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“Public finance in the early modern era:
A comparison of England and France in the eighteenth century”

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Introduction

Public finances are one of the best starting points for an investigation of society. The spirit of a people, its cultural level, its social structure, the deeds its policy may prepare-all this and more is written in financial history.

*Joseph Schumpeter*

The present thesis is about the public finance of England and France in the eighteenth century. Public finance is, at least since the financial crises that started in 2008, one of the most controversially discussed topics around the globe. This paper is not a study of the contemporary situation in public finance but it focuses on the origins of the current financial system which can be found in the western European state’s system of the eighteenth century. The history of public finance unveils the development status of societies without stressing cultural matters. This makes financial history in general an interesting field for all those who understand the historical science as being more than just telling an arbitrary story.

The rise of financial capitalism\(^1\) has its origins in seventeenth century Holland but the emergence of a fiscal state has to be tracked in England in the eighteenth century. Intuitively the first question that appears now is “*why in England?*”. Why not in Holland where the first Financial Revolution took place, or why not in another European country? Of course one can discuss the question of why it did not happen in another part of the world, for example in China. This global approach would then be covered in the *great divergence*-debate\(^2\), which became more and more important in historical science during the last ten years. This thesis focuses on European history and only marginally touches global history issues. The focus of this work is on the evolution of public finance in England and France in the eighteenth century. England and France as being the two major European powers competed for hegemony in Europe and in the world during the whole eighteenth century. Extensive social economic and political changes affected large classes of population in both

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\(^2\)If you are interested in the great divergence I recommend: Kenneth *Pomeranz*, *The great divergence: China, Europe and the making of the world economy*, Princeton, 2000; Andre Gunder *Frank*, *ReOrient, Global Economy in the Asian Age*, Berkeley, 1998.
countries in the course of the century. The year 1688 was the farthest-reaching caesura in the history of early modern England. With the Glorious Revolution the era of absolutism became a thing of the past and a new system characterized by limited government was introduced. In France the so called Ancien Régime, the old regime, which was characterized by the absolute monarchy, endured until the last decade of the eighteenth century and came to a sudden end with the French Revolution of 1789. The 101 years between the Glorious Revolution and the French Revolution define the timeframe that is covered in this paper. Whereas the timespan from 1688 to 1789 was definitely a formative era for modern Europe, at the same time it was a very bellicose century. The Nine-Years War (1688-1697), the War of Spanish Succession (1702-1713), the War of Austrian Succession (1739-1748), the Seven-Years War (1756-1763), the American War of Independency (1776-1785) and the Coalition Wars (1792-1815) are only the most prominent examples of interstate conflicts that took place in the eighteenth century. In the long eighteenth century, which is defined as the period from 1689 to 1815, France and England fought each other over the course of 64 years in a huge variety of wars. That means that both countries were in conflict for over fifty per cent of the century. To wage war over such a long time-span the European powers had to maintain large standing armies and expensive navy forces. Large parts of the budgets were used for the military, and most of the early modern European states were near bankruptcy for most of the time. To wage the more and more expensive wars the state needed to tap new sources of money. The two primary types of fundraising in the early modern era were taxing and borrowing.

Historians introduced the term fiscal-military state to describe the connection between the fiscal and military power of the early modern states. The fiscal-military concept explains the development of complex administrative and bureaucratic structures in the western European states in the course of the early modern era. These improvements were required to spend larger amounts of money on the enlargement of the army and to pay its troops. John Brewer first developed the concept of the fiscal-military state in his groundbreaking study on the *sinews of power*.4

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3Compare: Mark Dincecco, Political transformations and public finance, Europe 1650-1913, Cambridge, 2011.

This thesis is a comparative analysis of the fiscal systems of England and France in the eighteenth century. I chose these two states because they both stand for considerably different systems of early modern governance. Whereas in England the power of the crown was curtailed and the country seemed to be ruled by parliament since the Glorious Revolution, Ancien Régime-France still was an absolute monarchy. The following chapters show that both terms, parliamentarianism and absolutism, are problematic in many respects. Against the generally accepted opinion, the absolutistic ruler did not possess all the power, instead a little share of elites and nobles impinged upon the politics of the Ancien Régime. The English parliamentary system was not that laissez faire as generations of historians thought. Quite the contrast it was characterized by monopolies and protective duties.

The present work contains three major parts. The first chapter, being about the taxation systems of England and France, at first gives an introduction of early modern forms of taxation and the evolution of taxation in Western Europe after the financial revolution. It will then take a look at the English and the French taxation system in the eighteenth century separately, before comparing both systems in the last section of the chapter. The second part deals with the abstract concept of public debt. The history of public debt is much shorter than the history of taxation as the modern meaning of public debt is an invention of the early modern era. Therefore public debt was just in the early stages of development in the eighteenth century. The first section of the chapter gives an introduction of the evolution of public debt in Western Europe. The following parts examine the peculiarities of the English and the French public debt systems and introduce both systems individually. In the last section of the chapter both public debt systems will be compared and the conclusion of the chapter given. The last major part of this thesis is about the political economy of warfare in England and France in the eighteenth century. In the last chapter the things now come to a full circle, because warfare was definitely the driving force behind every early modern mercantilist policy. At first the concept of the fiscal-military will be introduced and explained. Then the political situation in Europe in the eighteenth century will be described as a era of nearly permanent warfare. All European powers were fighting each other in several wars and in constantly

changing alliances. In the final section of the chapter England and France are portrayed as fiscal-military states with different strategies and interests in the struggle for hegemony in Europe and in the whole world. In both states the military became the most important factor in the domestic economy: as the largest borrower and spender and also as the largest employer.

The public finance of early modern European states has been a well-investigated subject in financial history. A large number of monographs, miscellanies, studies and essays about public finance in the early modern era have been published within the last fifty years. Since the achievements of Douglass C. North and his new institutional economics\(^6\) in the early nineties of the last century, the history of institutions and institutional change was booming again after a period in which economists as well as historians did not put any value on institutional economics. I will give a short overview of the most important studies and authors at the beginning of each chapter.

The methods that are used in this thesis are mostly descriptive. As I mentioned before, a large number of literature exists, which made it easy to find the facts and figures that I needed to tell my own story. Nevertheless I used methods of quantitative analysis to make more complicated issues easier to understand for the reader. Some facts that are covered in this thesis are quite complicated to understand without having prior knowledge of the topic, but I tried to make it as easy as possible for the reader to follow my thoughts. Before going in medias res, I basically have to state that the history of public finance in England has been investigated far more extensively than the public finance of France in the eighteenth century. This fact sometimes made it impossible for me to compare exactly the same figures for both countries. In some cases I had to be content with quite similar data and in other cases I was forced to make guesses using the literature that I had on hand.

Part I Taxation in France and England in the eighteenth century

Nothing is certain in this live except of death and taxes

Benjamin Franklin

As it is the case today, taxation played a major role as a source of revenue for governments in early modern Europe. In nearly every western European state military and colonial success depended heavily on the government's taxing power.\(^7\) Since the outgoing seventeenth century, the role of taxation for England and France's national economy was quite different. On the one side the English faced a massive development of the fiscal system and the burden of taxation increased dramatically since the last decades of the seventeenth century.\(^8\) On the other side the impact of taxation in France did not increase significantly during the eighteenth century, therefore taxation in France did not burden the people and national economy in the same way as it did in England.\(^9\) For the early modern mercantilist state the question of how to squeeze the most taxes out of the population was absolutely central. Figures show the importance of tax revenues for the European state, especially for the realization of military goals and the attendance at wars in Europe and abroad. Therefore it is not surprising, that from 1689 and 1783 in England 61 to 74 per cent\(^10\) of the total state income was used for the military while in France between 1628 and 1768 even 71 to 95 per cent of total state income were spend for military properties.\(^11\) As a result of the heavy investments in the military the size of the armies of both countries grew massively in the early modern era. The French army increased from over 50.000 in 1515 to 350-000 in 1710, whereas the English army went from 20.000 up to 75.000. In England the growth of the navy was

\(^7\)Larry Neal, The rise of financial capitalism, 3.
particularly relevant, increasing from 24 ships and 600 men in 1578 to about 313 ships and 48,000 men in 1710.\textsuperscript{12}

Assuming that the collection of taxes was of particular importance for both countries the question appears why the impact of taxation differed so much in England and France in the eighteenth century. To solve that question, one has to take a look at the qualities and peculiarities of the singular systems of taxation in both states in the eighteenth century before it will be possible to compare them and try to find indicators for success or even failure.

1 Taxation in England in the eighteenth century

As mentioned before, during the eighteenth century the main task of the English taxation system was to furnish the military with fresh money. Patrick O’Brien indicates that the English taxation system for the time of the Glorious Revolution up to the French Revolution “...operated to provide its navy and army with the indispensable monetary means required to combat the kingdom’s foes and to maintain the military forces and the credit of the central government in conditions of readiness for the next war”.\textsuperscript{13}

Therefore, the function of taxation in England in the eighteenth century, indeed, was totally mercantilist. The connection between tariffs and taxes and the maintenance of the mercantilist system in England, which included protected trade and boarders have been discussed in detail in the last years. Considering a long series of mercantilist wars during that period, the tax burden during that time increased dramatically, in real terms nearly eighteen times over this period.\textsuperscript{14} From 1715 to 1803 the total tax revenue rose from 5.76 million pounds to 54.7 million pounds.\textsuperscript{15} So how was it possible for the English government to raise revenues out of taxation on such a dramatic level over one single century?

To answer that question one has to take a look at the English system of taxation in the eighteenth century. It seems quite obvious that the Glorious Revolution with all of its changes regarding the political and economic opportunities of the English state set

\begin{itemize}
\item \textsuperscript{12}Michael Braddick, Nerves of state, taxation and the financing of the English state, 1558-1714, Manchester, 1996, 30-31.
\item \textsuperscript{13}Patrick O’Brien, The political economy of British taxation, 1600-1815, in: the Economic History Review, new series 41/1, 1988, 1-32, 1.
\item \textsuperscript{14}O’Brien, The political economy of British taxation, 1.
\item \textsuperscript{15}Mathias, O’Brien, Taxation in Britain and France, 604.
\end{itemize}
the base for profound formations of public finance in England as a whole. With the rise of those new parliamentary administrations institutions were founded- like the Bank of England or the central tax authority- which supported higher tax levels, allowing the English politics to curtail the political influence of the old and wealthy elites that dictated fiscal policy in the centuries before.\textsuperscript{16} There are authors that argue similarly, for instance Charles Kindleberger who goes even further, comparing the events of 1688 with the French Revolution to explain the English success in the eighteenth century. He claims that the French financial institutions lagged behind by about one century, and therefore were inferior to the English in raising taxes until the French Revolution.\textsuperscript{17} Other scholars, including Peter Mathias and Patrick O’Brien, are warning not to overestimate the aftermath of the Glorious Revolution.\textsuperscript{18}

I think that the Glorious Revolution definitely set some institutional background conditions that may be conductive for the rise of the capitalist system in England. The new institutional economists, including its most famous exponent Douglass C. North, created an institutional approach on economic history. They featured institutions, like the Parliament, the banks or the court, as the heart of every society that “structure all political, economic and social interaction”.\textsuperscript{19} There are many theories based on North’s institutional approach, like the research of David Stasavage, John Brewer or Mark Dincecco.\textsuperscript{20} Dincecco sees the political system of limited government as the key feature that every state needs for establishing a successful financial system. He argues that European states were able to tax most efficiently through fiscal centralization if their governments were limited. Furthermore credit risk under limited and centralized governments were supposedly much lower for limited governments than for absolutistic states.\textsuperscript{21} For that reason Dincecco appreciates the incidents of 1688 in England as most important for the English fiscal success in the eighteenth century, and even claims that after 1688 England experienced a totally limited

\textsuperscript{16}Nye, War, Wine and Taxes, 68-70.
\textsuperscript{18}Mathias, O’Brien, Taxation in Britain and France 1715-1810, 634.
\textsuperscript{19}North, Institutions, 97.
Brewer, The sinews of power.
Dincecco, Political transformations and public finance.
\textsuperscript{21}Dincecco, Political transformations and public finance, 32-33.
government system.\textsuperscript{22} John Brewer argues quite similarly defending his thesis of the emergence of a fiscal military state in England in the eighteenth century. Just as Dincecco he locates the roots of the success of the English fiscal system in the Glorious Revolution.\textsuperscript{23} In his main theses he asserts that England’s military success was the result of institutional power and money.\textsuperscript{24} To finance military, taxation was a main factor public finance in the eighteenth century.

What were the characteristics and main features of the English taxation system in the eighteenth century? By and large it can be described as the shift from direct to indirect taxes. This pioneering innovation opened the doors to the attempts of the English government during the whole century to gain more and more taxes. Preconditions for the shift lay in the abolition of tax farming, the granting of monopolies, the modifications on land taxes and the rise of excises that were made during the seventeenth and eighteenth century.\textsuperscript{25} Before the first modern income tax was introduced in England by Tory politician Pitt the Younger in 1799, the land tax was the only effective way to tax wealth and income.\textsuperscript{26} Although land cannot give information about the fortune of its owner per se, the land tax should tax wealth via the detour of landownership. One cannot say that the land tax was a progressive tax in a modern sense, because it didn’t distribute the burden on the basis of wealth or income, but only on size of land. Anyway, the land tax was reformed during the eighteenth century, following the goal of making the tax more effective. For that reason objects that were connected with affluence, like the number of houses on the ground, windows, servants, horses and even luxury goods like hair powder, carriages and playing cards were included in the tax gradually.\textsuperscript{27} Such a mode of taxation is problematic for the government for two reasons. First it is absolutely not possible to tax every single set of playing cards, or little jar of hair powder of each English landowner directly, which means not via customs taxation. Therefore many reformations of the tax were simply not practicable.\textsuperscript{28} The second problem was that the land tax was limited in its size of possible revenue for the state. The Parliament always avoided increasing the land tax for political reasons, in particular because of

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\textsuperscript{22}Dincecco, Political transformations, 31.
\textsuperscript{23}Brewer, The sinews of power, 25.
\textsuperscript{24}Brewer, The sinews of power, 64.
\textsuperscript{25}Nye: War, wine and taxes, 68-70.
\textsuperscript{26}Mathias, O’Brien, Taxation in Britain and France, 610-614.
\textsuperscript{27}Ibid.
\textsuperscript{28}Ibid.
\end{flushleft}
the wide influence of the aristocratic elites on the policy makers. For that reason the
land tax brought decreasing returns over the course of the century. Therefore it is no
wonder that the share of direct taxes of the whole English tax cake fell from over 35
per cent in 1700 to less than 18 per cent at the end of the century. The assumption
that the Parliament was influenced by the aristocratic and money elites of the country
should not trivialize the power of the English Parliament, far from it, it is assumed that
the higher the Parliaments power the higher the taxing power. It simply shows that
the parliament's actions in the eighteenth century definitely were driven by the
interests of individuals. The government's craven efforts to tax wealth and income-
which was by the way increasing in average in the whole century - had to be
substituted by another form of tax revenues. From the beginning of the eighteenth
century indirect taxes became the main source of government revenues and the
most profitable kind of tax until the income tax was established. Whereas in 1750 the
share of total income from indirect taxation of customs and excise receipts was at 57
per cent, in 1780 it had already increased to 70 per cent. Those numbers show
quite clearly which prominent position indirect taxation had for the state's budget.
Indirect taxes were split into three categories: Customs, excise and stamps. Customs
duties were levied for all main imported articles, like sugar, tobacco, tea, imported
clothes, wine, imported spirits, but also coal, iron and timber. Excises were charged
for salt, candles, glass, soap, bricks, beer, malt, hops and domestic spirits.
Newspapers, bills of exchange and insurances were taxed via stamps. Over the
eighteenth century customs duties made about one quarter of the total tax income,
excise receipts between 45 and 50 per cent. Patrick O'Brien estimated the average
annual yield from the taxation of some major goods between the years 1788 and

30 Kiser, Linton, Determinants of the growth of the state, 418.
31 There are numerous studies about wages and salaries in Britain in the eighteenth century. It is commonly accepted that wages in Britain rose since the beginning of the seventeenth century. For further Information: Jan de Vries, The Industrious Revolution, consumer behavior and the household economy, 1650 to the present, Cambridge, 2008, chapter 3.
32 Mathias, O’Brien, Taxation in Britain and France, 616.
33 O’Brien, The political economy of British taxation, 11.
34 Mathias, O’Brien, Taxation in Britain and France, 617.
O'Brien's numbers show some interesting results. By comparing the calculated numbers of the total income from direct taxation including land, windows, carriages, houses, domestic servants and riding horses (£3,388,000 average annual yield) with the numbers of the total income only from alcoholic products including beer, wine, domestic and imported spirits, raw materials used for the production of alcoholic goods including malt, hops and tobaccos (£6,917,000 average annual yield) one can imagine how huge the impact of indirect taxation on the English society must have been. Furthermore, the table illustrates how high single goods were taxed. Especially customs, like tobacco (83 per cent taxed) and foreign spirits (60 per cent taxed) were branded by exorbitantly high duties, but the state also made money with so called necessities, such as salt (70 per cent taxed) or with information, for instance newspapers (55 per cent taxed).

The question of how the English state supervised the taxation system and controlled the collectors is central. Of course corruption existed as in any other bureaucratic system, but the English government succeeded to eliminate the most fatal forms of corruption: With the presence of a standing House of Commons after 1688 a powerful opposition to administrative malpractice, illegitimate disbursement and malfeasance was established. Due to the existence of financial institutions after 1688, which acted very strictly according to their own principles and which reformed the tax and in particular the tax collection system, the costs for the monitoring of the tax collection declined over the whole eighteenth century. The English fiscal administration was an exceptional example for Max Weber's ideas of bureaucracy in the eighteenth century. The Excise became the biggest and most efficient department of the state and the heart of the Victorian civil Service.

