defend their own prerogatives. The Senate had strong powers in implementing the law and the king’s pardons, and was able to exert strong influence on the whole legislation. The senate often refused to implement the Governor’s deliberations, appealing against them to the king’s final decision. In this way, the Senate was often able to stop the Governor acts. This situation gave room to large autonomy and even to insubordinations to his authority. Since the beginning of the Spanish domination, there was strong disagreement between Milan local institutions and the Governor every time he tried to limit their powers. Philip the Second in 1580 tried to limit some large discretionary powers of the Senate, especially in the field of pardon implementation or law interpretation. But even after this attempt, the Senate remained a strong check on the Governor’s authority. The other Spanish kings respected existing local institutions and tried to maintain an equilibrium between the Governor and the Senate. They also looked for cooperation with local elites, without which it would have been too difficult to govern the State of Milan.

Under the Utrecht Treaty of 1713, Milan passed to the Austria Monarchy. But until 1760, any Crown's attempt to modify the institutional and administrative structure of the State failed. Thus, the internal equilibrium of power remained the same as it had been for centuries.

In the 1760s Vienna, under Maria Teresa, showed a strong will to strengthen its royal authority and to discipline local powers. Since 1765, supreme magistracies (including the Senate) were deprived of important prerogatives, and the local elites lost substantial influence over the State. An irreversible process of change took place. In 1765 a Supreme Council of the Economy was founded, that looked like the symbol of Hapsburg absolutism. The Supreme Council exerted huge power in controlling economic and financial affairs and was completely subordinated to the government authority, in spite of the secular autonomist tradition of the ancient magistracies.

The building up of the new State went on until 1790, also under Maria Teresa's successor Giuseppe II. He was strongly committed to make the rules of the whole Austria's dominions similar and to absorb local powers in a hierarchical bureaucracy, so as to eliminate even the last traces of self-organization within the society. In Milan this process peaked with the suppression of the Senate (1786), for many centuries symbol of the Lombard autonomy.

Reflecting this evolution, this is how we coded the variable "constraints on the executives" in Lombardy up to 1750. We assigned a value 3 in 1600 and 1700 because of the existence of some real constraints over executive power, and 2 in 1750 to account for the transition towards an absolutistic regime, completely established later in the XVIII century.

Piedmont.

Since the beginning of the XVII century, the Savoia's Monarchy was nearly autocratic. Court aristocracy, for instance, formed the Secret Council, but this Council was practically without any political relevance. The Monarchy became even more absolutistic under king Vittorio Amedeo II, from the Utrecht peace (1713) to the year of his abdication (1730). Vittorio Amedeo's absolute Monarchy was very similar to the classical French model of Louis XIV, with strong central bureaucratic structures. The provincial intendants linked central government and local communities, fighting local particularities and imposing a high degree of administrative homogeneity. During this consolidation period, the village assemblies stopped working and local communities lost their residual autonomy, adopting the administrative frameworks suggested and imposed by the central authorities. The three Senates of Piemonte, Chambéry and Nizza did not represent a threat for the monarchic absolutism, but were a source of Crown's high bureaucrats. The State, characterized by autocratic paternalism at the top and by passivity and obedience at the bottom, became a typical example of an absolute monarchy. Such an institutional set up, improved and made more efficient by Vittorio Amedeo's successors, lasted for the whole XVIII century.

We gave Piemonte a value of 2 in 1600 and 1700 and of 1 in 1750; by this last date the absolutistic regime was perfectly set up.

Tuscany

Under Cosimo I de Medici (1537 -1574) the building up and consolidation of an absolute State gradually took place in Tuscany. The new Prince tried to build up a monarchic State similar to those prevailing in Europe, while at the same time preserving some aspects of the older republican institutions and norms. The main breakdown with the past was the attribution of the legislative power to the Prince. The Constitution of 1532 was still in force and stipulated that the the Council ("*Il Consiglio dei 200*") and the

Senate (“*Il Senato dei 48*”) would take part in the legislative process and in law implementation. These two collective bodies lasted for the whole Medici regime. They also elected some important magistracies. Even though the Prince formally respected the prerogatives of the Senate and of the Council’, he ended up by concentrating the legislative power in his hands. To some extent, Ferdinando I (1587 – 1609) mitigated the centralizing process initiated by his father Cosimo I. In a framework of partial liberalization, he gave more relevant power to the “*Consulta*”. The main task of this body, formally established in 1550, was to admit appeals against ordinary magistracy sentences and to give advice on law formulation and elaboration. Ferdinando I promoted also a wider citizen participation in local magistracies. This institutional framework remained substantially unchanged up to the end of the Medici regime (1737). In 1737 Tuscany passed to the Lorena’s dynasty, and especially when Pietro Leopoldo came to the throne (1765) it fell under the dependence of the Austrian Crown.