In the discussions about taxes and fares in general and therefore about early modern tax systems, the question of the social incidence is central. Who had to carry the main burden in the English system of taxation in the eighteenth century? This point has been discussed controversially in the past. Whereas Mathias and O'Brien come to the premise that the indirect taxes fell mainly upon the poor and the socially

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35 For the complete tables: O'Brien, the political economy of British taxation, 11.
36 Brewer, The sinews of power, 70.
37 Eugene White, France and the failure to modernize macroeconomic institution, 60, in: Michael Bordo ed., Transferring wealth and power from the old to the new world: monetary and fiscal institutions in the 17th through the 19th centuries, Cambridge, 2001.
38 For a detailed description about the excise: Brewer, The sinews of power, chapter 4.
deprived, other scholars criticized this assumption. As a direct answer to the essay of Mathias and O'Brien Donald McCloskey states that question of “who paid?” cannot be answered as easy as they do. Furthermore he argues that the appearance of indirect taxation on goods like beer depends on many things, mainly on the elasticity of supply and demand but also on the openness of the economy and individual preferences. This means that the implications of indirect taxes can vary a lot depending on the economic background. Therefore the beer tax, for example, could have quite easily affected the rich more than on the poor. The role of demand and supply is definitely crucial in the whole discussion about indirect taxation in the eighteenth century, because in England the conditions such as population, labor, or wages changed massively in that period from 1680 to 1789. Joel Mokyr dealt with the topic of demand and supply during the industrial revolution of course emphasizing his favorite issue: technology and knowledge. In the end of his essay Mokyr points out that there must have been an increase in the demand of goods from 1760 to 1860 as a result of lower production costs and higher wages.

Coming back to taxes it seems quite obvious that a tax on goods and services would hit the poor with higher intensity than the rich, but on closer inspection one has to consider some important points:

1) What kind of good is taxed: Is it a complement or a substitute?
2) Is the good a luxury or a so called necessity?
3) How heavy is it taxed?

The English government tried to keep the tax burden for the poor small. Therefore so called necessities of the poor should be taxed on a moderate level, whereas luxuries like imported liquors, wine, tobacco and exotic foodstuffs, like sugar, dried fruit and spices as products of the wealthy classes should be taxed heavily. Considering O'Brien’s estimations, luxuries were actually very high taxed but by comparing the annual yields of luxury goods to goods of every days use, one can see huge

39Mathias, O'Brien, Taxation in Britain and France, 617.
41Ibid.
43Mokyr, Demand vs. Supply, 1005.
44O'Brien, The political economy of British taxation, 10-25.
differences in the amounts of the sold goods. Products like beer, coal or soap really were taxed on a moderate level - 20 per cent on beer, 21 per cent of coal, soap is not declared\(^4\) but could not be substituted by other goods easily. Before modern water filtration technology was invented it was advisable to drink beer instead of water if one wanted to protect oneself from dangerous germs. Hence the taxation of beer and all its ingredients, like hops and malt, hit a majority of the society. The same applies to coal and other heaters, lighters and fuel, and any other kinds of “energy goods”, which weren’t substitutable but absolutely necessary for the masses. While it was possible to avoid the high taxes of the luxuries by simply not buying them, it was impossible to dispense with liquids or warmth. By considering that one has to say that the main share of taxes heavily burdened the poor classes, because the wealthy population could easily afford those necessities whereas the poor certainly had to work the whole day to buy them. It seems absurd that the government collected the major part of the whole tax revenues from those who had less, but considering that the poor were the absolute majority in the population of England it seems quite obvious that the main burden laid on them. Again, basic domestic foodstuffs, like grain, butter, meat and cheese were exempted from taxation but due to with urbanization and industrialization a steadily increasing share of the imported, and therefore taxed food allotted on staples.\(^5\) Basic and raw products experienced sustained growth in the total share of imported goods during the eighteenth century. From 1700 to 1801, raw materials rose from 45 per cent to 56 per cent, foodstuffs from 27 percent to 39 per cent, whereas the share of finished manufactured goods fell from 28 per cent to 5 per cent.\(^6\) These numbers reflect the mercantilist trade regime, which was installed by the English government in the seventeenth and eighteenth century via an uncountable number of acts, codes and treaties with allied powers perfectly. The collection of revenue combined with an economic weakening of the European enemies –first and foremost France- emerged as a quite effective foreign policy during the whole century. The rise of protectionism in England up to the middle of the eighteenth century is linked to the government of Richard Walpole, under whose authority a large number of commercial acts were imposed, including the Molasses Act from 1733 that levied six pence of revenue per gallon of Molasses

\(^{45}\) O’Brien: The political economy of British taxation, 10-25
\(^{46}\) Ibid.

\(^{47}\) Nicholas Crafts, British economic growth during the Industrial Revolution, Oxford, 1985, 141-147.
from non-English colonies. The example of the Molasses Act illustrates how the foreign policy of the early modern era worked. Furthermore it shows that England was not really a liberal laissez-faire state in the eighteenth century.

Of course the main use of the government’s tax revenues was to finance wars nevertheless one has to admit that the main share of the money used for wars did not come from taxes but from borrowing in the eighteenth century. Approximately 75 per cent of the extra finance the state needed for imposing wars came from loans, hence the invention of the public debt in England definitely marked a huge change of the possibilities of warfare. The role of debt and state’s borrowing will be subject of part two of this thesis. To switch from peace to wartime rapidly, the taxation system in England was not elastic enough, which means that the whole “taxing machinery” simply started too slow. A common way of earning additional taxes was to increase the land tax, although the government had reservations about that. The English governments mostly tried to spare the wealthy landowners from high taxation, because most of them were politically influential or even held a ministerial office in some cases. During wars the land tax increased from the non-war five per cent to 20 per cent. Nevertheless there are direct connections between wars and taxation in England. To be effective new taxes or the increased existing taxes needed time, but with the additional revenues the government paid loans and serviced the debt that was increased in wartimes. Through the eighteenth century an enormous share of governments’ revenues were spent for war, approximately 75 to 85 per cent of the whole budget. On the other hand England’s governments spent only little on civilian affairs, at most 10 to 15 per cent.

The massive upgrade of the navy was unique in European history. No other country paid so much attention to its naval powers, but according to England’s geographic and political situation the priority of the navy seems quite logical. The cost for a wartime navy sailor was twice as high as for a soldier, because of the sailor’s higher maintenance costs. Nevertheless, over 40,000 people worked on board of navy ships in the middle of the eighteenth century and an enormous amount of money was

48 Nye, War, wine and taxes, 22-23.
50 O’Brien, The political economy of British taxation, 2.
51 Brewer, The sinews of power, 39.
spent not only for the navy soldiers but also for shipbuilding, constructing engineers and dock workers.\footnote{Brewer, The sinews of power, 33-36.}

To gain the money that was needed for such a massive enlargement, the fiscal system had to work highly professionalized and effective. The bureaucratic body of the English state grew over the whole eighteenth century. There were 1,200 officials between 1649 and 1660; the number increased to 12,000 in 1720 and in the 1760’s as many as 16,000 officers worked for various institutions of the state. The biggest contingent of the full time employees of the state worked for the fiscal bureaucracy, which rose from 2,524 in 1690 to 8,292 in 1782.\footnote{Brewer, The sinews of power, 66.} Regarding this massive growth of the bureaucratic apparatus, the hitherto heterogenic and amateurish fiscal system became a highly professionalized and effective tax administration that formed the essential body of the state.\footnote{Brewer, The sinews of power, 91.} In the years from 1689 to 1815 the English state raised taxes 16 fold and borrowing even 240 fold to finance its expensive wars. The government in England came very close to an optimal fiscal policy with its efforts of maximizing revenue. Increases in the taxation were smooth and not just for the duration of war. England had developed an efficient system of debt finance by the end of the eighteenth century.\footnote{Forest Capie, The origins and development of stable fiscal and monetary institutions in England, 27, in: M. Bordo ed., Transferring wealth and power from the old to the new world.}

Concluding this part of the chapter, one can say that with the consequences that arose from the incidents of the Glorious Revolution in 1688 England was able to create a taxation system that was a case sui generis in Europe in the eighteenth century. The establishment of macroeconomic and fiscal institutions after 1688 gave English governments through the whole eighteenth century the opportunity to install a regime of taxation that made it possible to service its debt on a regular basis. With the shift from direct to indirect taxation via excises and customs the breakthrough to a more effective taxation was done. The taxation of necessities like beer or coal and luxury goods, such as tobacco or tea, brought tons of pounds sterling into the government’s coffers. As O’Brien showed, the social incidence of this heavy taxation is clear, since the poorer parts of the society had to cover the biggest burden.\footnote{O’Brien, The political economy of British taxation, 1-32.} Nevertheless the revenues from taxation were absolutely necessary for the state to
survive. Without the money that came from the public England wouldn’t have been able to win most of the wars it fought or to defeat so many enemies. The achievements that had been made in the whole taxation system were definitely a main benefit in the development of the English fiscal military state in the eighteenth century.

2 Taxation in France in the eighteenth century

As in England, in France the main goal lay on running the mercantilist system and to gain a maximum of money in order to finance the military. In the eighteenth century, France was the strongest power on the European continent and the main antagonist of the English. The political background of France was totally different to that of its enemy on the other side of the channel. Whereas England was ruled by a parliamentary monarchy after the events of 1688, in France the Ancien Régime should remain until the big clash of the French Revolution in 1789. Actually one could think that France’s possibilities in the competition for the hegemony in Europe were way better than those of the English. France was larger in size and population and it was endowed with a variety of recourses. Furthermore the state was ruled by a single absolutist monarch, although that fact doesn’t mean that he had all the decisive power. Therefore by taking a look on its preconditions, on paper Frances possibilities for the maximization of revenue for the state were the best in Europe. Nevertheless in matters of financial institutions, a solid taxation system and debt policy the French state lacked behind its biggest European rivals: Holland and England.

The development of the French fiscal system in the early modern era has been the subject of quite a large number of contemporary studies. In this context most authors argue quite similarly by characterizing Ancien Régime’s public finance sector as backward and inefficient. A number of scholars even go so far to state that the main factors for the French Revolution were not political or social, but simply based on financial reasons. Michael Kwass for instance states, that the dramatic incidents that began in 1789 were not based on a current governmental lapse but rather had their origin in the long term financial failure of the absolute monarchy.\(^\text{57}\) Philipp Hoffman, Jean Rosenthal, David Weir and Mark Dincecco all claim that the confusing variety of

taxes, privileges and exemption was a key factor for the French revolution. Francoise Velde and David Weir say that Frances financial market evolved, but too slow to keep pace with its European antagonists.\textsuperscript{58} In fact most of the studies about the fiscal system in France in the eighteenth century state institutional or political reasons for the French failure. Patrick O'Brien and Peter Mathias draw a different picture by arguing that it was not the missing financial institutions or the political system that crippled France in its fiscal development but the simple fact that the burden of taxation was too low - especially in comparison to England.\textsuperscript{59} By arguing that taxation was too low in eighteenth century France O'Brien and Mathias contradicted the thesis of those who claim that the high level of taxes was responsible for the French Revolution. And at the same time they got rid of the myth of France being Europe's biggest tax-collector in a mercantilist matter.

So what were the main features of the French taxation system in the eighteenth century and how was it characterized? First, one must admit that the matters and instruments of taxation as well as the political background were much more complicated in France than in England. Like in most of the other European states, in France the collection of taxes in France was privatized and supervised by the ferme generale or the general tax farm. The ferme generale was the heart of the French taxation system, and sold the right to collect the unpopular indirect taxes for a fixed price to privates, the so called fermiers-generaux or farmers-general. They often operated corruptly, and were, not surprisingly, hated among the French society.\textsuperscript{60} The system of the ferme generale lasted from 1726 up to the French Revolution, and was often criticized, especially in the second part of the century. The major points of critique concerned the principles of the ferme itself, seeing that a privatized collecting system was less effective than a centralized system maintained by the state with civil servants instead of private fermiers. Assuming that the maximization of revenue was the superior goal this critique seems to be legitimate. The second kind of criticism involved the fact that supervising private collectors was very expensive and difficult, and therefore reduced the total revenue again.\textsuperscript{61} The main problem of public finance

\begin{footnotesize}
\begin{itemize}
\item\textsuperscript{59}Mathias, O'Brien, Taxation in Britain and France, 634-635.
\item\textsuperscript{61}White, from privatized to government-administered tax collecting, 640-641.
\end{itemize}
\end{footnotesize}
in general was that of information. Especially for France a lack of information was a major problem, because it was absolutely impossible for the small royal government to be informed about the whole huge kingdom.

A main argument of some historians analysing the public finance of France in the eighteenth century is that the governments and policy makers acted amateurish and consequently infected the whole bureaucratic body with ineffectiveness. Thus the main failing can be found in the actions of the incompetent leaders and their advisors. To my mind this argumentation seems ahistorical. Furthermore, long term development of states cannot be measured by the competence or even incompetence of single men. For Example, the preconditions for the biggest disaster in the French financial history of the eighteenth century, the reign of John Law, were set by the quite intelligent and logical thoughts of Philippe d’Orleans who became regent in 1715. Before Philippe entrusted the Scottish banker John Law he installed the Duke of Noailles to consolidate the French state. Philippe knew about the ineffectiveness of France’s financial system and was bent on increasing the states revenues. Noailles’ approach to gain the support of the elite by abandoning extraordinary taxes failed. After the dismissal of Noailles, Philippe contacted Law in 1716 and he was fascinated by the ideas of Law who wanted to create the same sort of banking system that seemed to be so essential to England’s fiscal success. In 1716, Law formed the Banque Generale whose quantity grew up to over 150 million Livres in 1717. With the beginning hostility to Spain and in accordance to that new enmity the states ever growing need for fresh money, Laws authority grew steadily before he finally became Controller General (minister of finance) in 1719. He founded the Compagnie d’Occident in 1717 whose shares were traded very effectively in the first years of its existence. In 1718 he renewed the Banque Royale which from now on was called Banque Generale. In 1719 the Banque Generale took over the general tax farms, which collected the most important indirect taxes, and it was allowed to convert the national debt into shares. Law merged the Banque Generale with the chartered companies in order to turn the bank into the French equivalent of what the Bank of England was for the English economy. To reach this goal he made some crucial decisions. Not only did he establish the notes of the Banque Generale to legal instruments for all payments above 600 Livres but he also used Compagnie des

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63Hofmann et al, Priceless markets, 72-73.
Indes shares to spread out government debt. In fact, in return for their fixed interest rate government bonds, the creditors would receive shares of the Compagnie des Indes. To make the action profitable for the state, he tried to increase the stock of the company up to about 10,000 Livres per share.\textsuperscript{64}

In 1720 the bubble burst, and John Law got dismissed by the regent. The banknotes were demonetized and no longer used as currency when the Banque Generale was shut down in 1720. Government debt was consolidated again in 1721 and the financial system was reestablished having quite the same characteristics as it had before the Law affair started.\textsuperscript{65} That means, that the ferme generale was reestablished and the credit sector went into the private hands of the notaries again.

Considering the entire story of the Law affair one must say that these disastrous events had a massive impact on the public finance in France in the eighteenth century. France tried to copy England’s highly successful system of public finance and failed. By looking at all the upcoming financial decisions France took during the whole century one should never forget the impact of this crucial episode.

From the 1720’s on the collection of indirect taxes was in duties of the ferme generale again. The ferme was in charge of the collection of the gabelle (the salt monopoly), the traites (costume duties), the domains (the seigniorial rights of the Crown and registry rights) the aides (sales taxes) and the tabac (tobacco monopoly) were added in 1730.\textsuperscript{66} But the problem with the tax farming system remained, it still seemed to be absolutely impossible for the state to impose a system of control and keep its costs at a low level at the same time.\textsuperscript{67} Anyway, over the century tax revenues were growing and the state permanently tried to make the farms more efficient. In the end of the century the state was able to establish a system of monitoring that worked efficiently but unfortunately was very expensive at the same time. If the crown would have been able to impose a system of permanent control at low costs the state would have made much more money via taxation, but by failing that goal the state always had to balance between higher costs for monitoring and suffering bigger losses by cutting the monitoring.\textsuperscript{68} Hence the whole system was quite unstable and didn’t support the long-run public finance of the country.