We assigned a value of 2 to Tuscany in 1600 and 1700, in consideration of the gradual building up of an absolutistic regime. In 1750 we gave the same value Acemoglu et al. (2002) assign to Austria, namely 1.

Papal State

Since the end of the XVIth century, the Papal State was like an absolute monarchy. Similarly to what happened in other European countries, there was a process of increasing administrative centralization and of more relevant governmental control over peripheries. Yet, the Papal State was not able to reach a really homogenous institutional structure. The Northern Legation of Bologna, Ravenna, Forlì and Ferrara had more autonomy: many laws (for instance fiscal or custom rules) were implemented with exceptions and derogations concerning this area. In particular Bologna, the second town of the State, played an important role as leader of the whole Legation area. On the basis of “*Capitula*” of 1447, the city was ruled by a diarchy made of a Legate of the Pope and of a large and representative Senate. Bologna was able to maintain a special regime of local magistracies, in charge of justice administration and fiscal legislation. The city of Ferrara too was ruled by a Papal Legate and by a Council of 100 citizens, but here the Papal Legate was able to exercise more power.

In 1600, 1700 and 1750 we assign to the northern region of the Papal State (Emilia – Romagna) a value of 2, and to the remaining ones (Lazio, Umbria and Marche) a value of 1.

Venice

The Doge was the leader of the Republic of Venice and one of its most relevant political institutions. Even though he was chosen by means of sophisticated elections, he was appointed for life. His power was constrained by several checks and balances. The Doge presided over the most important Councils of the Republic, but only together with his Advisors and the three Chiefs of “*La Quarantia*”. These individuals formed a body called “*La Serenissima Signoria*”. The Doge could convene a meeting of the most important Republican Councils only with the agreement of “*La Serenissima Signoria*”.

The sovereign power over the Republic was up to “*Il Maggior Consiglio*”, the assembly of Venice’s elite. All laws became effective only after ratification by this Council. The Council also elected several magistrates and members of other collective bodies, such as the Senate, “*Il Consiglio dei X*” and “*I Procuratori di San Marco*”. This last body had the judiciary task of safeguarding the Republic’s political and institutional system. Over time, the Senate acquired growing relevance and played a key role in the Venice’s political life.

To account for a regime in which the executive had effective power but was subject to substantial constraints and was accountable to other collective bodies, we assigned to Venice a value of 5 in 1600, 1700 and 1750.

Republic of Genoa

In 1576 the Republic of Genoa provided itself with a new Constitution, which was in force until 1797. The executive power was shared between the Doge (appointed for two years) and a collective body made up of two Councils, “*I Collegi*”. To avoid authoritarian risks, the new Constitution imposed stronger limits on their power than in the past. The competence on penal matters was subtracted to the executive organs and granted to an independent one, “*La Rota Criminale*”. The Constitution increased the powers of the two Councils (Lower and Upper). The Lower Council, made up of 100 members, acquired increasing relevance under the new constitution: it approved legislation and it took decisions on the most important political issues of the Republic. The Lower Council designated the so called “*Thirty Electors*”, that in turn had to choose the members of the two Councils, at the moment of their renovation. The ancient magistracy (“*I Supremi Sindacatori*”) also had outstanding relevance in this constitutional framework. They controlled each Governor after he left office, and acted as a Constitutional Court controlling the decisions of the two Councils – although in the end the Lower Council had the final word.

We can consider Genoa as having an institutional framework in which the authority of the executive is relevant but at the same time subject to real checks and balances and some accountability. Accordingly, we coded Genoa with a value of 5 in 1600, 1700 and 1750.