\textsuperscript{64} Hofmann et al, Priceless markets, 83.
\textsuperscript{65} Ibid.
\textsuperscript{66} White, Tax farming, 643.
\textsuperscript{68} White, Tax farming, 655-665.
Furthermore, the system was characterized by indebtedness and default. Right after the Law affair the debt servicing defaulted and did so in 1726 again. Of course this two-stage default reduced the debt of the state but also lowered its credibility as a borrower massively.\textsuperscript{69} The impact of the taxation on the population and the state did not really change in France during the eighteenth century. Indirect taxation stayed quite stable on a low level between 40 and 45 per cent, quite less than in England. In France, direct taxation still had the main share of the states complete revenues. In peacetime it was approximately 50 per cent of the total tax revenue and in war time about 60 per cent. The French state applied various kinds of direct taxes like taille, capitulation, dixième, vingtième, foncière, mobilière, portes et fenêtres, dons gratuitites etc.\textsuperscript{70}, counterpart to them were the indirect taxes that were mentioned before. The main problem of the indirect taxed products was that they already were expensive as duty free goods therefore it is obvious that for commodities like salt or tobacco were smuggled in big amounts in France in the eighteenth century.\textsuperscript{71} It is quite difficult to measure the impact of direct taxation in France due to the mass of different types of taxation with varied effects for the social groups in different geographical regions. Direct taxation in France was quite unfair and followed some curious patterns. The richest parts of the French society, like the citizens of towns, or great land owners were able to rid themselves taxes quite well. Therefore it was definitely no fun to be a French minister of finance in the eighteenth century, seeing as the French system of direct taxation was riddled with abuses, exemptions and privileges of all kinds.\textsuperscript{72} Facing this impermeable web of direct taxation, the ministers should have been focusing on indirect taxation, but they didn’t. About 40 per cent of the share of indirect taxes came from tobacco and salt.\textsuperscript{73} As mentioned, it was quite complicated to levy tax revenues of these goods, because they were already very expensive duty free and were heavily smuggled. But why didn’t the French started taxing higher indirectly, for example via a more regressive taxation? Here again a cost-benefit analysis has to be done, because indirect taxes in France were collected by the tax farms, which were quite expensive. According to that it has to be stated that the whole public sector in France was simply in a very rudimental condition and hostile to innovations. These

\textsuperscript{69}Ibid.
\textsuperscript{70}Mathias, O’Brien, Taxation in Britain and France, 625-626.
\textsuperscript{71}White, Tax farming, 647.
\textsuperscript{72}Mathias, O’Brien, Taxation in Britain and France, 629.
\textsuperscript{73}Mathias, O’Brien, Taxation in Britain and France, 640.
facts lead to some major problems that crippled the whole development of public finance in France. Due to the absence of a central fiscal authority or some kind of financial controlling by the state, it was quite difficult for various rulers to act efficiently. But why did it take so much time, in fact until 1800, to establish a supervising financial Institution? To find an answer to that question it seems obvious to look at the traumatic consequences of the John Law failure. On the one hand, in some ways the policy makers of France in the middle of the eighteenth century were scared by the disasters of the early 1720s and therefore may have acted overcautious in implementing financial innovations. A second explanation could be that the conservative powers had good arguments against financial centralization and the abolition of the manifold existing privileges for particular parts of the society. The 113 Parisian notaries for instance, as a very tiny part of the society, had enormous influence on the politicians in the eighteenth century and used their power to affect political decisions to their own favor.\textsuperscript{74} The whole private credit sector was in the hands of those few notaries which acted individually and on their own risk. A flourishing credit sector was absolutely unrealistic under the regime of such a small wealthy elite that was in the position to choose its partners and the conditions.\textsuperscript{75} The other strong group of privateers in the financial sector was the already mentioned tax farmers, which had a similar amount of power as the notaries. The entire picture of the French financial system of the eighteenth century seems to be drawn by a number of financial intermediaries, which all followed their own goals. It is nearly impossible to tell exactly who benefited most and what the government gained from that system.\textsuperscript{76}

Due to its limitations caused from its manifold privileges and exceptions, the French tax system was lagging behind. During the whole eighteenth century elites succeeded in maintaining their privileges.\textsuperscript{77} Up to the French Revolution the state produced a regime of fiscal disparities that distinguished between privileged elites and common tax payers that had to carry the major part of the tax burden. However, that doesn’t mean that nobles and the aristocracy were totally exempted from paying taxes, quite the contrary. The state tried to loot the wallets of the rich, for example via direct taxes like the \textit{capitation}, the \textit{dixieme} and the \textit{vingtieme}. The function of those

\textsuperscript{74} Hofmann et al, Priceless markets, 30-54.
\textsuperscript{75} Ibid.
\textsuperscript{76} Ibid.
\textsuperscript{77} Kwass, A kingdom of taxpayers, 300.
duties was to reach all royal subjects. If and with which intensity those sanctions affected the nobles is a controversial and often discussed question among financial historians. In fact the connection between taxation and noble’s privileges cannot be measured in total terms\textsuperscript{78}, but one can state that the subject of direct taxation in France in the eighteenth century still remains a scientific field that is quite uncharted and was neglected in many studies about the financial system of the Ancien Régime. In a contemporary article Michael Kwass focusses on direct taxation and tries to find out the nobles share on the whole states revenue from indirect taxes. His findings are quite various but in the end of his essay Kwass states that the privileged, nobles and officers were confronted with quite a mild burden of direct taxes during the whole eighteenth century, whereas for peasants and villagers the taille still contained an already heavy tax burden.\textsuperscript{79} In some parts direct taxation may have supported the goal of taxing the riches of the huge landowners, nobles and aristocracy but the measures show that they didn’t disburden the third estate at all, including all the little peasants and merchants. Beside the fact that the nobles paid more direct taxes in the middle of the eighteenth century than they had ever before, the Ancien Régime entered an unhealthy relationship with the privileged, which defined France’s political culture in the last stages of absolutism.\textsuperscript{80}

During the whole eighteenth century it became clear that the absolutistic monarchy definitely was able to cut privileges and to tax the elites, but as the state began to concentrate on burdening the wealthy, the relationship between the state and nobility changed. Those who already had big influence on the state’s decisions were now able to expand their might.\textsuperscript{81} France should have taken much more out of direct taxes, but, as mentioned before, the social incidence of direct taxation made it quite complicated for the state. Over the entire eighteenth century the state’s revenues increased but the policymakers failed to modernize the taxation system fundamentally. France’s financial sector experienced many small innovations, but couldn’t fully escape the origins of its system of tax policy, which means that the two biggest problems, the privileges of single groups and the absence of an effective fiscal institution, weren’t solved until the big clash of 1789.\textsuperscript{82}

\textsuperscript{78}Catherine Behrens, A revision defended: nobles, privileges and taxes in France, in: French Historical Studies, 9/1976, 521-527.
\textsuperscript{79}Kwass: A kingdom of taxpayers, 306-314.
\textsuperscript{80}Kwass: A kingdom of taxpayers, 324.
\textsuperscript{81}Kwass, A kingdom of taxpayers, 335-340.
\textsuperscript{82}Bordo, Transferring wealth and power from the old to the new world, 80-81.
3 Taxation in England and France in the eighteenth century: Comparison and conclusion

The Glorious Revolution can be perceived as the hour of birth for the English success story of the following two centuries. The French equivalent of 1688 is of course 1789 the beginning of the French Revolution. The French Revolution maybe was more important in the history of mankind than the Glorious Revolution, but not for the story that is told here. To come back to taxation, the main question is why both countries ways of public finance differed so much during the whole eighteenth century. Or to ask simpler: Why did England do so much better?

The most trivial answer to that question can be found in the two specific year dates-1688 and 1789, by saying, that England had an advantage of one hundred years. This argument is often brought by that part of scholars calling themselves institutional historians. The thesis of time as England’s main advantage is represented by Charles Kindleberger and Mark Dincecco in particular\(^{83}\), who both say that the backwardness in the financial and economic performance of France is caused by an institutional lag. In that context Dincecco speaks of fiscal fragmentation, which characterized the Ancien Régime.\(^{84}\) Here Dincecco distinguishes different stages of financial centralization, and states that England had centralized institutions from early on, in his opinion since 1066 when the Normans conquered England and brought some kind of an early provincial authority to the country. Of course this very early date seems to be a little provocative, but the author wants to point out England’s superior position in the establishment of institutions. For France Dincecco defines 1790 as the year of birth of the fiscal centralization. He argues that the administrative reforms that emerged after the Revolution of 1789 were essential for this development.\(^{85}\) Furthermore he states that for countries ruled by a system of limited government, such as England was after 1688, it was quite easy to get control over the national budget and reduce expenses, whereas absolutistic states, like France, more often were locked in a vicious circle of low revenues and default. Following Dincecco’s logic, limited government means as much as the establishment of fiscal

\(^{83}\) Kindleberger, Financial institutions and economic development, 103-124; Dincecco, Political transformations and public finance.


\(^{85}\) Dincecco, Fiscal centralization, 53-55.
centralization which consequences would be found in higher tax revenues that leaders would use to wage war and eventually to impose absolutistic power over their enemies.\textsuperscript{86} By following Dincecco’s argumentation the answer to the question of why England was taxation champion and France ran behind would be simple, because England’s success would be totally and alone based on its political system. In my opinion it would be a little too easy to limit the whole question to the point of the existence or absence of limited government.

It can be seen as a fact that the impact of taxation in France for most of the eighteenth century did not increase significantly, whereas in England the tax revenue in constant prices was broadly stable on trend until 1740, but from that point on increased above average for the rest of the century. Mathias and O’Brien calculated that by a starting point of 100 in 1750 for total tax revenue in prices of 1700 in 1790 the index for England stands at 227 and for France at 209. At a first glance the difference between the two countries does not seem to be too big, but one has to mention that those numbers are total.\textsuperscript{87} France’s states territory was about double the size of the territory of England in the eighteenth century. In 1789 the French state had over 28 million inhabitants, and was the most populated country in Europe during the whole century. By the end of the century England had no more than 12.5 million inhabitants, which was not even half of France’s population.\textsuperscript{88} Based on these facts Mathias and O’Brien calculated that the tax income in England more than tripled from 1740 until the end of the century, whereas in France income by taxes only rose by 50 per cent. Therefore they reach the conclusion that taxation in England was higher because in France, the sector of production was expanding faster than real tax income while in England the trend followed quite a different track by establishing a financial market based economy.\textsuperscript{89}

The biggest and most self-evident difference between the two countries’ taxation systems was the focusing on a special kind of tax: the English on indirect taxes and the French on direct taxes. Direct taxation, according to modern economics and the theory of taxation, calls for a highly developed and modern state and economy and was, with exception of the tithe, an invention of modern economists and statesmen.

\textsuperscript{86}Ibid.
\textsuperscript{87}Mathias, O’Brien, Taxation in Britain and France, 606.
\textsuperscript{88}Martin Daunton, the politics of British taxation, from the glorious revolution to the Great War, 111, in: Bartolome Yun-Casalilla, Patrick O’Brien, Francisco CominComin eds., The rise of fiscal states: a global history 1500-1914, Cambridge 2012.
\textsuperscript{89}Mathias, O’Brien, Taxation in Britain and France, 606-609.
The system of indirect taxation on the other hand existed in various ways since the ancient times, and covered all duties, tolls and tariffs for goods for the longest time in history.\(^90\) In principal we can say that the country with the more modern state system, which was England, used an old fashioned mode of taxation whereas the Ancien Régime tried to implement a very modern taxation system in the middle of eighteenth century. The following table shows the shares of direct and indirect taxation in total tax revenue:

<table>
<thead>
<tr>
<th>Year</th>
<th>direct taxes</th>
<th></th>
<th>indirect taxes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eng. %</td>
<td>Fr. %</td>
<td>Eng. %</td>
<td>Fr. %</td>
</tr>
<tr>
<td>1715</td>
<td>27</td>
<td>61</td>
<td>69</td>
<td>34</td>
</tr>
<tr>
<td>1725</td>
<td>20</td>
<td>48</td>
<td>76</td>
<td>47</td>
</tr>
<tr>
<td>1735</td>
<td>17</td>
<td>59</td>
<td>81</td>
<td>37</td>
</tr>
<tr>
<td>1745</td>
<td>32</td>
<td>57</td>
<td>66</td>
<td>39</td>
</tr>
<tr>
<td>1755</td>
<td>21</td>
<td>46</td>
<td>76</td>
<td>45</td>
</tr>
<tr>
<td>1765</td>
<td>22</td>
<td>54</td>
<td>75</td>
<td>42</td>
</tr>
<tr>
<td>1775</td>
<td>18</td>
<td>49</td>
<td>77</td>
<td>47</td>
</tr>
<tr>
<td>1785</td>
<td>18</td>
<td>48</td>
<td>76</td>
<td>46</td>
</tr>
<tr>
<td>1790</td>
<td>17</td>
<td>38</td>
<td>75</td>
<td>51</td>
</tr>
</tbody>
</table>

As can be seen, the share of direct taxes fell from nearly 30 per cent in the beginning of the century down to 17 per cent in the 1790s in England. In France the trend of falling direct taxes and rising indirect taxation is observable, but turns out to be way less dramatic than in England. France’s share of direct taxes in total tax revenue starts at 61 per cent in the beginning of the century and ends with 38 per cent at the beginning of the revolution. While in the main economic impact of English taxation fell upon consumption and demand, the French levied the main share from income and wealth. In England indirect taxes formed the main burden for the population acquiring about 70 per cent of the total income of taxation out of customs and excises in the 1780s, whereas France only obtained between 40 and 45 per cent

\(^91\) Data taken from: Mathias, O’Brien, Taxation in Britain and France, 622.
during the whole eighteenth century.\textsuperscript{92} Indirect taxation was regressive in England, which means that the main tax burden had to be carried by the lower classes. That can be explained by the fact that many of the so-called necessities, like beer or coal were taxed on a relevant level, namely roundabout 20 per cent while other alcoholic beverages such as wine or spirits were far heavier taxed, wine with 27 per cent and imported-spirits like rum with 60 per cent. Other very highly taxed goods were for example salt with 70 per cent or tobacco with 83 per cent.\textsuperscript{93} In France indirect taxation was less regressive, therefore one can argue that the overall incidence of direct taxes probably bore more heavily upon the wealth and incomes of the affluent classes than comparable taxes did in England. In the Ancien Régime most revenues of indirect taxes were made by taxing royal monopolies like the gabelle or the tabac, whereas most of the English revenues came from taxing foreign products entering the country. In England there was a large variety of duties on imported goods, in the eighteenth century 30 to 35 per cent of total tax share were made out of taxing imports, whereas it was only seven to eight per cent in France. The biggest share of indirect taxes came from taxation of salt and tobacco and made roundabout 40 per cent. Unlike in England, alcoholic beverages were not taxed as indirect taxes in France, were many internal tolls existed instead, for instance for wine (accounting for 30 per cent of all internal tolls) and may foodstuffs (covering the other 70 per cent).\textsuperscript{94} Summing up, one has to conclude that England’s system of taxation in the eighteenth century was way more regressive and mercantile than that of France. Hence the old cliché of the French state as the “tax gobbling monster” of early modern Europe does not seem to reflect the factuality. In fact this role appears to fit better to the English state, and one can certainly say that the inferiority of France was not based on too much but too little taxation. In England indirect taxation turned out to be a real cash cow for the state and could raise much more revenue than in France. The wide population noticed the highly profitable duties from imported goods as taxes on foreigners and luxuries, and therefore not as a negative thing. It was also advantageous that no social group was exempted from the tax and everyone paid as he or she consumed. Furthermore, those foreign goods got into the country via a few

\textsuperscript{92}Mathias, O'Brien, Taxation in Britain and France 617.
\textsuperscript{93}O’Brien, The political Economy of British taxation, 11.
\textsuperscript{94}Mathias, O’Brien, Taxation in Britain and France, 630-637.
ports and were easy to monitor.\textsuperscript{95} Especially alcohol has to be seen as the absolute key product for the vast success of excise and customs in England.

\textit{Table 2}\textsuperscript{96}: Composition of taxes in England

<table>
<thead>
<tr>
<th>Good</th>
<th>Average annual yield 1788-92 (in 1000 pounds)</th>
<th>Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Direct taxes</td>
<td>3388</td>
<td>Direct</td>
<td>21.2</td>
</tr>
<tr>
<td>2) Food</td>
<td></td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>Tea</td>
<td>583</td>
<td>Customs</td>
<td>3.6</td>
</tr>
<tr>
<td>Salt</td>
<td>999</td>
<td>Customs</td>
<td>6.3</td>
</tr>
<tr>
<td>Sugar</td>
<td>425</td>
<td>Excise</td>
<td>2.7</td>
</tr>
<tr>
<td>3) Heat, Light Fuel</td>
<td>969</td>
<td>Cust/Exc</td>
<td>6.1</td>
</tr>
<tr>
<td>4) Construction materials</td>
<td>648</td>
<td>Cust/Exc</td>
<td>4.1</td>
</tr>
<tr>
<td>5) Clothing</td>
<td>1010</td>
<td>Cust/Exc</td>
<td>6.3</td>
</tr>
<tr>
<td>6) Soap, Starch</td>
<td>501</td>
<td>Excise</td>
<td>3.1</td>
</tr>
<tr>
<td>7) Alcohol and tobacco</td>
<td></td>
<td>43.3</td>
<td></td>
</tr>
<tr>
<td>Beer</td>
<td>1968</td>
<td>Excise</td>
<td>12.3</td>
</tr>
<tr>
<td>Malt</td>
<td>1838</td>
<td>Excise</td>
<td>11.5</td>
</tr>
<tr>
<td>Hops</td>
<td>121</td>
<td>Excise</td>
<td>0.8</td>
</tr>
<tr>
<td>Wine</td>
<td>739</td>
<td>Customs</td>
<td>4.6</td>
</tr>
<tr>
<td>Foreign Spirits</td>
<td>990</td>
<td>Customs</td>
<td>6.2</td>
</tr>
<tr>
<td>Domestic Spirits</td>
<td>654</td>
<td>Excise</td>
<td>4.1</td>
</tr>
<tr>
<td>Tobacco</td>
<td>607</td>
<td>Customs</td>
<td>3.8</td>
</tr>
<tr>
<td>8) Commercial Services,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td>533</td>
<td>Stamp</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>15,973</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

In the end of the eighteenth century over 40 per cent of all taxes fell on alcoholic drinks and tobacco. The English managed successfully to shift its mode of collecting taxes from the less lucrative direct taxes to indirect taxes, and was able to deregulate the market. But it would be wrong to say that the English success in taxation can be explained by a more laissez-faire political and economic system. England did not have less government than France. Quite the contrary, the English state played a

\textsuperscript{95}Mathias, O’Brien, Taxation in Britain and France, 630-637.

\textsuperscript{96}Based on data from: Nye, War, wine and taxes, 73.
perfect mercantile game by taxing imported products, French wine for example, on high tariffs. Those interventions had low costs and protected the own economy while harming its European rivals, particularly France at the same time. On the other hand the French state had high costs with its interventions, like royal monopolies, price regulation or regional tolls, which were less efficient and in some cases even baneful to investment and enterprise.  

The mercantilist system with its tariffs, taxes and tolls was absolutely necessary for the English state to defend its own interests at home and abroad. During the eighteenth century the early modern world became a place in which commerce, growth and trade were only possible if a national economy secured boarders and protected trade. In this context, the creation of a centralized professional fiscal system for the collection of domestic taxes and import duties helped England to establish hegemony in Europe and in the whole world during the eighteenth and nineteenth century. In comparison, France’s fiscal system characterized by decentralism, an expensive monitor system and unprofitable tax faming, made fiscal success nearly impossible and confronted the French state with very serious budgetary problems. The second huge issue the absolutist kings in France had to deal with was the fact that they did not have the exclusive power of decision in financial and fiscal matters. Elites were involved into the fiscal and commercial policy and in contrast to the English state, which had an assertive parliament that was able to turn off elitist influence by implementing strong institutions like the Bank of England or the central tax authority, the French state had nearly no striking instrument of intervention.

The existence of such instruments in form of institutions made it possible for the English state to collect taxes way more efficiently than its neighbors across the channel. Especially the collection of excises which was under the control of the Excise- an institution ran by the state- appeared to be easy and cheap. The costs even decreased in the course of the century, starting with 15.8 per cent of gross revenue in 1683; shrinking to 7.7 per cent in 1730, 6.5 per cent in 1760 and finally to only 5 per cent in 1787. While in France, with its tax farmers and aristocratic elites who only took care of their own well-being, lobbyists and amateurs influenced the costs even decreased in the course of the century, starting with 15.8 per cent of gross revenue in 1683; shrinking to 7.7 per cent in 1730, 6.5 per cent in 1760 and finally to only 5 per cent in 1787. While in France, with its tax farmers and aristocratic elites who only took care of their own well-being, lobbyists and amateurs influenced the

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97 Nye, War, wine and taxes 77.  
98 Nye, War, wine and taxes 111-113.  
fortune of the state's financial system, the English tax collectors and officials acted like a well-trained\textsuperscript{101}. In the end of the eighteenth century over 20,000 people worked for the central government in England and over 80 per cent of them worked as tax officers.\textsuperscript{102} As a counterexample, in 1721 the French Crown in 1721 formed a \textit{regie} to coordinate the actions of the \textit{ferme generale} in a better way, employing 40 officers to work as \textit{regisseurs}. This example shows the huge difference between the English and the French bureaucratic system.\textsuperscript{103} In the end of the eighteenth century, 30,000 men worked for the \textit{ferme}. Francois-Nicholas Mollien was one of those 30,000, and in his \textit{Memoires} he wrote:

\textit{This army itself was a heavy tax, but it was the necessary consequence of the diversity of taxes, above all the variations in rates that rendered each province a foreign country to the rest.}\textsuperscript{104}

The existence of those farmers alone must have been an immense burden for the state, considering that the average annual income of a single farmer was between 100,000 and 500,000 Livres. Though the farmer’s earnings were not made public, the picture existed that the farmers were terribly affluent and took every Livre to get even richer. The 113 Parisian notaries were the second unpopular group in the public view, as being the prime example for the privileged members of the \textit{Ancien Régime}.\textsuperscript{105}

In England tax officers did not seem to have such a bad reputation as their French colleagues, although they probably weren’t very popular either. The main reason for the better acceptance of the English officers may have been the fact that the English system eliminated corruption and capriciousness better than the French. The English officers were supervised by the tax authority very efficiently and there was little scope left to line one’s pocket.\textsuperscript{106} Even though the English population had to carry a way higher tax burden than the French, the tax paying English citizens were not in any position of a successful protest against the taxes, because they were passed to the consumers through the indirect taxation on goods via customs and excise.\textsuperscript{107}

\textsuperscript{101} Peer Vries, Public Finance in China and Britain, 9.
\textsuperscript{102} Julian Hoppit, Checking the Leviathan 1688-1832, 284, in: Donald Winch, Patrick O’Brien eds., The political economy of British experience, 1688-1914, 2002.
\textsuperscript{103} White, Tax farming, 644.
\textsuperscript{104} Francois-Nicholas Mollien, Charles Gomel, Mémoires d’un minister du trésor publique, 1780-1815, volume 1, republished 2012, 66.
\textsuperscript{105} White, Tax farming, 654.
\textsuperscript{106} Ibid.
\textsuperscript{107} Nye, War, wine and taxes, 75.
Therefore, the only form of protest in England would have been not to buy taxed goods— a quite unrealistic practice by considering that many staples were notably taxed. It is common sense that coming along with the industrial revolution, in the end of the eighteenth century in England subsistence economy did no longer exist and so nearly everyone had to consume at least on a level that would include basic foodstuffs. The English population of the eighteenth and nineteenth century definitely was pressured by a heavy tax burden. It is all the more surprising then, that England experienced an explosion of its economy in exactly that period that is also known as the Industrial Revolution with all of its consequences like higher wages and a better standard of living. In France this development started way later and with lower intensity, after the country underwent a declining trend during the whole seventeenth century and up to the 1730s being in a highly unfavorable condition of deflation, falling prices, incomes and consumption.\textsuperscript{108} England was not unaffected by the crisis and wars during the seventeenth century, but not comparable to the deep and lasting depression in France. According to this, England was superior to France in most of the important fields like industry, commerce and finance in the beginning of the eighteenth century.\textsuperscript{109}

At the end of this chapter I have to say that there were a couple of important points that made the difference between the very efficient English taxation system of the eighteenth century and the in many respects backward fiscal system of the Ancien Régime. First, one has to mention the institutional level. Strong institutions, like the Bank of England and the tax authority, were absolutely essential for the establishment of fiscal centralization. Fiscal centralization, as Dincecco defines it, is important for an efficient taxation system. France was decentralized in fiscal matters, and the absence of financial institutions and a national bank was definitely not a positive factor for its development. The aspect of institutional power as the key factor of the political and economic success of England in the eighteenth and nineteenth century is supported by numerous historian. As a precondition for economic growth, institutional stability certainly is essential but it is not the one and only solution for all the difficulties that were described in this chapter.

\textsuperscript{108} Francois Crouzet, Britain ascendant: Comparative studies in Franco-British economic history, Cambridge, 1990, 14-16.
\textsuperscript{109} Ibid.
The second very important aspect that was subject of this chapter is the different characteristics of both countries taxation systems. Whereas England started to stake everything on the card of indirect taxation, which turned out to be perfectly successful, Frances taxation policy appeared to be more anxious which probably was a logic consequence after the disastrous happenings following the Law-affair. In fact the discrepancy between the well working and highly professionalized system of customs and excise and the privatized “old school” tax farming system made a big difference. The French system of direct taxation and royal monopolies turned out to be inefficient, although France with its 28 million inhabitants ruled by an absolute state would meet all the basic prerequisites an early modern European state needed to be class winner in taxing its population. Instead of that, France’s taxation system was tied up by corrupt officers and institutions, regional and social disparity and amateurism. At the same time, France’s European rivals, especially England and Holland, established functioning and efficient taxation system to finance their armies and service national debt- debt being the second most important instrument of public finance after taxes. The English and the French national debt policies of the eighteenth century is the other main topic of this thesis and will be subject of the following part.
II Public debt in England and France in the eighteenth century

It is a terrible situation when the government, to insure the national wealth, must go in debt and submit to ruinous interest charges, at the hands of men, who control the fictitious value of gold. Interest is the invention of Satan.

Thomas Edison

Whereas the history of taxation traced back far in history, the history of public debt is much shorter. Ancient cultures, for example Greece or the Roman Empire, did not know any similar practice of borrowing similar the modern term of public debt. Bills of exchange existed since the early Middle Ages and were invented by the Italian city states, with Genoa and Venice in the top positions. The Venetian public debt in the twelfth century can be seen as the earliest system of public debt. Later, public debt became a standard financial instrument in most of the Italian city states. European Medieval kings borrowed from southern German, Swiss and Italian bankers in times of war or other financial bottlenecks. Most of the European monarchies first learned the techniques of constant public indebtedness in the course of the sixteenth century. In England public banking became professionalized in 1694 with the foundation of the Bank of England as the manager of government debt. Concerning national banking, the Bank of England had quite an unusual structure, because it was a private and a national bank at once. The Amsterdamse Wisselbank, founded in 1609, indeed appears to be the first true central bank in history, but it did not have the same duties and functions as the Bank of England. The same applies to the public banks in Italy (Banco del Giro in 1619) and the public banks of the northwestern parts of the European continent (Hamburg in 1619, Delft in 1621, and Rotterdam in 1635). In France, by contrast, politicians were deterred by the John Law-disaster and public banking had a bad reputation. Hence it is no wonder that the Banque Royale, as being the first French national bank, was only founded in 1800. Therefore it is quite logical that during the eighteenth century not Paris, but England and Amsterdam were the financial centers of Europe.

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110 Ferguson, The cash nexus, 105-111.
111 Ibid.
112 Ibid.
In the eighteenth century almost all of the great European powers tended to spend way more than they were able to levy via taxation. Between 1692 and 1815 the average budget deficit of the English state amounted to approximately 3.3 per cent of the national income.\footnote{Ferguson, The cash nexus, 121.} Whereas the English system of public debt was characterized by encouraging private sector issues of securities to deepen and widen the capital market, due to Law’s failure, France remained locked in a system in which private credit was restricted to the information network provided by the elitists Parisian notaries.\footnote{Hofmann et al, Priceless markets, 30-70.} The whole French system of private credit was in the hands of these notaries who were able to choose its partners and the conditions under which they lent their money. Many notaries had quite strict principles and accommodated only family members or close friends with money.\footnote{Ibid.} These conditions made it absolutely impossible for the French private credit sector to evolve.

During the eighteenth century public debt became an absolutely essential part of the state’s fiscal policy in England. From 1688 to 1784 England’s debt rose to over 200 per cent of national income.\footnote{James MacDonald, A free nation deep in debt, the financial roots of democracy, Princeton, 2003, 235.} The English debt burden was indeed very high in relation to other European powers. For example, the French debt was way beneath the English debt in the eighteenth century not only in absolute term, but also by considering that the French national income was higher. According to one estimate, the French debt in the late 1770s was equivalent to just 56 per cent\footnote{Richard Bonney ed., Economic systems and state finance, Oxford, 1995; The eighteenth century II, The struggle for great power status and the end of the old fiscal regime, 345.} and ended at 65 per cent\footnote{MacDonald, 241.} in 1788, at the eve of the French Revolution. These numbers show quite well that in the eighteenth century, the public debt was way lower in France than in England. Although France had a substantially lower debt than England in absolute terms and as a proportion of national income, the costs of servicing its debt in France were much higher than those of its European rivals. Ancien Régime—France definitely was exemplary for a state suffering by the costs of servicing its debt. Between 1751 and 1788, interest and amortization payments rose from 28 to 49 per cent, or from just over a quarter of tax revenue to 62 per cent.\footnote{Bonney, Struggle for great power status, 347.} In contrast, between

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1740 and 1788 debt charges in England rose as a proportion of tax revenues only from 37 to 56 per cent.\textsuperscript{121} Between 1776 and 1782, French debt charges amounted to around 7.5 per cent of the total debt, compared to a figure of 3.8 in England. In other words the costs of servicing the same amount of debt were roughly twice as high for France.\textsuperscript{122}

But why was that the case? In order to answer that question, one again has to distinguish the two countries’ fiscal policy in the eighteenth century. Whereas England had established a constantly high level of public debt, which it serviced regularly and steady, France defaulted several times during the eighteenth century. By looking at the plain figures of debt as the percentage of GDP, it seems quite logical that public debt or even bankruptcy were major preconditions for the French Revolution.

The point is that England paid for debt by raising taxes, whereas France contained debt by partial defaults.\textsuperscript{123} It seems as if England simply developed a better debt system. The main costs of war were paid in short term paper debt, which was then exchanged for perpetual debt, mainly after the war had ended. New taxes were levied on the ground that they were needed to cover the interest charges of new debt. With this strategy England never had to default, in contrast to France. The new credibility created some kind of public reliance into the English state, which allowed it to borrow ever-increasing amounts. France evolved too, but after the restoration of the fiscal and monetary order in 1726, Ancien Régime’s possibilities in taxation and public debt policy were reduced again.\textsuperscript{124}

The story that is being told here is linked to the ideas from the previous part. Again one has to take a look at both countries’ fiscal policies from a single perspective, before comparing them. Public debt and taxation of course are linked together. In modern economic theory there are only two ways to reduce debt: firstly the reduction of costs and secondly raising taxes.\textsuperscript{125} For the period that this thesis covers one may

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\textsuperscript{121} Paul Kennedy, The rise and fall of the great powers, economic change and military conflict, 1500-2000, London 1988, 109.  
\textsuperscript{122} Ferguson, The cash nexus, 135.  
\textsuperscript{123} Weir, Tontines, public finance and revolution, 102.  
\textsuperscript{124} Françoise Velde, David Weir, The financial market and government debt policy in France, 1-39.  
add a third possibility to reduce debt, by winning wars, but this point will be subject of the third chapter.

1 Public debt in England in the eighteenth century

There are a number of studies that try to find the causes of the huge success of the English capital market in the late seventeenth and eighteenth century. A first group of studies concentrate on eighteenth century interest rates. Gregory Clark for example analyzes private rents on land\textsuperscript{126}, Stephen Quinn\textsuperscript{127} and Peter Temin and Hans-Joachim Voth\textsuperscript{128} emphasize private bank interest rates. In general, these interest-rate-based studies come to the conclusion that private interest rates on consumer loans or insurance did not decline during the eighteenth century. Besides that approach there are a vast amount of studies that deal with institutional formations and changes in property rights. This second group of research gives weight to the political-economy of the English fiscal system in the eighteenth century. John Brewer focusses on the connection between economic and military success and a strong government. That connection was, according to Brewer, the reason for the emergence of the fiscal military state in eighteenth century in England.\textsuperscript{129} Marc Dincecco presents a quite similar thesis by calling these institutional changes \textit{fiscal centralization}. He also considers the changes in fiscal institutions as the main reason for England’s success.\textsuperscript{130} The research of Peter Mathias and Patrick O’Brien is covered in this second group of scholars as well. They focus on taxes and come to the conclusion that due to the administrative foundation of a centralized fiscal state, England was able to levy more taxes than its European rivals, especially France.\textsuperscript{131} Niall Ferguson\textsuperscript{132} and David Stasavage\textsuperscript{133}, representing a third scientific group, both come to the conclusion that it was not institutional factors but political events that

\textsuperscript{126}Gregory Clark, the political foundations of modern economic growth: Britain 1540-1800, in: Journal of Interdisciplinary History, 26/4, 1996, 563-588.
\textsuperscript{127}Stephen Quinn, the Glorious Revolution’s effect on British private finance: a microhistory, in: Journal of Economic History 61/3, 2001, 593-615.
\textsuperscript{129}Brewer, The sinews of power.
\textsuperscript{130}Dincecco, Fiscal centralization.
\textsuperscript{131}Mathias, O’Brien, Taxation in Britain and France.
\textsuperscript{132}Ferguson, The cash nexus.
\textsuperscript{133}Stasavage, Public debt and the birth of the democratic state.
were decisive for the English success. A last group of authors search for the reasons for the rise of the English fiscal state in the centuries before the Glorious Revolution took place. Henry Roseveare, for example, states that financial developments in England can be traced back into the beginning of the seventeenth century.\footnote{Henry Roseveare, The Financial Revolution, 1660-1760, London, 1991.} Robert Allen does not see the rise of the English financial market in the seventeenth century as a reason, but as a precondition for a Financial Revolution.\footnote{Robert Allen, Progress and poverty in early modern Europe, in: Economic History Review, 56/3, 2003, 403-443.} The English government’s credit standing was quite bad at the end of the seventeenth century, and lenders became reluctant to commit any more capital to a regime that was stuck in a difficult war and had clearly been in financial difficulties. However in the last decade of the century, because of the founding of the bank of England and numerous acts adopted by the parliament, the financial situation of the state improved constantly.\footnote{Anne Murphy, The origins of English financial markets, investment and speculation before the South Sea bubble, Cambridge, 2009, 40-43.} In 1692 raising money through long-term borrowing was discussed intensively by the parliament. The technique of capitalizing via long term borrowing appeared to guarantee slow but steady success, and in addition to the most important financial innovation of the long eighteenth century- the foundation of the Bank of England- in 1694 the basis for financial and success in the eighteenth century was set. These events in the 1690s marked the beginning of an effective and efficient system of public finance in England. Especially the creation of a long term national debt implied a change in the relationship between the state and the public\footnote{Murphy, The origins of English financial markets, 43.}. Public debt in England was of immense importance during the whole eighteenth and nineteenth century because it was not only another way of capital procurement but also had the power to help the whole national capital market to evolve.\footnote{Bruce Carruthers, City of capital, politics and markets in the English Financial Revolution, Princeton, 1996, 4.} In financial matters the restoration of the English state brought two improvements: first, the abandonment of tax farming which was followed by fiscal centralization and efficient administration\footnote{Patrick O’Brien, Philip Hunt, The rise of the fiscal state in England, 1485-1815, 403-443, in: Richard Bonney, ed., The rise of the fiscal state in Europe, 1200-1815, Oxford, 1999.} and second, the gradual modernization of the Treasury, which by 1702 had turned into a professional institution administrated by a body of
professional organized officers and servants. The foundation of the Bank of England in 1694 was for one major reason: to create an institution from which the state could borrow enormous amounts of cheap money. The Bank of England’s commercial role was not recorded in detail in the bank’s charter, which incidentally was changed monthly in some periods. As the Bank of England acted as lender of the last resort it was of enormous importance for the English public finance in the eighteenth century. A large share of the English public debt came from small investors. Finding new ways to mobilize the capital of the small investors, for example via lotteries and bonds, was a main task of the English government. But where was the attraction for the broad classes to invest in this new public debt? In this case three reasons seem to fit: First, the state as a borrower seemed to be quite credible in cases of refunding, because Act of Parliament guaranteed interest and annuity payments. A second reason applies at least to the first decades of the Century when English bonds were traded at conditions above average that were offered by a state, which was desperate for fresh money. Interest on bonds was often over the legal maximum rate of 6 per cent, at least at the beginning of the century, and therefore was a worthwhile investment for English salesmen and investors from abroad, for example from the Netherlands and France. A third reason to lend to the state was patriotism. For many English it was a kind of civic duty to support the state by lending money but also for example by buying favored English goods and avoiding products from their enemies - for example Wine from France. In the first decades of the eighteenth century the English monarchy began to borrow heavily on long term loans, mainly to fund the wars between 1688 and 1715. As a result of these heavy expenditures, the English public debt reached six times the annual revenues in 1713, at the same time the state used half of its revenues to service public debt. After the end of the wars at the beginning of the century, government borrowing rose slower than before, although in 1742 public debt reached eight times the annual revenues. At the same time interest rates on government debt in England fell from eleven per cent in 1690 to only four per cent in 1740.

141 Murphy, The origins of English financial markets, 47-54.
142 Ibid.
143 Nye, War, wine and taxes, 111-113.
144 Stasavage, Public debt and the birth of the democratic state, 77-78.
145 Ibid.
These figures alone show that something in the English financial system must have changed during these fifty years. The trend of diminishing interest rates in the course of the eighteenth century in England has both, economic and political reasons. The first intuitive reason for falling interest would be caused in the quantity theory. It says that interest paid on government debt would fall with the ever growing overall capital stock in England, and a growing capital stock would imply a reduction in the rate of return on capital in the economy. Furthermore one has to keep in mind that the yields from the interest on loans were often not the only source of revenue that those government bonds offered. Over one third of the loans the English government issued, endowed the investors with additional privileges and possibilities, for example the participation in the lottery or the use of the monopoly privileges the chartered companies and the Bank of England were furnished with.\textsuperscript{146} Besides these economic explanations there were also political reasons for the falling interest rates in the eighteenth century. The main political reason is, according to Stasavage, the strong partisan control of the parliament. From the beginning of the eighteenth century a Whig majority entered the House of Commons as well as the House of Lords. A result of the shift of power from Tory control to Whig control in 1714 was a significant reduction in the interest rate on government debt by two per cent.\textsuperscript{147} Tory and Whig were the two big parliamentary powers in eighteenth century England.