The Kingdom of Naples

Since 1600 the Kingdom of Naples was an absolutistic and autocratic monarchy. We give it a value of 1 for all the period under consideration.

A.3.4 Italy in 1800 and 1850

To code constraints on the executive in 1800 in Italy we focused mainly on the historical events of Napoleonic period. As general rule, we coded the Italian regions with 1, because after complex vicissitudes they fell directly or indirectly under Napoleone’s control. Nevertheless, we gave a value 2 to Lombardy, Emilia–Romagna and Liguria, to account for the brief republican experiences they lived in this lapse of time. For instance, in 1796 Cispadana and Transpadana Republics were created respectively in Lombardy and Emilia-Romagna. In 1797 they merged into the Cisalpina Republic, which survived until 1802³. The Republic of Liguria, established in 1797, lasted until 1805 when it was annexed to the French Empire.

Italy became a unified and independent State in 1861. To code constraints on executive in 1850, we focused on the so called Restoration period. Using the information provided by Polity IV, we coded Tuscany, the Papal State and the Two Sicilies with 1; Piemonte and Liguria, which were part of the Kingdom of Sardinia, were coded as 3⁴. Autocratic regimes, established by the Council of Vienna of 1815, ruled the remaining Italian States, so we gave them value of 1 in 1850.

A.3.5 Germany

³ In this year the Cisalpina Republic became the so called Italian Republic, that survived until 1805.

⁴ The Isle of Sardegna was part of the this Kingdom too. But in our dataset we consider Sicilia and Sardegna as one territorial entity (too few observations on culture are available to code Sardinia as a separate entity).

During these centuries, Germany consisted of several territorial entities, in many cases difficult to relate to present-day Landers. As general rule, German Landers were coded with a value of 1 in 1600, 1700, 1750, 1800 and 1850, following Acemoglu et al.(2002). But there are some exceptions, namely some territorial entities not characterized by autocratic institutions and that we can clearly relate to today Landers. For some of these entities, we have information provided by Polity IV dataset. Our sources on Germany are Asch (1988), Vierhaus (1988) and Graves (2001).

Baden-Wurttemberg

During the period under consideration, Baden and Wurttemberg were two distinct territorial entities. The values assigned to the current Lander of Baden-Wurttemberg are the simple average of those we gave to each of part.

Following Acemoglu et al.(2002), we coded Baden as 1 in the years 1600, 1700, 1750 and 1800. Following Polity IV we code it as 3 in 1850 (Polity IV gives Baden a 3 between 1819 and 1871).

Wurttemberg had more advanced political institutions. After the Thirty Years War (1648) Germany experienced a general decline of territorial Estates and a strengthening of autocratic regimes. But the Assembly of Wurttemberg (*Landtag*) was able to preserve its political position in the seventeenth and eighteenth centuries. This Assembly was made up of delegates of the towns and of protestant prelates; it mainly had the right to approve taxation and to control the fiscal management. Permanent parliamentary committees worked whenever the full assembly was not summoned. These bodies not only had fiscal and administrative competences, but also played an important role in the decision-making about governmental and economic matters. The Wurttemberg's *Landtag* was thus able to exert real constraints over the executive power⁵. We thus assigned a value 3 to Wurttemberg in 1600, 1700, 1750 and 1800. Polity IV assigns to Wurttemberg a value of 5 between 1819 and 1871. Thus, we coded Wurttemberg as 5 in 1850.

Bayern

After the early XVIIIth century, the Assembly of Bayern became ineffective and under ducal control. Following Acemoglu et al. (2002), we thus assigned a value of 1 to Bayern for 1600, 1700 and 1750. The values of 1 and 3 for 1800 and 1850 respectively derive from information provided by the Polity IV dataset.

Bremen-Hamburg

The two Landers of Bremen and Hamburg are considered as one entity in our data set. The values assigned to Bremen-Hamburg are the simple average of those given to each part.