At the end of the Seven Years’ War in 1763, the total government debt was equivalent to 13.5 times of annual states income.\textsuperscript{148} This figure marked a new maximum in England’s public debt burden. England professionalized its borrowing system in the course of the eighteenth century by implementing a single type of bond 1754, the consol (consolidated stock), which was traded on a well-developed secondary market. The yields on the consols remained within a spread of between three and five per cent in the second half of the eighteenth century, independent of inflation and other exogenous factors that could have influenced interest rates. Consols were long term loans without redemption, paying interest indefinitely. Potential customers of the bond were creditors who wanted to place their funds in a safe way and therefore accepted a lower interest rate\textsuperscript{149}. Following that trend,

\textsuperscript{146} Stasavage, Public debt and the birth of the democratic state, 77-78.
\textsuperscript{147} Stasavage, Public debt and the birth of the democratic state, 80-81.
\textsuperscript{148} Stasavage, Public debt and the birth of the democratic state, 93-94.
\textsuperscript{149} Daunton, the politics of British taxation, 123.
government debt policy in England became almost predictable by the end of the eighteenth century.\footnote{Stasavage, Public debt and the birth of the democratic state, 93-98.}

But why was England able to create this system of public debt that allowed the government to borrow on those excellent terms? One reason was clearly that the state never defaulted and therefore the risk of lending to the English state was very low. Secondly, the English state never tried to reduce its debt, for example by a debasement of its currency or inflation.\footnote{Daunton, the politics of British taxation, 121-122.} By contrast, England began to work with its debt and started to use it to suggest, as paradoxical as it may sound, a well credit standing. Starting from a states’ indebtedness of zero, in the first forty years of the eighteenth century the public debt rose quite slowly and even stagnated in some decades, before England’s public debt reached 50 million pounds in 1740. However from the middle of the century it swelled with great pace. In 1750 it was already at 80 million pounds and in 1760 at 140 million pounds, before it reached a maximum in 1790 with 250 million pounds.\footnote{Brewer, The sinews of power, 114-116.} In the nineteenth century the indebtedness of England was even higher but that issue goes beyond the time span which is covered in this thesis. Before the middle of the eighteenth century the history of public debt was always characterized by the interplay of the two major types of obligation: short term unfunded debt and long term funded debt. This then changed by the transformation of short term unfunded debt into long term funded debt.\footnote{Ibid.} Funded debt was funded by interest payments made by the English state. This guaranteed revenues made it more attractive for private investors to buy government bonds. In contrast to short term borrowing, long term borrowing produced less interest and risk but restricted the states flexibility in financing. As the debt began to grow rapidly in the beginning of the century, the state searched for new ways to service its debt. In contemporary discussions about public finance the importance of funded borrowing to a balanced budget of an early modern state is frequently mentioned. Especially in the case of England it becomes clear the state needed long term borrowing to finance its current expenditures.\footnote{Patrick O’Brien, Mercantilist institutions for the pursuit of power with profit. The management of Britain’s national debt, 1756-1815, in The Economic History Working Paper Series, LSE, 95/06, 2006,1-68, 1-10.} Short term debt, in contrast, especially was
demanded during wartime when the state quickly needed fresh money.\textsuperscript{155} Therefore the increased dependence on indirect taxes in the eighteenth century can be directly linked to the growth of the long term national debt.\textsuperscript{156} However the increasing national debt in England caused a number of problems that occurred during the eighteenth century. During the Nine-Years War (1688-1697) approximately 70 per cent of the state’s obligations were in form of short term debts, which was unfunded in large parts. This rate of short term loans fell rapidly in the first decades of the eighteenth century and during the War of Austrian Succession (1740-1748) short term debt was not more than 14 percent of total borrowing.\textsuperscript{157} The switch from short term to long term debt is important for the development of the English fiscal state and definitely comparable in importance with the switch from direct to indirect taxation. The establishment of long term debt reduced the costs of borrowing for the English state massively, because interest rate on long term debt was much lower than interest rates on short term debt.\textsuperscript{158} The biggest advantage of the English fiscal system in the eighteenth century was that it was visible. Everybody could see that professionals with knowledge of public accounting ran this system. This created a climate of pleasure and comfort, which attracted investors from England and the European continent.\textsuperscript{159}

The importance of a functioning fiscal system for public debt is well discussed but in my eyes obvious. As I mentioned before, from 1714 the Whig party was the dominating power in the English parliament. During the first half of the eighteenth century there have been many intense discussions in the parliament between Whig and Tory representatives about public debt decisions, the implementation of new taxes and the establishment of new financial institutions. Whereas the Whig leaders in Parliament consistently supported the creation of a long term debt, the increase in taxation of land at a rate of twenty per cent and the installing of the Bank of England, the Tories tried find other ways of raising funds. The Tories wanted to reduce the land tax in the beginning of the century by arguing that the heavy taxation on land would burden landowners massively- in 1713 a Tory majority actually reduced the

\textsuperscript{155}O’Brien, Mercantilist institutions for the pursuit of power with profit, 1-10.
\textsuperscript{156}Brewer, The sinews of power, 119.
\textsuperscript{157}Ibid.
\textsuperscript{159}Brewer, The sinews of power, 130-131.
land tax to ten per cent. In 1722 the most prominent Whig in the eighteenth century, Robert Walpole assumed leadership in the House of Commons. Under Walpole the government was very successful in maintaining the majorities’ support for debt repayment. In 1716 Walpole introduced the sinking fund, a financial instrument that became necessary to service government debt. The sinking fund collected the surpluses of all parts of the English budget each year. It was implemented with the intention to build a reserve for cases of catastrophe or crises. In reality the funds were plundered frequently by the treasury in order to finance wars or to balance the budget.

Even considering the fact that the state never defaulted, the story of public debt in England in the eighteenth century was not an overall success. In the period between 1680 and 1790 several crises shocked the English economic system. These crises were discussed controversially in the public. The main points of critique were about the usefulness and efficiency of government borrowing and the existence of an ever-growing public debt. The most prominent critic of government borrowing was Adam Smith. Adam Smith stated in his Inquiry into the nature and causes of the wealth of nations that:

“The practice of funding has gradually enfeebled every state which adopted it…Great Britain seems to support with ease, a burden which, half a century ago, nobody believed her capable of supporting. Let us not, however, upon this account conclude that she is capable of supporting any burden; nor to be confident that she could support, without great distress, a burden a little greater than what has already been laid upon her.”

Smith was totally convinced that bankruptcy would be always the end of great accumulations of public debt.

The South Sea bubble of 1720 seems to be a perfect example of the problems of the English public debt system, especially in the early eighteenth century. In the case of the South Sea bubble one can easily see that the relationship between the state and

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160 Stasavage, Public debt and the birth of the democratic state, 108.
161 Stasavage, Public debt and the birth of the democratic state, 126.
162 O’Brien, Mercantilist institutions for the pursuit of power with profit, 1-68.
165 Ibid.
the chartered companies, like all of the trading companies but also the Bank of England, was quite uncommon in a modern economic sense—anyway in the mercantilist system of the eighteenth century it built a strong alliance of power on the whole globe. In 1720 the state started a project to store a large share of the long term government debt at the South Sea Company in form of newly issued shares of the company—in fact the debt was simply converted from bonds into South Sea Company shares. The interest rate remained the same but the government now paid to the company instead of to its numerous private creditors. The company had to convert the cash into shares and dividends for those people who had borrowed to the state. In other words the state shifted public money into a chartered company for speculation on the South Sea trade. After the South Sea Company collapsed and the bubble burst in spring 1720, most of the public money was lost and parliament felt compelled to pass the Bubble Act on 9th June 1720. The Act forbade all companies without the authorization by a royal charter—this decision was to help prevent speculation with public money. Nevertheless the act was annulled only five years later in 1725.\footnote{Richard Kleer, The folly particulars’, the political economy of the South Sea bubble, in: Financial History Review, 19/2, 2012, 175-197.} The state used the companies for carrying their debt hoping to keep the interest rate that the state had to pay low. This practice was not unique for England nearly every early modern European power employed its chartered companies to tap the capital market for new sources of money. At the end of this section it is obvious that following the taxation policy, clever public debt policy was the second big factor for the rise of the fiscal state in England. The date of 1688 again is absolutely central for the further financial development of England in the eighteenth century. In contrast to the taxation system, the implementation of a functioning public debt system needed more time, and so the last decades of the seventeenth and the first decades of the eighteenth century were characterized by financial and debt crises.\footnote{Hoppit, Attitudes in Credit in Britain, 305-322.} Nevertheless, and at the latest with the implementation of the consol, a single type of bond, in 1754 England had established a functioning and stable system of borrowing, which made it possible for the state to increase its debt burden with continuing good conditions. The fact that England never defaulted during the whole eighteenth century made the English financial market, especially that of London, very popular even for investors from other European countries.
The political economy of public debt in England was as mercantilist as it was in most of the other early modern European states. Especially the close relationship between the state and the chartered companies was a crucial factor for the English success on the whole globe. In the end the combination of taxing and borrowing power was essential for the establishment of the fiscal-military state.

2 Public debt in France in the eighteenth century

There are several studies and articles regarding the public finance in France in the eighteenth century, although those about English financial history are more numerous. A basic introduction to French fiscal history is given by Richard Bonney.\textsuperscript{168} Authors who concentrate on the politics of the French financial in the eighteenth century are Gail Bossenga\textsuperscript{169} and Michael Kwass with his book \textit{Privilege and the politics of taxation in eighteenth century France}.\textsuperscript{170} Both authors argue that the biggest problem of the French financial system was that various groups of privileged persons and regions were exempt from any form of taxation. Furthermore Kwass states that the French Revolution in fact was a fiscal revolution. Other authors emphasize more economic approaches such as Francoise Velde and David Weir\textsuperscript{171}, stressing interest rates and life annuities, especially the \textit{rente viagere}. Most articles and studies about French public debt policy concentrate on the last baleful years of \textit{Ancien Régime}’s existence- the years in which the whole system of public finance broke down and the absolutist state slid into bankruptcy. Historians largely agree in the matter that financial crises were partially responsible for the Revolution in 1789.

The most interesting question is who was responsible for these heavy debts that threw France into the most famous Revolution in the history mankind? It was not a single person who was responsible for the financial mess in the end of the century, but it was the public finance in the \textit{Ancien Régime}, which failed as a whole system.

\begin{footnotesize}
\begin{itemize}
\item[{169}] Gail \textit{Bossega}, The politics of privilege, Old regime and revolution in Lille, Cambridge, 1991.
\item[{171}] Francoise \textit{Velde}, The case of the undying debt, Financial History Review, 17/2, 2010, 185-209.
\item[Weir, Tontines.]
\item[\textit{Velde, Weir}, The financial market and government debt policy in France.]
\end{itemize}
\end{footnotesize}
Government debt in France, as in other countries too, became an important instrument in the fiscal policy in the course of the eighteenth century. In France, the sources of money for the government were very decentralized and anonymous.\(^{172}\) Therefore it was quite complicated and arduous for the rulers of Ancien Régime-France to tap new sources of fresh money for the state. As in the taxation policy, the constitutional structure of Ancien Régime-France was simply hostile to innovation in the countries’ public finance. There was a wide range of borrowing methods and loan plans in France whose amortization was based in three major ways:

First we have the life annuity debt. Life annuities were linked to the life of its subscriber. They were the main form of public lending in France especially from the middle of the century. The second form was simple term loans. In this way of lending the investor received a fixed payment for a defined period of years to cover both interest and amortization. This form of borrowing was used relatively less often in the eighteenth century. The third and more important form of government borrowing were some special financing plans. They contained that the government paid out a fixed sum for interest and amortization each year, in the same way as for a term loan. But there was a random draw of some of the bonds to be reimbursed in full each year instead of amortization of a part of each bond every year.\(^ {173}\) All in all France had a very differentiated and complex system of liens, obligations and bonds. The pattern of Ancien Régime-France’s policy remained the same until the end of the eighteenth century and can be described in one sentence: borrow as long as you can, carry the burden, borrow even more to service the debt and default on at least parts of the debt.

We can distinguish three kinds of default on public debt France:\(^{174}\)

During temporary crises, like wars for example, the *suspension* of reimbursement payments was the form that was the easiest and most often used by the absolutist government. Typical for the debt policy during big crises in the eighteenth century was a high level of debt service relative to revenues by taxation and to the value of debt. These characteristics seem to be logic by looking at the modes of borrowing. As a consequence of tax revenues lagging behind government spending the accumulation of short term papers issued by the corrupt office holders into direct

\(^{172}\) *Velde and Weir*, The financial market and government debt policy in France, 6-8.


\(^{174}\) The following description on the next two pages of the three kinds of default is taken from: *Velde, Weir*, The financial market and government debt policy in France, 8-9.
payment for goods and services supplied by the government was common sense. Whereas all of these cases contained a government policy of unsolicited reimbursing perpetual debt, suspension was implemented non-voluntarily and immediately: short term paper was simply converted to long term paper debt and reimbursements were suspended. Suspension was used three times during the eighteenth century: In 1759 suspension was announced until the end of the war (Seven-Years' War) and in the end payments continued until 1763. From 1770 suspension became permanent although it was adumbrated only for eight years. The 1788 suspension announcement was for one year but ultimately it lasted for two.

The second kind of default can be termed reform. In France in the eighteenth century the maximum legal interest rate was five per cent, which was also the ordinary rate on which the government borrowed. When the government had to borrow at higher rates, an adjacent reform simply reestablished the old rate of five per cent. For example in 1763 the government reduced the reimbursable capital value of some loans sold during the war at a discount. Reform was easier to justify if the excess interest could be blamed on the mistakes of previous administrations. For example in 1770 the government altered tontines to life annuities whereby the future payments due were lowered too. The argument of the government was that the tontines were subscribed on excessive high rates of return because of the mistake the previous administration made by offering them. Another and maybe the most evident description of this kind of default was the consolidation of the public debt in 1793. The government reduced life annuity payment via complicated bureaucratic and actuarial formulas with the goal to eliminate interest over five percent. The remaining debt was simply consolidated into a single stock, with nominal interest of five per cent. These methods quite drastically show how Ancien Régime politicians handled debt policy.

Repudiation was the third method of default in Ancien Régime-France. Repudiation has to be understood as the reduction of the yield on the original capital rate to a rate below five per cent. Repudiation was executed for example in 1759 and 1770 when the government cut some assets to four per cent nominal yields or less.

In the end all of these in some cases very tricky ways of defaulting show quite drastically that Ancien Régime-France was heavily financially troubled during the whole eighteenth century. Whereas at the beginning of the century the state's financial situation definitely was stressed but could be overlooked by the acting politicians, at some point during the eighteenth century the crown must have lost
control over its financial behaviour. This loss was based on the fact that the government issued a very large variety of debt instruments when it faced a deficit.\footnote{Eugene White, Was there a solution to the Ancien Régime’s financial dilemma?, in: The Journal of Economic History, 49/3,1989, 545-568, 546.} The main long term stocks were the *rentes perpetuelles*, which were the French counterpart of the English *consols*, and the *rentes viagere*, which were life annuities. Other long term borrowing instruments were for example loans hypothecated on the revenues of the *pays d’etats*\footnote{Ibid.} and the city of Paris, but also loans from the clergy and the security bonds of the tax farmers. In most cases short term debt was covered by anticipations of tax revenue, for example *assignations*, *billets de ferme* or *rescriptions*. Another kind of government debt was the group of the *dettes exigibles arriérees*, a diverse bunch of non-interest bearing promissory notes.\footnote{White, Was there a solution to the Ancien Régime’s financial dilemma?, 546-547.} Even though the debt instruments in the *Ancien Régime* were manifold, there seems to be no doubt that from the middle of the eighteenth century, the crown had borrowed much more than it ever could repay.\footnote{Ibid.} In the second half of the eighteenth century *Ancien Régime*’s financial policy was closely linked to the prominent names of Joseph Marie Terray, Anne-Robert-Jacques Turgot and Jacques Necker who all were controller-generals of finances under the reign of Louis XV. These three gentlemen are definitely branded and linked to the great financial catastrophe that afflicted the *Ancien Régime* in the last third of the century. Terray was installed as controller general in 1769 when the state had to face a massive financial crisis. Terray took drastic measures after he calculated a 60 million Livres deficit for the French state. The deficit implied that the government had totally maxed out its ability to borrow and was very close to a financial collapse.\footnote{Ibid.} The cuts administered by Terray were brutal - he cut pensions to the bone by 70 to 85 per cent above 600 Livres, reduced interest rates on main parts of the *rentes* and suspended reimbursement on other debts.\footnote{Marcel Marion, Histoire financiere dela France depuis 1715, Vol. I, 1914, 251-254.} At the same time he tried to raise revenues by annulling a whole clutch of tax privileges and exemptions, and by implementing the first vingtieme, which was a permanent tax. Furthermore, Terray tried to downsize
the bureaucratic body of the state by deleting some of the numerous treasurers and corrupt offices, which managed the royal finances. Instead of those amateurs he installed a small number of paid and qualified officials whose task would be to gain control over the royal expenses and revenues. First in 1773 Terray’s budget was positive by making a small surplus of five per cent. Terray interpreted his success as a result of the limited borrowing possibilities of a nearly bankrupt state. At the same time he feared that a re-establishment of the crown’s credibility would destroy his consolidation of the budget immediately again. In the following two years, Terray’s fear became reality and the budget deficit rose to 27 million Livres in 1774 and to 36 million Livres in 1775. Terray’s methods for reducing the crown’s debt were indeed successful, but in the end he did not succeed in converting short term debt into long term debt. His major effort was the reestablishment of the crown’s credibility - without Terray’s accomplishment the crown possibly would have crashed into bankruptcy because it would not have been able to borrow any longer.

After Louis XV dismissed Terray in 1774, Anne-Robert-Jacques Turgot became controller general. Turgot’s plans were more visionary than those of Terrray, as Turgot used a holistic approach in order to solve the crown’s financial problems. Turgot tried to kick-start the economy by freeing domestic trade and moreover he had big plans for a far-reaching tax reform. His fiscal policy turned out to be quite successful as he succeeded in raising taxes and revenues of the crown, but the budget deficit grew even faster under Turgot, up to 39 million Livres in 1776, as a consequence of the French entry into the American War of Independence in 1776. In 1778 Jacques Necker became controller general. Whereas Terray and Turgot had cleaned up the financial institutions by dismissing some single officers, Necker went further by abolishing the complete Intendants of Finances and most of the controllers of the royal and military household. Necker succeeded in restoring confidence of the investors into the French crown. As a result 530 million Livres of new debt were added to the already existing debt during Necker’s tenure.

182 For a detailed list of the Ancien Régime’s budget from 1773 to 1789 read: White: Was there a solution to Ancien Régimes dilemma?, 550-553.
183 Ibid.
184 White, Was there a solution to Ancien Régimes dilemma?, 555-557.
185 Ibid.
186 Robert Harris, French Finances and the American War, 1777-1783, in: The Journal of Modern history, 48/2, 1776, 233-258, 236.
achievements was to finance France’s participation in the American war of Independence almost exclusively by borrowing. Surprisingly, Necker did not try to raise taxes to finance the war. The main reason for this behavior was that Necker wanted to avoid conflict with the local parliaments of the pays d’états, especially with those of the city of Paris. Necker succeeded in finding other ways to reduce expenditures, so that in 1776 he produced savings of 84.5 million Livres. Between 1776 and 1781 Necker consolidated the budget from a minus of 39 million Livres in 1776 into a plus of 10.2 million Livres in 1982. The figures seem to be impressive, especially considering the fact that in the second half of the eighteenth century no one else but Necker was able to present such a big surplus to the king.

Terray, Turgot and Necker all followed quite sound financial policies. They succeeded in parts in structuring the whole financial sector of France by implementing radical changes to fiscal policy. However, again all three had to fight self-interested elites and the local parliaments of the pays d’etats. Under this unfavorable conditions Terray, Turgot and Necker acted in the best way possible within the constitutional structure of the Ancien Régime.

The fiscal instability affected the conditions on which the state could borrow. Depending on different factors like war and confidence of the investors, the interest rates on the major bonds varied during the whole eighteenth century and, depending on the kind of the product, went up to rates of eleven and twelve per cent- rates that can be compared to shares that would be issued by developing countries nowadays.

Life annuities (rente viagere) were the most important financial product for the fiscal health of the country. They were issued first by the French government during the Nine Year’s war (1688-1797) and became the most consumed rent in France in the eighteenth century. By the end of the century life annuities were the major method of borrowing. The following table shows how much revenue was made out of life annuities in the eighteenth century.

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187 White, Was there a solution to Ancien Régimes dilemma?, 558.
188 Robert Harris, Necker: Reform statesman of the Ancien Régime, Berkeley, 1979, 155-159.
189 White, Was there a solution to Ancien Régimes dilemma?, 550-553.
190 Velde, Weir, The financial market and government debt policy in France, 28.
Table3\textsuperscript{191}: Life annuity borrowing from 1730-1789

<table>
<thead>
<tr>
<th>Years</th>
<th>Millions (in Livres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1730-1739</td>
<td>34</td>
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<tr>
<td>1740-1749</td>
<td>61</td>
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<tr>
<td>1750-1759</td>
<td>197</td>
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<tr>
<td>1760-1769</td>
<td>164</td>
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<tr>
<td>1770-1779</td>
<td>197</td>
</tr>
<tr>
<td>1780-1789</td>
<td>643</td>
</tr>
</tbody>
</table>

By comparing these numbers to the total earnings of the French state, which were between 550 and 600 million Livres (total tax receipts+total revenue) in the 1770’s\textsuperscript{192}, the share of the life annuity borrowing was quite big- approximately one third of the total earnings in the 1770’s. The life annuities were sold on flat rate prices and so to earn the highest yields the annuities had to be bought in infancy. Indeed it was not the children who paid but the shares were bought on the lives of children.\textsuperscript{193} According to this it is no wonder that the annual life annuity payments were at their highest between the age of five and ten (between 3 and 3,5 million Livres) and had another but smaller peak by the age 40 to 50 (about 1 million Livres).\textsuperscript{194} The problem for the state with the borrowing for life annuities was that the government borrowed money without knowing about its future revenues to cover its debt obligations. Therefore interest the state had to pay in life annuities was traditionally high (up to 10.5 per cent at its peak in 1773-1774).\textsuperscript{195} High interest rates always are an alarming signal for the financial market and in the eighteenth century the market had the continuing fear of a default on life annuities.\textsuperscript{196}

The example of the life annuities shows that the whole financial system and market in France was a system of insecurity and stress. The French government through the whole century paid a lot of risk premia because of its unreliability in financial matters. Interest rates above ten per cent were not uncommon in France and so the state had

\textsuperscript{191}Table taken from: Velde Weir, The financial market and government debt policy in France, 28.
\textsuperscript{192}White: Was there a solution to Ancien Régimes dilemma?, 550-553.
\textsuperscript{193}Velde, Weir, The financial market and government debt policy in France, 31.
\textsuperscript{194}For the full graph see: Velde, Weir, The financial market and government debt policy in France, 32.
\textsuperscript{195}Velde, Weir, The financial market and government debt policy in France, 21.
\textsuperscript{196}Velde, Weir, The financial market and government debt policy in France, 35.
to keep borrowing new money just to pay for its loans. To raise some new money from the market, the state had to offer rates of interest that were way above the current market rates.\textsuperscript{197}

What were the main features of the French system of public debt? At first one has to say that it was very complicated and included various kinds of instruments. Several generations of controller generals tried to make this bewildering system more transparent and to eliminate privileges and abuse. Especially Terray, Turgot and Necker did quite a good job as chief of the crowns finances. Some of their plans, like the centralization of the taxation system that was pursued by Turgot, were even quite revolutionary, but simply unenforceable within the \textit{Ancien Régime}’s political system.\textsuperscript{198} Furthermore, they only had a few years to implement their ideas before they got dismissed and a new controller general with different ideas came into office. \textit{Ancien Régime}’s financial system definitely did not fail because of the incompetence of its rulers and policy makers but because of its own immobility and lack in flexibility. The same can be said for the borrowing and debt policy in France in the eighteenth century. In comparison to the other main European financial powers, especially England and Holland, France did not borrow much. Quite contrarily, France’s indebtedness was surprisingly low. The same can be said for the debt servicing in France in the eighteenth century. In contrary to what has been widely assumed by historians, France was quite a good debtor by looking at its debt servicing rate in most parts of the eighteenth century. Nevertheless France never attained a financial reputation comparable to England or Holland.\textsuperscript{199} This may be related to the way the state handled its debt burden and its creditors. In the \textit{Ancien Régime}, default always was a possibility and a strategic instrument that was used several times by various administrations.\textsuperscript{200} As a result of that policy, France had to pay above-average interest rates of ten per cent and more to receive some fresh money. This implied that France had to borrow ever more to service its loans. Therefore, the fiscal pressure on the country was constantly high during the whole eighteenth century.\textsuperscript{201}

\textsuperscript{197} Velde, Weir, The financial market and government debt policy in France, 39-40.

\textsuperscript{198} White, Was there a solution to \textit{Ancien Régimes} dilemma?, 568.

\textsuperscript{199} Ibid.

\textsuperscript{200} Weir, Tontines, 124.

\textsuperscript{201} Weir, Tontines, 124.
3 Public debt in England and France in the eighteenth century: Comparison and conclusion

This section will compare both countries’ public finance policies and set them into context of the main question of this thesis: what made the difference between these two countries during the eighteenth century?

A recent article by Gary Cox analyzes the effects of the Glorious Revolution on the English financial institutions. Cox argues that the Glorious Revolution though did not affect so many parts of social and economic life in England than North and Weingast assumed. In his view the empowering of the parliament was the main reason for the development of the English financial market in the eighteenth century. Cox’s research is interesting for this thesis because he focuses on the political transition between 1680 and 1720 in England and connects it with the fiscal evolving of the English state. The following two graphics show the difference in taxing and borrowing power between the years before and after the Glorious Revolution:

Graphic 1

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204 Cox, Was the Glorious Revolution a constitutional watershed?, 567-568.
205 based on data by: Cox, Was the Glorious Revolution a constitutional watershed?, 576.
What had changed in the English financial policy that boosted the financial power of the state over such a short period? England moved from a heterogenic financial system that was characterized by an amateurish administration and ineffectiveness to a centralized and highly professionalized fiscal state within a period of twenty to thirty years. Besides the revolution in the taxation system, the establishment of a long term funded debt is definitely the most exciting and pioneering event in the English financial history in the eighteenth century. Its main advantage was one crucial component in the evolving of the English public finance sector: It was carried by private creditors who invested in government securities, precisely because they were secure. The fact that investors from England and abroad trusted the state can be seen as the crucial factor that made it so easy for England to borrow even excessive amounts. The high costs for French borrowing before 1789 can definitely be identified as the main reason for the low borrowing rates of the French state. In England after the south sea-shock of 1720 public debt was still traded at the London

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206 based on data by: Cox, Was the Glorious Revolution a constitutional watershed?, 582.
207 Brewer, The sinews of power, 91.
208 Brewer, The sinews of power, 88.
209 MacDonald, A free nation deep in debt, 242.
stock Exchange in a converted form as shares of chartered companies like the East India Company. This practice was nearly dead in France as one of the consequences of the John Law affair. The monarchy did nothing to encourage the trade of its own debt at any financial institution until the nineteenth century and tried servicing the main parts of its debt via revenues from taxation and other sources.\textsuperscript{210} By ignoring perpetual debt and the international financial markets Ancien Régime-France seemed to provoke high costs in borrowing. A legal limit of five per cent interest was implemented by the crown to keep borrowing costs small, in fact from the middle of the eighteenth century no investor was willing to lend to the French crown at those conditions any longer. From the 1750’s the crown had to operate on the financial market to conceal the true costs of its borrowing.\textsuperscript{211} Another factor for the high rates the French government had to service was the investors' fear of default. France defaulted several times during the eighteenth century. A large share of the partial defaults in the eighteenth century was planned by the government to squeeze at least the last Livres out of the already dashed financial market. This strategy of course had disastrous consequences for the confidence in the French financial market in the long run. The following graph shows how this lack of confidence affected the conditions of French borrowing in comparison to the conditions in England:

\textit{Graphic 3}\textsuperscript{212}

\textsuperscript{210}MacDonald, A free nation deep in debt, 242-243.
\textsuperscript{211}Ibid.
\textsuperscript{212}Based on data by: Stasavage, Public debt and the birth of the democratic state, 96.
The crucial difference between the English and the French way of debt policy was that England paid for its debt by raising taxes whereas policy makers in France were always afraid of raising taxes during the whole eighteenth century and therefore had to accept partial defaults for servicing government debt.\textsuperscript{213} This fact is shown in the following graph:

\textit{Graphic 4}\textsuperscript{214}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{graph.png}
\caption{debt interest as a share of taxes}
\end{figure}

In the course of the eighteenth century, in England a transition from short term unfunded debt to long term funded debt proceeded- from the middle of the eighteenth century it had leveled off at 85 per cent share of the government debt.\textsuperscript{215} In contrast the largest share of government debt in France was still in form of short term and life-contingent borrowings.\textsuperscript{216}

In England the implementation of the \textit{consol} in the middle of the century simplified the financial market significantly. \textit{Consols} attracted investors from England and other European countries mainly because they were very secure- the government covered

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\textsuperscript{213} \textit{Weir, Tontines,} 102.
\textsuperscript{214} Based on data by: \textit{Weir, Tontines,} 101.
\textsuperscript{215} For a detailed graph on the composition of the English government debt in the eighteenth century read: \textit{Sussman} and \textit{Yafeh,} Institutional reforms, financial development and sovereign debt, 922.
\textsuperscript{216} \textit{Weir, Tontines,} 102.
\end{flushright}
them. Therefore, the subscribers accepted a low interest rate of three per cent. Following that trend, government debt policy in England almost became predictable by the end of the eighteenth century. In France, no consistent financial policy existed and the several controller generals had differing ideas and methods to find a way out of France’s financial dilemma. Life annuity borrowing was the most important source of fresh money in the financial system of France during the whole eighteenth century. Nevertheless, the financial market in France in the eighteenth century was not as backward as many historians believed. Recent studies by Weir, Velde and Kwass draw a more optimistic picture of the French financial market than generations of historians did before. Ancien Régime’s policymakers definitely strived forward to understand investor’s privileges and market conditions. Coevally the financial market of course recognized the problems and lacks of the public finance system, accepted its failures like major deficits and partial default, and learned to handle it. The financial problems of France were not the result of a single factor or occasion and could not even have been solved by the cleverest administration, because it was the whole system that let France lag behind its European rivals. In the end, as it was the same with taxing, the system of privilege and nepotism made partial defaults inevitable. Default was the poison that kept the interest rates the state had to pay consistently high. As a result of this fiscal pressure the state had to offer yields way above the current market rates and in the course of the century turned more and more to life annuity borrowing with excessive rates of return. Finally one can state that the French public finance was a system of permanent stress. In England after the Glorious Revolution a number of institutional reforms implemented by the newly established parliament created mechanisms that made a stable and continuous financial system possible in the long run. Recent studies emphasize that it was not only institutions that made all the difference as it was proclaimed by North and

217 Daunton, The politics of British taxation, 123.
218 Ibid.
220 Weir, Tontines, 95-124.
222 Kwass, a kingdom of taxpayers,295-339.
223 Velde, Weir, The financial market and government debt policy in France, 36.
224 Ibid.
Especially the works by Sussman and Yafeh\textsuperscript{226} and Cox\textsuperscript{227} modify North and Weingast’s findings by constraining the power of institutional change to some special sectors. In their conclusion Sussman and Yafeh speak of some “good” institutions that were unique in England. The interaction of these “good” institutions, for example the Bank of England, a well establishment merchant and private banking sector or a professionalized treasury, built the heart of the English financial sector in the long run. In the end, these mechanisms were the essential factor for the reduction of the cost of fresh capital for the English government in the course of the eighteenth century, according to Sussman and Yafeh.\textsuperscript{228} Cox argues that the Glorious Revolution was a constitutional watershed which resulted in a fruitful struggle between parliamentary supremacy and “absolutism” over the whole century.\textsuperscript{229} Therefore, in Cox’s view the empowering of the parliament is the crucial factor in the establishment of the fiscal-military state in England.

Public borrowing made the largest share of the budget of the English state in the eighteenth century. For waging war borrowing was much more important than the revenues from taxation. The invention of public debt in England definitely marked a huge change in the possibilities of warfare.\textsuperscript{230} It is absolutely astonishing how the English state managed its financial affairs during the whole eighteenth century. The state definitely stumbled several times, but never fell. Between 1688 and 1815 interest on government bonds was cut to the half, whereas taxation revenues and public debt increased continuously.\textsuperscript{231} This seemingly magical development of the English state finance has casted a spell over generations of historians who tried to find the causes of the rise of the British Empire. The assumption that it was parliamentarianism and a \textit{laissez-faire} attitude that was responsible for the success of the English public debt policy was common sense for a long time. Meanwhile, as for English taxation policy, most of the economic historians agree on the fact that financial policy in eighteenth century England was a number of things but definitely not \textit{laissez faire}. The financial sector was under strict control of a number of

\textsuperscript{225} North, Weingast, Constitutions and Commitment.
\textsuperscript{226} Sussman and Yafeh, Institutional reforms, financial development and sovereign debt, 906-935.
\textsuperscript{227} Cox, Was the Glorious Revolution a constitutional watershed?, 567-600.
\textsuperscript{228} Sussman and Yafeh, Institutional reforms, financial development and sovereign debt, 906-935.
\textsuperscript{229} Cox, Was the Glorious Revolution a constitutional watershed?, 567-600.
\textsuperscript{230} Mathias, O’Brien, Taxation in Britain and France, 623.
\textsuperscript{231} Vries, Public Finance in China and Britain, 18.
institutions - this was a necessary factor for the creation of the nimbus of the English fiscal system to be secure and trustworthy.  

It is clear that war was the driving element behind the establishment of fiscal states in the Western European states. This fact is equally accepted for the emergence of both, the English and of the French military states.

To sum up, what where the main differences between the English and French public debt system in the eighteenth century? First, the difference in the size definitely is dashy. The English public debt rose from the beginning to the end of the eighteenth century about 215 per cent of GDP. The following graphic shows the evolution of the English National debt in the eighteenth century:

*Graphic 5*  

The French national debt evolved too but much more slowly. In the first half it was on a quite stable level of 50 per cent of GDP. From 1750 on it increased with more pace so that it ended at 65 per cent in 1788. The second huge difference was the conditions, under which both countries were able to borrow. Whereas in England

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233 Based on data by: *MacDonald*, A free nation deep in debt, 235.

234 *MacDonald*, A free nation deep in debt, 241.
clever financial market policy kept the interest on bonds low, the French state had to pay high risk-premia on its debt.

Finally, the last and most important differences between the English and the French public finance system were institutions and bureaucracy. The establishment of a highly professionalized fiscal system based on a huge bureaucratic body was crucial for the transformation of short term unfunded debt to long term funded debt. For investors in England and from abroad creditableness was the most important factor for the rating of a financial market. Creditors invested in English government bonds precisely because they were secure. The French financial policy moved in the opposite direction. As a result the English debt fell, while the French costs rose.  

\[235\] *Brewer, The sinews of power*, 89-133.
Part III The political economy of warfare

and the fiscal-military state concept

War involves in its progress such a train of unforeseen and unsupposed circumstances that no human wisdom can calculate the end. It has but one thing certain, and that is to increase taxes

*Thomas Paine*

As the logic consequence of the previous chapters about taxation and public debt, the things now come full circle in this third chapter by adding the crucial driving force of early modern mercantilist policy: war. This chapter covers the emergence of the fiscal-military state in the western European states. The last section deals with the development of the fiscal-military state in England and France in particular. The term fiscal-military state was first introduced by John Brewer to describe the evolution of England in the eighteenth century. But as the term became more common, historians adopted it to explain state formations in eighteenth century continental European countries as well. Hence, it became quite a universal expression to describe the political systems in early modern Western Europe, but for the following text only the original meaning of the term is important, which could be described as follows:

- The fiscal-military state characterizes a system in which the development of complex administrative and bureaucratic structures was required to spend larger amounts of money on the enlargement of the army and to pay its troops and suppliers.