Bremen and Hamburg were two of the few free cities (*Freistadt*) that survived until the XIX century and entered the German Confederation in 1815. Free cities had to pay taxes directly to the Empire. They were usually ruled by magistrates, although their sovereignty could vary from one city to an other. Political power was generally in the hands of the patriciate or more often of guildes. For instance, Bremen established an aristocratic constitution in 1433, that gave power to the local patriciate. In Hamburg, a council of delegates of guildes of merchants and artisans shared the political power with

⁵ Polity IV codes Wurttemberg from 1800 to 1818 as 3. As we have no evidence of striking institutional changes at the beginning of the XIX century in comparison with the two previous centuries, this confirms our coding. In 1819 a new constitution was established in Wurttemberg, and after this year Polity IV gives it a value of 5.

the ancient aristocratic Senate since the XVI century. We coded Bremen and Hamburg as 3 in 1600, 1700, 1750 and 1800.

In 1815, Bremen established a republican constitution that provided separation of power and an aristocratic system of designation to public offices by cooptation. Legislative power was up to an elected Council of Citizens (*Burgerschaft*), made up of 150 members. A 16 member Senate exercised the executive power. The Council elected its members under instruction of the Senate itself. We thus assigned a value of 5 to Bremen in 1850. As we don't have evidence of relevant institutional change in Hamburg over the same period, we retain the value of 3.

Hessen

The Assembly of Hessen was quite powerful in the distant past and further increased its relevance at the end of XVI century. Like other German principalities, Hessen experienced several religious conflicts, which weakened the regime of Maurice of Hesse-Cassel (1592 – 1627). He thus became increasingly dependent on the support of the Estates for defence and military matters, and for taxation. In 1627 eventually he was forced by the Assembly to abdicate in favour of his son William V (1627 – 1637). To account for these checks and balances, we assigned to Hessen a value of 3 in 1600.

Over time the Estates lost their authority because of conflicts and divisions between towns and nobility. After 1655, this enabled William IV to unilaterally impose taxes in emergencies and, when convenient, to ask the Assembly for retrospective consent. Following Acemoglu et al. (2002), we assigned to Hessen value a value of 1 in 1700, 1750, 1800 and 1850.

A.3.6 Spain

Our sources for Spain are Graves (2001), Ortiz (1988), Menedéz Pidal and Jover Zamora (1987). As general rule we assigned to the Spanish regions the same values that Acemoglu et al.(2002) give to Spain. Nevertheless, in the XVII century there were some relevant differences between Castile and other Spanish regions, namely the eastern kingdoms of Aragon (Aragon, Catalonia and Valencia). These three regions integrated in the Spanish Crown maintaining their own laws, organization and institutions. In particular these regions preserved their own Parliaments, the “*Cortes*”, as guarantors of local freedoms and prerogatives. In the kingdoms of Aragon, people usually thought about the monarchic power as a contractual one, so any Castile's king had to comply with “*constitutions*” or “*fueros*” of these regions. These constraints over the royal sovereignty, especially in the fiscal and military fields, stood against the absolutistic tendencies prevailing at that time in Spain, sometimes giving rise to episodes of tension and conflict⁶. The Cortes not only had some veto powers over taxation, but had other important legislative prerogatives. Since the basis of the royal power was contractual, the kings could enact laws only with the consent of the Cortes of Aragon. In the XVII century the relevance of these Cortes was declining in comparison to the previous centuries, and the Spanish kings did not summon them very often. Nevertheless, when they met, the Cortes kept dealing with fiscal, political and legislative matters. Moreover, each of the Cortes of the kingdoms of Aragon had permanent committees (called “*Diputaciòn*” or “*Generalitat*”) endowed with fiscal competences. Over time, these permanent committees acquired also political and economic relevance and often acted as caretakers of local liberties. To account for this institutional framework of the kingdoms

⁶ We can mention the crisis between Aragon and Spanish Crown in 1592, the refuse of Cortes of Catalonia to consent to taxation in 1626, the rebellion that occurred again in Catalonia in 1640-1659, and finally the less known and relevant successes of Valencia in 1645-1648.

of Aragon, we assigned value 3 in 1600 to the Spanish regions of Aragon, Catalonia and Valencia.

At the beginning of the XVIII century, the ancient institutions of the three kingdoms of Aragon were abolished. To account for this period of transition towards autocratic regimes, we assigned to the regions of Aragon, Catalonia and Valencia the value 2 in 1700.

In all subsequent dates, all Spanish regions are given the same values that Acemoglu et al. (2002) give to Spain.

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