The concept of the fiscal-military state emphasizes fundamental values like organization and rationalism. These new values were absolutely necessary for the functioning of this system and without them the path-breaking changes in taxation and debt policy in the eighteenth century would have been unthinkable. Early modern Europe was faced with important changes in the dimensions and character of warfare. Costs exploded as a consequence of the establishment of a standing

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236 Brewer, The sinews of power.


238 Storrs: The fiscal military state, 14.
army and the massive enlargements of troops in most of the European states. As a result, by the eighteenth century the average size of most of the European states’ armies during wartime was four to five times larger than it was only two centuries earlier. With the long eighteenth century, Europe experienced a period of nearly permanent warfare. All of the European powers—England, France, the Dutch Republic, Spain, the Habsburg Empire, Prussia and later even Russia were fighting each other in several wars and in constantly changing alliances. Besides the major eighteenth century wars, all European powers were involved in uncountable minor conflicts in Europe and in the colonies in Asia, the American continent and the Caribbean. The so called “rise of the west” is directly linked to the ability of the European powers to raise money in order to conquer major parts of world. From 1500 on the European powers struggled for hegemony in the world. First were the Spanish and the Portuguese with their plundering of the American silver in the sixteenth and seventeenth century. They were replaced by the Dutch in the course of the seventeenth century. The colonial experiences of France and England just started at the end of the seventeenth century. Both countries fought each other on various continents besides Europe, especially in North-America and South-East Asia. Nevertheless England became the global power and created the vast overseas colonial system that is best known as the British Empire. In its biggest enlargement in 1922 the British Emperor ruled over about 458 million people, one-fifth of the world’s population, covering almost a quarter of the Earth’s total land area. Hence, the British Empire was the biggest empire in World history. France entered as the third major player in the contest for world dominance after the English and the Dutch. At the same time they were involved in conflicts with the other European powers, especially the Portuguese and the Spanish. It seems to be obvious that this constant warfare forced each European power to raise even more revenue via taxation and borrowing to pay for its ever growing armies. It is a fact that each major war in the eighteenth century tested the functionality and stress resistance of the fiscal system of its participants in a crucial way. During wartime, early modern European states had to be able to tap new sources of money in a very short amount

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241 Findlay, O’Rourke, Power and plenty, 1-37.
242 Findlay, O’Rourke, Power and plenty, 227-247.
of time. The following graphic shows how close warfare and public finance were linked together using the example of the English public debt:

*Graphic 6*\(^{243}\)

<table>
<thead>
<tr>
<th>war</th>
<th>Increase of debt in per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nine Years War:1688-1879</td>
<td>7.5</td>
</tr>
<tr>
<td>War of Spanish Succession 1702-1713</td>
<td>10.4</td>
</tr>
<tr>
<td>War of Austrian Succession 1739-1748</td>
<td>13.8</td>
</tr>
<tr>
<td>Seven Years War 1756-1763</td>
<td>22.9</td>
</tr>
<tr>
<td>American War 1776-1785</td>
<td>45.8</td>
</tr>
</tbody>
</table>

\(^{243}\)Based on data by: Brewer, The sinews of power, 115.
To wage wars the European states absolutely depended on credit. For Example, in England government borrowing increased with every war during the eighteenth century. Whereas the share of borrowed money on the total spending for the Spanish War of Succession was at 32 per cent for the American war of Independence it was already at 40 per cent.\footnote{Dickson, The financial Revolution in England, 10.} Especially short term debt grew rapidly during every war. This fact concerned England as every other European state. In England It was a common method to accumulate short term into long term funded debt after the end of the war. This practice was adopted by nearly all English administrations and was a major part of the establishment of the long term funded debt system in the eighteenth century.\footnote{Brewer, the sinews of power, 115-119.} In nearly every other European state, except for the Dutch Republic in parts, the main instrument for short term debt reduction after an expensive war was partial default. Therefore, the establishment of long term public debt was absolutely unthinkable for the European powers, except for England.\footnote{Hoffman, Rosenthal, The political economy of warfare and taxation in early modern Europe, 30-37.}

The second important instrument for the finance of warfare was taxation. Here the biggest problem was the time frame new or increased taxes needed to be effective. Most of the European states operated inefficient taxation systems. Several administrations of the European powers taxed heavily during wartimes but dropped taxes back to the pre-war-level after the peace declaration. \textit{Ancien Régime}-France serves as a perfect example for that practice. At the beginning of the eighteenth century England successfully established a system of constantly high taxation. No other European state was able to follow England in that model for nearly one century.\footnote{Ibid.} The inefficiency in taxation in the early modern European states possibly derived from the decentralized fiscal authority that characterized most states with the exception of England. This lack of fiscal centralization made it nearly impossible for rulers to implement taxation systems that ran more constantly and levied higher revenues.\footnote{Dincecco, Fiscal centralization, 48-103.}

Besides fiscal centralization, mercantilist policy was an important factor for economic success in the early modern era. England boosted its domestic market by implementing a large variety of protective tolls and tariffs. Simultaneously England developed new markets in Asia and the Americas by fighting its European rivals and
the natives in the overseas colonies. The English used the colonies in two ways: first as foreign markets and second as sources for new goods and raw materials. The fiscal expansions through the whole of Europe and the installation of large standing armies was very logical in a world in which economic growth was only secured by tariffs taxes, and a harsh mercantilist system.

1 The political economy of warfare in England and France in the eighteenth century

In the long eighteenth century England was in war with France from 1689-1697, 1702-1713, 1739-1763, 1775-1783 and 1792-1815. Some historians even speak of the “Second Hundred Years War” referring to this aggressive era. In both countries the military became the most important factor of the domestic economy being the largest borrower, spender and employer at the same time. In the struggle for hegemony, both countries followed different strategies and interests: Whereas England couldn’t acquiesce that France could dominate the European continent it was France’s largest concern that England would expand its overseas territories. Hence England had to establish a large standing army to resist the French supremacy on the European continent, whereas Frances spending on military was for the navy and private buccaneers to break England’s hegemony on the seas. Nevertheless, the navy was the unquestionable pride and joy of the English army. The priority England gave the navy was unique, and by 1750 40,000 people worked for the royal navy at the docks and on the seas. England had a peacetime standing army from 1688, during wartimes the size of the army was increased by additional troops. The English state spent large sums for this: in the War of Spanish Succession they spent seven million pounds, or 25 per cent of the total expenditure, on shortly increasing the army.

In the early modern era, France operated as the hegemon of the European continent quite consistently. As a fiscal-military state in the eighteenth century, France had to be able to rapidly engage in every conflict that occurred on the European continent at

Nye, War, wine and taxes, 110-111.

Brewer, the sinews of power, 25.

Ibid.

Findlay, O’Rourke, power and plenty, 247.

Ibid.

Brewer, the sinews of power, 32-36.

Ibid.
any time. Thus a large standing army was absolutely necessary to be victorious and to maintain hegemony. The size of France’s standing army was way larger than the English. In the Nine-Years War France had 340.000 troops, whereas the English army just counted 76.000. In the War of Spanish Succession the number of French troops still reached 255.000 while only 92.000 troops were in the English army. Although the French state was endowed with a larger amount of resources than the English state was, the size of France’s standing army is astonishing. Especially by accounting that the French state commenced to build a for a continental power amazingly giant battle fleet at the end of the seventeenth century. In the beginning of the eighteenth century it counted 93 battleships larger than 1.000 tons and was surpassed in size only by Europe’s big naval powers- the English and the Dutch.

The French military state had to deal with a large number of defects in its army. Therefore, a number of military regulations which regarded all sections of the military were introduced by the state. Particularly discipline, drill, a professionalized hospital, the barracks system as well as the regimental system are achievements of the Ancien Régime’s military policy.

Nevertheless the French military was not able to keep up with the English in the long run, and by the middle of the eighteenth century the English overall military supremacy became visible. In large parts, the English success in the mid-century wars depended on two factors: First a clever alliance policy to conceal her inferiority on the European Continent, and second what John Brewer calls a successful blue water policy: “The retention of a European ally or allies to divert the resources of France towards an expensive European campaign, and the establishment of naval supremacy”. Therefore, the English navy was the absolute key for the military success of England overseas. The navy followed a very effective strategy to damage the French in the whole world, by bottling up the French fleet and cutting France’s overseas trade. The conflict between England and France was not only on a bellicose level, but also fought diplomatically and economically. The European

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259 Felix, Tallett, The French experience, 158.
260 Brewer, The sinews of power, 175.
261 Ibid.
262 Ibid.
powers formed various political and economic alliances and treaties to have the biggest possible advantage. Mercantilist policies pressurized nearly every European economy in the eighteenth century. A classic example for far reaching mercantilism was the Methuen Treaty between England and Portugal from 1703. Although David Ricardo used the Methuen Treaty to explain his theory of the free trade and comparative advantage, the Methuen treaty has to be classified as a perfect example of mercantilist doctrine.\textsuperscript{263} The treaty granted to the English to offer their goods, mainly woollen and cotton cloth, on the Portuguese market and in return the English government guaranteed very low tariffs on Portuguese wines and spirits.\textsuperscript{264} On the first glance, both countries’ advantages seem to be obvious, but beneath the treaties seemingly perfect free trade surface a deeply mercantilist face appears. Whereas Portugal’s intentions probably were driven by the ideas of freer trade, the English interests were more varied: Before the Methuen treaty the English economy highly depended on French wine because the English national economy was not able to produce its own wine due to climatic and geographical reasons and France was the biggest producer of wine in Europe. In the mercantilist struggle between England and France England wouldn’t be able to afford to buy the expensive French wines and in further consequence to let high amounts of English silver flow into the cashboxes of the French.\textsuperscript{265} The example of the Methuen treaty perfectly shows that the conflict between England and France was not only military, but also diplomatic and economic.

The English as well as the French fiscal-military state both ran an extremely expensive mercantilist system, which was only maintained by high tariffs and taxes. In fact broad classes of the societies of both countries had to carry a large fiscal burden. In England the customs and excise system by and large hit the poorer classes harder than the affluent tax payers. In France large parts of the society, such as nobles, inhabitants of the city of Paris, or the citizens of the north-western parts of the country, were exempt from paying any taxes. According to this peasants and other of the rural areas had to carry the largest fiscal burden in France. How was such a system of disparity in social and regional matters possible? The answer to that question is simple, since it collapsed in the end of the eighteenth century. The

\textsuperscript{263}Sandro Sideri, Trade and power: informal colonialism in anglo-portuguese relations, Rotterdam, 1970, 75.
\textsuperscript{264}Nye, war, wine and taxes, 25.
\textsuperscript{265}Ibid.
French Revolution was a fiscal Revolution, as historians like Michael Kwass, Eugene White or Francoise Velde and David Weir state. That means that at the eve of the French Revolution the fiscal pressure on the third estate simply was too big and finally ended in violent protest.

The English fiscal state cashed its subjects to the last penny in the eighteenth century. So why did not England experience riots similar to the French Revolution? To put it briefly I do not have a satisfying answer to that question.

There is no doubt that in the course of the eighteenth century, England faced massive changes in political, economic and social matters. Nearly every English citizen was really convinced that the state should be able to protect its economic and political interests in the world. The existence of a strong army and navy was absolutely necessary and the English citizens knew that a lot of money was needed to succeed in the interstate mercantilist competition. For England, as for all European powers, the relation between power and plenty was absolutely crucial in the mercantilist world. From that standpoint the factor of an insecure world, in which England had to enforce its own interests, indeed was an argument for the high taxes and everyday costs the English population was burdened with.

Another factor for the low resistance possibly was that the English fiscal system was easy to understand and very transparent. It was very important for the English government to avoid malpractice and corruption. A number of institutions were established during the eighteenth century to fight corruption. Hence the public finance established the nimbus of being a perfectly working system. Retrospectively one can say that it was a typical example for Max Weber’s ideas of bureaucracy. Malpractice of course existed in England as in any other bureaucratic system, but the institutions managed to delete its most fatal forms by implementing a highly efficient monitoring system. A third reason for the success of the English fiscal system was the practice of indirect taxation, because it was taxes that affected everyone. The taxation of alcoholic drinks alone delivered almost half the share of all major English

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266 Compare: Kwass, a kingdom of taxpayers, 295-339; White: was there a solution to ancien régimes financial dilemma?, 545-568; Velde, Weir, The financial market and government debt policy in France, 1-39.

267 Vries, public finance in China and Britain, 30-31.

268 compare: Vries, public finance in China and Britain; Findlay and O’Rourke, Power and plenty.

269 Brewer, The sinews of power, 70.

270 White: France and the failure to modernize macroeconomic institution, 60.
taxes in the end of the eighteenth century. These revenues were absolutely necessary for the English state and even if it sounds ridiculous it is definitely true, that major parts of English navy were financed by people getting drunk. Nevertheless, the English tried to find ways to avoid the high taxed goods. Expensive products that were sold in little quantities, like spirits, tobacco or tea, were predestinated for smuggling. Nevertheless, according to the data available it is impossible to estimate the share of smuggled goods in the overall consumption. These three points may be reasons for the low resistance within the English population, although I know that none of them is perfectly satisfying. Summarizing one just has to state that the English population seemed to have accepted the government’s system in large parts.\textsuperscript{271}

In France the fiscal system finally collapsed in 1790 after a series of partial default in the course of the eighteenth century. The political system of France was not strong enough to maintain the constant fiscal pressure upon its population. The French Ancien Régime possibly failed because of the fact that it simply was not able to kill off the old privilege system.

Up to the end of the eighteenth century England’s warfare was largely financed by incurring debts. From the beginning of the century approximately 75 per cent of the extra money the state needed to wage wars came from loans and only 25 per cent from taxation.\textsuperscript{272} Anyway, taxes were still important to the state, to service the debt and to pay the interest on the increased debt.\textsuperscript{273} The following graphic shows how taxation in England and France changed in the course of the seventeenth- and eighteenth century:

\begin{itemize}
\item \textsuperscript{271} Vries, Public finance in China and Britain, 37.
\item \textsuperscript{272} Mathias, O’Brien, Taxation in Britain and France, 622-624.
\end{itemize}
Particularly in the second half of the eighteenth century the amount of new debts that were added during wartime increased steadily from war to war. The English state was able to manage its debt through their large tax revenues, whereas the French did not really succeed in taxing their population.

Wars boosted many parts of England's economy. Furthermore, war produced an additional demand for domestic saving. The demand for fresh money was fulfilled by private investors, who surprisingly invested more during wartimes than they did in times of peace. This can be explained by the fact that eighteenth century Englishmen were absolutely convinced that England had to win its wars to maintain its thriving economy. Additionally they knew that successful overseas trade was only possible if it was protected by a strong army. The following table exactly shows how the English war-finance was composed for selected wars:

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274 Data taken from: MacDonald, A free nation deep in debt, 253.
275 This fact can be checked in graphic 6.
276 Wright, British government borrowing in wartime, 360.
Table 4\textsuperscript{278}: English government borrowing in wartime

<table>
<thead>
<tr>
<th>In million</th>
<th>Seven Year’s War</th>
<th>American War</th>
<th>French War</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>whole</td>
<td>whole phase1</td>
<td>phase2 phase3</td>
</tr>
<tr>
<td>Pounds Sterling</td>
<td>1756- 1776-</td>
<td>1776- 1781-</td>
<td>1793- 1802</td>
</tr>
<tr>
<td></td>
<td>1763</td>
<td>1784 1780</td>
<td>1811 1810</td>
</tr>
<tr>
<td>1) Gross proceeds from issues</td>
<td>58.0</td>
<td>91.8</td>
<td>32.0</td>
</tr>
<tr>
<td>2) Less effective discounts</td>
<td>1.0</td>
<td>1.9</td>
<td>0.7</td>
</tr>
<tr>
<td>3) Sinking fund</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4) Funded borrowing</td>
<td>56.9</td>
<td>89.9</td>
<td>31.3</td>
</tr>
<tr>
<td>5) Unfunded</td>
<td>4.3</td>
<td>2.0</td>
<td>8.5</td>
</tr>
<tr>
<td>6) Total borrowing</td>
<td>62.2</td>
<td>91.9</td>
<td>39.8</td>
</tr>
<tr>
<td>7) Irish contribution</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

To sinking fund

| 8) Net | 61.2 | 91.9 | 39.8 | 52.1 | 184.4 | 106.7 | 126.5 |
| 9) Number of years | 8 | 9 | 5 | 4 | 9 | 9 | 5 |
| 10) Government borrowing (p.a.) | 7.7 | 10.2 | 8.0 | 13.0 | 20.5 | 11.4 | 25.3 |
| 11) National income | 72.0 | 102.0 | 98.0 | 106.0 | 176.0 | 266.0 | 280.0 |
| 12) Government | 10.6 | 10.0 | 8.1 | 12.3 | 11.6 | 4.3 | 9.0 |

borrowing as %. of N.I.

| 13) Other investment | 5.9 | 7.0 | - | - | 8.3 | 8.0 | 9.7 |
| as %. of N.I. |

The economic system of England changed dramatically during the eighteenth century. England faced rapid urbanization with the consequences that large parts of the population were engaged in the industry, commerce and service. The agrarian societies vanished in large areas and subsistence production was declining.\textsuperscript{279} A commercialized economy with cash-earning workers absolutely enhanced the state’s capacities to raise revenue. So in further consequence also the state’s capacities to wage war relied on a functioning commercialized economy.\textsuperscript{280} Goods and products that the own national economy was not able to produce had to be imported. Until the last decades of the eighteenth century, Europe was England’s most important trading

\textsuperscript{278}Data taken from: Wright, British government borrowing in wartime, 356.

\textsuperscript{279}Brewer, The sinews of power, 180-183.

\textsuperscript{280}Ibid.
In the 1770s Europe provided England with 47 per cent of its imports and 62 per cent of its exports.\textsuperscript{281} In the end of the century, the colonies became more and more important as providers of raw-materials and as markets. Colonies were the fastest growing markets for English goods and thus it is no wonder that England tried to secure them by all available military means.\textsuperscript{282} In addition to the royal navy the state had a second tool to impose power in its colonies: the chartered companies. Especially the East India Company and the South Sea Company, the two largest English chartered companies carried the mercantile interests of the state through an aggressive commercial expansion into the overseas colonies.\textsuperscript{283} At the same time the companies exercised an enduring influence on the policymakers in London. The South Sea Company, for example, pushed Walpole into a colonial war with Spain in 1739.\textsuperscript{284} In the meantime the East India Company fought with the French for hegemony on the Indian subcontinent until the company was finally triumphant in the Battle of Plassey in 1757.\textsuperscript{285} The fact that nearly all chartered companies were endowed with numerous monopolies on trade and other privileges shows how extremely important they were for the English blue water policy. Whereas England’s colonial efforts were overall successful in the Southeast Asian region as well as in China, the colonization of North America ended in the American War, with the result that America proclaimed itself as an independent state. Losing the War of American Independence was a watershed in the history of the English state in the eighteenth century. Not only that the government spent 112 million pounds\textsuperscript{286} expenditures for the military were approximately about 70 per cent of the total expenditure of the American War\textsuperscript{287} it also suddenly lost one of its most important colonies. Whereas most of the mid-century wars (War of Austrian Succession, Seven Year’s War) were very successful for the English military, the War of American Independency revealed the limits of England’s overseas military power. In the struggle for the North-American colonies, England and France wore each other down and in the end England failed because it wasn’t able to mobilize its continental allies. This view

\textsuperscript{281}Roderick Floud, Donald McCloskey eds., The economic history of Britain since 1700: vol1, 1700-1860, Cambridge, 1981.
\textsuperscript{282}Brewer, The sinews of power, 185.
\textsuperscript{283}Brewer, The sinews of power 168-179.
\textsuperscript{284}Ibid.
\textsuperscript{285}Findlay, O’Rourke, power and plenty, 267.
\textsuperscript{286}MacDonald, A free nation deep in debt, 239.
\textsuperscript{287}Findlay, O’Rourke, power and plenty, 256.
shows that England definitely was dependent on the support of allies whereas France, as being the wealthiest and most populous nation in Europe was not hit that hard by the lack of allies in North-America.\textsuperscript{288} The consequences of the American disaster were manifold. The loss of the American colonies as well as the unbearable growing size of the tax burden and national debt spurred the supporters of political and administrative change in parliament to start an integrative reform initiative.\textsuperscript{289} The endeavors of the 1780s had two main goals: First to limit the Crown’s power and political influence and secondly to reform of the bureaucratic body to professionalize officials and administrators to reduce costs and to improve the workings of the government. The 1780’s and 1790’s in England were characterized both by an enthusiasm for reform and by rising expectations on the governments power in solving both domestic and international problems.\textsuperscript{290} In these decades after the War of American Independence, the first career administrators and functionaries emerged in England. They had a much more positive standing in times of political crisis by showing themselves as men who tackle and solve problems by acting resolute and unprejudiced. The political and administrative reforms at the end of the eighteenth century characterized on of the most important institutional development in the history of the English state after the Glorious Revolution. Undoubtedly the foundation for the persistent success of England in the nineteenth century was laid with these reforms.\textsuperscript{291}

Although France spent way less in the American War (only 40 million pounds\textsuperscript{292}) and it didn’t end so badly as it did for England, the decades after the War of American Independence marked the collapse of the Ancien Régime. The political leaders in France did not want to realize that the French state lagged behind England in their ability to raise money for global warfare.\textsuperscript{293}

\textsuperscript{288}\textit{Brewer}, The sinews of power, 168-169.  
\textsuperscript{289}\textit{Brewer}, The sinews of power, 85-87.  
\textsuperscript{290}\textit{Ibid.}  
\textsuperscript{291}\textit{Ibid.}  
\textsuperscript{292}\textit{MacDonald}, A free nation deep in debt, 239.  
\textsuperscript{293}\textit{Ibid.}
A quote by Joly de Fleury, minister of finance, from 1782 illustrates the glorified view of the French concerning the possibilities of their own economy:

*From any standpoint, England’s position is far from being as favourable as that of France, inasmuch as she has a third of our money in circulation or our population; nor a soil so extensive or productive; nor as many manufactures of all varieties; nor a geography so favourable, which links us by land and sea to all parts of Europe and the globe.*

Fleury was right in some positions, especially concerning France’s endowment with resources—raw materials as well as human resources, and the possibilities of its real economy. The main problem of the Ancien Régime was not its domestic economy but the framework in which all economic actions took place. In the end of the eighteenth century it became clear that France suffered because of the lack of professionalized fiscal institutions and a functioning bureaucratic body. The following table shows France’s financial problems at the eve of the French Revolution:

*Table 5*: the financial positions of France and England in 1788 in £ million

<table>
<thead>
<tr>
<th></th>
<th>France</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNP</td>
<td>280</td>
<td>135</td>
</tr>
<tr>
<td>Public debt</td>
<td>183</td>
<td>245</td>
</tr>
<tr>
<td>-as percentage of GNP</td>
<td>65%</td>
<td>182%</td>
</tr>
<tr>
<td>Debt service</td>
<td>12.2</td>
<td>8.1</td>
</tr>
<tr>
<td>-as percentage of GNP</td>
<td>4.4%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

These numbers suggest that France may have dealt better with the costs of persistent warfare than England. France’s public debt was lower than England’s in absolute terms; moreover France’s Gross National Product was roughly twice as high as that of England. In addition France seemed to be the better debtor by servicing its debt at 12.2 million pounds whereas England spent only 8.1 million pounds to service its debt. But the reality certainly was different: France definitely had problems in borrowing. The costs for France to service its debt were twice as high as they were for England. In the whole eighteenth century France had to borrow at way less

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294 Joly de Fleury, Travail sur la situation generale de la dette du roi a époque de premier janvier, 1782, quoted by: MacDonald, A free nation deep in debt, 239.

295 Data taken from: MacDonald, A free nation deep in debt, 241.
attractive conditions than its rival from across the channel. It is obvious that the French state did not merely budget better than the English one and therefore had less public debt, but it was not able to borrow higher amounts because the conditions made it unaffordable to borrow the same sums as England.\footnote{MacDonald, A free nation deep in debt, 241.} Due to its geographic position- as a continental country with many national borders the French had to maintain a large standing army to make sure that the country could defend itself. A standing army was very expensive, so it is no wonder that up to 95 per cent of the total state expenditure was spent for the military in the eighteenth century.\footnote{Ibid.} England benefited from its geographic position. Being an isle made the existence of a large and expensive standing army not that necessary as it was for France. Instead, England concentrated on creating a powerful navy that ruled the waves from the beginning of the eighteenth century. Although England and France followed a quite similar war policy according to the motto of power and plenty, the development of both states could not have been more diverse. While England became a perfect example of a fiscal-military state in the course of the eighteenth century France slid into bankruptcy and revolution. In England not only a strong state but a strong nation and civil society arose during the course of the long eighteenth century.\footnote{Vries, Public finance in China and Britain, 37.} The English bourgeoisie was able and, much more importantly, willing to invest huge sums of their private capital into a state they felt connected with in some way.\footnote{Ibid.} The French elites and middle classes weren’t less affluent than their English counterparts, but they made sure to spend only the bare sums on the state. Furthermore they tried to maintain the privileges and exemptions that already existed since middle ages. Instead of investing in the state the French tax-exempt elite bought acres of farmland from taxpaying peasants.\footnote{Hoffman and Rosenthal, the political economy of warfare in early modern Europe, 35.} In England the elites and the state were in a permanent exchange about public finances of the country- either on a personal or on an institutional level.\footnote{Vries, Public finance in China and Britain 36.} Institutions were a key factor for the English success in the eighteenth century. England became a bureaucratic state par excellence, although the bureaucratic body of the state stayed slim in comparison to the French administrative body. The French civil administration grew from 15.000 in the middle of the sixteenth century to 50.000 in 1650 and
300,000 in 1750.\textsuperscript{302} The English body increased only in the important institutions. The excise administration for example increased from 1200 employees in 1690 to 4900 in 1783 and the number of land tax commissioners increased from 13,000 in 1723 to 25,000 in 1775.\textsuperscript{303} The biggest difference between the larger number of French officers and the smaller group of English servants was that the English were efficient whereas the French were not. The English fiscal apparatus was characterized by an ever growing professionalization and effectiveness. The officers became full time employees who earned high salaries of 40 to 80 pounds per annum already in the early eighteenth century.\textsuperscript{304} With these high salaries the state prevented itself of corruption and other forms of malpractice. This highly professionalized and well paid army of fiscal officers was not comparable to the large bunch of badly paid and highly corrupt French officers.\textsuperscript{305} Several French ministers of finance tried to reduce the bureaucratic body of the state and make the whole fiscal system more efficient but in the end France never had a satisfying fiscal system not to mention functioning and powerful financial institutions.

At the end of this chapter I want to sum up the main points that were covered.

It is obvious that in the eighteenth century England and France were fiscal-military states by definition. Although Brewer described the concept of the fiscal-military solely regarding England\textsuperscript{306}, it is undoubtedly clear that fiscal-military systems existed in most of the western-European states.\textsuperscript{307} Although England indeed has to be seen as the prime example for a fiscal-military state, the political and economic situation in Western Europe made the existence of fiscal-military systems urgently required for the great powers. The relationship between taxation, public debt and the economy of warfare was very tight in England as well as in France. This fact becomes apparent by simply looking at the shares of total state income that was used for the military in both countries. In fiscal-military states there was not much money left for other political fields, like social or welfare policy beside military expenditures. Expenditures for the poor for example made up only one per cent of GDP in England and Wales in

\textsuperscript{302}Kiser, Linton, Determinants of growth, 414-415.
\textsuperscript{303}Ibid.
\textsuperscript{304}Brewer, the sinews of power, 79.
\textsuperscript{305}White: tax farming, 640-641.
\textsuperscript{306}For a further description read the Preface of: Brewer, the sinews of power.
\textsuperscript{307}In the book the fiscal military states in eighteenth century Europe ed., Storrs, a collection of essay is presented that deal with the different kinds of fiscal-military states that occurred in Europe in the eighteenth century.
the middle of the century.\textsuperscript{308} Although I don’t have figures about social expenditures of the French state in the eighteenth century I would assume that they did not differ to those of England.\textsuperscript{309} Anyway the developments of the fiscal-military states were very different in both countries. While the English state became more powerful with every war it won, the French state had to face crucial economic and social problems from the middle of the century. The English population seemed to have accepted a high tax burden and less social benefits as the price for being secured by a powerful state that was capable of acting. Furthermore the English elites trusted the state as a safe form of investment. On this basis an Empire had emerged to which many of its inhabitants had nationalistic and patriotic feelings.\textsuperscript{310}

In comparison the French population never was as connected to the state as the English one was. This may have originated in the fact that the French people did not have any chance to participate. Not that the normal people of England were politically influential, but at least they were represented in parliament, while the assembly of the estates in France was a farce which only served to save the privileges of the elites.\textsuperscript{311} In my eyes the principle of power and plenty was the thriving element of every foreign and economic policy in the mercantilist system of eighteenth century Europe. The imposition of military power in the world was absolutely crucial to maintain a global trading network. England perfectly internalized power and plenty. With its powerful navy and chartered companies it was in the position to successfully wage war around the globe. France had a geographic problem: being a continental power it wasn’t able to invest that much in a striking navy because it had to secure its borders with a large and expensive standing army.

\textsuperscript{308} Vries, Public finance in China and Britain, 1-47.

\textsuperscript{309} For social implications of the French fiscal-military state read Kwass, Privilege and the politics of taxation or Bossenga, The politics of privilege.

\textsuperscript{310} Vries, Public finance in China and Britain, 37-38.

\textsuperscript{311} Kwass: a kingdom of taxpayers, 295-239.
Conclusion

No place is so strongly fortified that money could not capture it

Cicero

The conclusion of my thesis is divided into three parts: First I give a summary of my general findings, then I adopt those findings on the example of England and France and finally I want to give my personal opinion on the whole topic.

There are several approaches to find the beginnings of fiscal centralization in history. Some historians think that one can find perfect examples for the existence of functioning fiscal systems in nearly all stages of mankind: For example the tribute system of the Roman Empire, the tithe in medieval Europe or the public banks of the Italian city states. I think all of these systems contained elements of fiscal centralization, but the first real burst of fiscal centralization in history was the Glorious Revolution of 1688.

There are four main features that are important for an early modern European state to impose a functioning system of public finance: a professionalized tax bureaucracy, national debt, a central bank and a strong parliament.312 All of these features can be found in different states before 1688, but only in England after the Glorious Revolution do these features occurred combined. These four characteristics required a large number of abilities regarding the society of a country. The existence of a functioning professionalized bureaucracy for example implies the need of a system for formal education to make sure that the civil servants were at least both numerate and literate. The evolution of a stable public debt required private investment by people who first had the money and second felt confident that government bonds would be the best to pour in their money. This private investment at the same time widened and deepened the English capital market, encouraged financial innovation and at least created new opportunities for the whole financial economy in England. A central bank is a very complicated construct according to the preconditions that are needed for its creation. A functioning central bank needs to be furnished with a monopoly over note issue as well as number of additional monopolies, for example on the management of the exchange rate or on lending. Furthermore a national bank

312Ferguson, The cash nexus, 15-16.
bank appeared to be very useful for England on the one hand to stabilize the whole national economy and on the other hand to reduce the risk of financial crisis. At least the existence of a strong parliament required a functioning legislation system\(^3\). To cut a long story short: These four features were just the peaks of an already quite complex political system that first appeared in England after the Glorious Revolution. Although similar systems of public finance were introduced in most of the European states in the course of the eighteenth century, England serves historians as the prime example for the emergence of the fiscal-military state in the Europe.

Another main finding of my thesis is that the principle of power and plenty drove the politics of nearly all the major European powers in the eighteenth century. The strength of an early modern European state absolutely depended on the power of its army, for building such an army a lot of money was required. Therefore, a functioning fiscal system probably was the key element for economic and political power in Europe and on the whole globe.

Why then it could be useful to compare the English and the French fiscal system anyway, when it was only the English state that implemented that particular structural combination of parliament, bureaucracy, debt and bank in the eighteenth century? Financial historians largely agreed that the French fiscal system could have been way more efficient than it was in the eighteenth century. On paper, Frances possibilities for the maximization of revenue for the state should have been the best in Europe. France was bigger in size and population and its endowment with recourses was manifold in comparison to England. The historical debate about the development of the French state is controversial. In contrast, scholars basically agree about the English evolution in the course of the eighteenth century. Meanwhile the historical scholarship has abandoned drawing the history of the French state up to the French Revolution in only the darkest colors. France definitely was not as backward as generations of historians in the last century thought. France was the hegemon on the European continent in the eighteenth century and was vastly superior to England regarding the size of the military, total revenues from taxes and economic output (at least until the end of the century). Nevertheless something must have gone wrong in France in the course of the eighteenth century, considering that

\(^3\)Ferguson, The cash nexus, 15-16.
the French state slithered into the biggest political crisis of its existence by the end of the century - a crisis that implied the elimination of a whole system of society and governance. The French Revolution definitely had fiscal causes, besides the social and political factors. Although France was one of the winners of the War of American Independence, the state was financially devastated at the eve of the French Revolution. At the end of the eighteenth century not even winning wars could prevent the final collapse of the Ancien Régime.

In my eyes the main reasons for the fact that France never was able to implement a functioning fiscal system through the whole eighteenth century can be found deep inside the French society. The system of privilege and exemption was totally imbedded in every part of the daily life in France. A range of ministers of finance tried to cut the privileges and exemptions of those parts of the society who never paid taxes and failed. At the same time the state massively raised taxes in wartime and on that way burdened those who already had to pay the lion’s share on the domestic tax receipts.

Another main reason for the failure of the French fiscal system in the eighteenth century was the missing of financial institutions, especially compared to England. After the disaster of the John Law affair in the early 1720’s the state simply ran out of arguments for the implementation of a bureaucratic system following the example set by the English. Especially the tax farmers and the Parisian notaries benefited from the fact that the implementation of effective monitoring systems simply was unenforceable for the French Crown. So it is no wonder that malpractice, corruption and nepotism were standard in the French fiscal system. Whereas the fiscal bureaucracy in England was professionalized step by step in the course of the eighteenth century, the French bureaucracy was way to blown up and ineffective. In the middle of the eighteenth century 16.000 officers worked for various institutions of the state in England, whereby the biggest contingent of full time employees worked for the fiscal bureaucracy. In France in the 1750’s 300.000 servants who were badly paid and acted highly corrupt worked for the civil administration. The English officers earned high salaries and therefore were much less open to malpractice and corruption.
A last factor for the weakness of the French state in the eighteenth century was definitely the fact that its own population did not believe in it. Whereas in England private investors considered the state to be a trustworthy investment, the people in France avoided spending their money on state issues. While France had to pay high interest to receive fresh money, interest rates for the English state were constantly low during the eighteenth century. From that perspective it appears to be logical that it seemed easier for England to accumulate mountains of public debt, whereas public debt in France was constantly low during the eighteenth century.

Finally I have to state that I was not able to completely answer the question of “why England?” in this thesis. This was clear to me all the time though, because I do not think it is possible to answer this question in one essay or thesis. What I can say is that the emergence of modern fiscal states was definitely a major step on the way to modernity. At the latest with the beginning of the eighteenth century it becomes perfectly obvious that a European state was not able to survive without being backed by a functioning fiscal system. By understanding the nexus between a strong fiscal state and the ability of implementing power on the whole globe, it becomes a little clearer why England became the most powerful empire in the history of mankind in the course of eighteenth century.
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**Online Resources**

Deutscher Abstract


English Abstract
The present thesis is about the public finance of England and France in the eighteenth century. It contains three main parts: Taxes, public debt and the political economy of public debt in England and France. The main approach of this thesis is a comparative analysis of both states’ fiscal systems.

Public finance is, at least since the financial crises that started in 2008, one of the most controversially discussed topics around the globe in the 21. century. This paper is not a study of the contemporary situation in public finance but it focuses on the origins of the current financial system which can be found in the western European state’s system of the eighteenth century. Financial history is a special, but very interesting scientific field in the huge complex of economic history. The history of public finance unveils the development status of societies without stressing cultural or social matters.

England is considered to be the motherland of modern financial economy. In the eighteenth century, England was the only European state with a fiscal bureaucracy with powerful institutions. Furthermore, an efficient taxation- and borrowing system was established in England in the course of the eighteenth century, whereby it was possible to maintain an expensive military-state. Therefore, the main question of this thesis focusses on why the development of modern fiscal states had its origins in England and not in another European country, for example in France.
Lebenslauf

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