

WAR FOR PROFIT: ENGLISH CORSAIRS, INSTITUTIONS AND DECENTRALISED STRATEGY

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In the present paper we propose that in states with relatively weak central authorities, decision makers had to develop market oriented organisation solutions to successfully face a grave external threat, and these solutions proved to be efficient. Using an interdisciplinary approach that combines institutional theory, history and strategy, we analyse a case study, the use of corsairs (privateers) by England in the late 16th and early 17th centuries. We have found that the development of partnership companies went hand in hand for commercial and military purposes. English privateers proved to be economically efficient and superior to the centrally planned war operations of the Spanish empire.

Keywords: Institutions, partnership companies, privateers, coordination and cooperation mechanisms, 16th-17th century England.

JEL Codes: H70, N23, N40, N43, P16.

INTRODUCTION

At the beginning of the 16th century, Spain started developing into the strongest European state and establishing the world's largest overseas and maritime empire, including many parts of today's Central and Latin America (by subduing the Indian Aztec, Inca and Maya empires and additionally islands such as Cuba and Puerto Rico) and parts of Chile and areas such as Florida, California, and today's Philippines and Benelux countries.

By the beginning of the next century, the Spanish empire was in decline, having faced four bankruptcies during the long reign of Philip II, (died in 1598) the loss of its naval supremacy, loss of today's Netherlands, which became *de facto* independent during the Dutch revolt of 1568-1648 and *de jure* in 1648 with the Treaty of Westphalia, and having been humiliated in a series of naval defeats at the hands of the then new, poor and "upstart" countries of England and the United Provinces (Dutch Republic). It was a historical case of two Davids beating a Goliath. How did this happen?

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Many explanations for the decline of Spain have been offered, as for example by North (1981) and Kennedy (1988). Kennedy proposed that the Spanish empire during Philip's reign undertook too many wars at the same time: fighting the Ottomans in the Mediterranean, supporting their Habsburg cousins, the emperors of the "Holy Roman Empire of the German Nation" against revolted (mainly Protestant) princes and regions, the revolted Dutch and furthermore campaigning against England in 1588 with the so-called "Armada", leading thus to overextension and military and financial exhaustion.

North points out the wrong and short-sighted economic measures that were adopted by Philip in order to face urgent short-term financial problems, which led to a "wrong" institutional set up in Spain, which inhibited long-term economic growth. One such example is the "mesta", the union of Spanish owners of flocks of sheep that produced wool. Philip taxed them with a per head (of animals) tax, which was easy to levy and gave them, in exchange, permission to graze their flocks freely, e.g. prohibited enclosure. But non-enclosure meant that agriculture suffered in general, because it made investment in land improvement non profitable.

Following an institutional approach, we develop the thesis that in the 16th century England, which was a country with relatively weak central government (as opposed to Spain), market solutions were introduced, tried and adapted to face various problems, and these solutions proved in the long run to be superior to centrally imposed solutions. Market solutions brought about an efficient institutional set up that was favorable to growth. In the present paper, we analyse a related institutional issue, war for profit, e.g. how England, developed market solutions, e.g. corsairs (privateers) and its associated strategy and institutional set up to wage war successfully against Spain and, after Spain took over Portugal in 1580, against Portugal as well.¹ The newer naval and maritime nation challenged successfully the two older maritime empires.²

Related to the institutional developments, we analyse the new set of values that were linked to them, as efficient cooperation and coordination mechanisms. More specifically, the particular values and norms that emerged in the maritime sector were trust and self-reliance (both among the cooperating merchants, their officers and crews, who in the case of privateering enterprises had a share in profit and thus a common purpose), self-confidence (achieved through repeated successful enterprises), but also a sense of cohesion, common mind, fairness and equality, even strong religious beliefs (perhaps a Protestant ethic according to Weber) and even, in many cases, friendship and a sense of responsibility.

These values were essential for attracting and retaining crews for the privateering enterprises because they were mostly dangerous voyages and very risky to undertake. Thus these new norms and values, especially trust, reduced transaction costs, and in this way helped also promote economic development. Such a set of norms and values

¹ We are focusing on the case of England while we have to acknowledge that similar institutional mechanisms were developed also in the UP.

² For a detailed analysis of the UP political and economic system, see de Vries and van der Woude (1997), Halkos and Kyriazis (2005), Kyriazis (2006), Davids and t' Hart (2012) and the additional references provided there.

promoted also a community of interests. People in maritime states throughout history, beginning from ancient Athens (Kyriazis and Zouboukakis 2004), seem to have understood that their direct or indirect participation in this effort brought advantages (although of course in different degrees) to everyone involved, and thus they were willing to support this effort.

The paper is organised as follows: In the next section, we present England as a case study of having a relatively weak central government. Then, we examine the institutional and organisational framework for privateering.³ This is followed by the analysis of war against Spain-Portugal in the late 16th and beginning of the 17th centuries and its economic effects on the belligerents, followed by our conclusions.

ENGLAND AND WEAK CENTRAL GOVERNANCE

By the end of the 15th century, England had lost the Hundred Years War against France, and had gone through the Civil War of the Roses that culminated in the establishment of a new dynasty, the Tudors, after the victory of Henry VII at Bosworth in 1485. Henry VII and his heirs, Henry VIII and his daughters Mary and Elisabeth, were thus a new dynasty and had to take into account the interests of the survivors of the old nobility, but also the commercial interests of cities, new “low” nobility of the country etc.

They had to do so even more due to threats to their dynastic claims by other contestants (like Queen Mary of Scotland) and religious cleavages. Also, England had a long tradition of insurrection that limited central power, most notably the insurrection of the nobles against King John that forced him to grant the Magna Carta in 1215 which can be seen as the first constitution of a modern European state.

Also, the gradual rise of parliament since at least 1215, was another pivotal element to counterbalance the absolutism of the English kings in imposing their will on issues such as arbitrary taxation (North and Weingast 1989) undertaking war campaigns without the nation’s consent, or offering special privileges to specific

³ Privateers and corsairs are synonymous, the first term coming from “private” denoting ownership of the ship by the captain or the company (as against English royal ships owned by the state-queen). Corsair comes from the French “course” meaning booty (Rodger 1997). As we show, in some cases piracy and privateering was indistinguishable. Corsairs could cross over the “red line of legality” and become pirates. Privateering, as piracy has long historical antecedents, going back to the ancient world, and certainly to the Middle Ages. The Knights Hospitallers of Rhodes and Malta may be seen as a “privateering state”, since they waged a continuous war against the “infidel enemy” eg., the Ottoman Turks and their dependents. But the English and Dutch were the first to use privateering on such a large scale and over the vast expanses of the Atlantic, Indian and Pacific oceans. Drake’s first capture was in the Pacific. Furthermore, the American Civil War produced some of the most renowned corsairs, as the Confederate’s “Alabama”. During the two World Wars, Germany made extensive use of commerce raiders, in the form of auxiliary merchant cruisers (ex-merchant ships, armed with concealed guns), although they were navy ships and were not operating with a profit motive. Famous among them, were “Atlantis”, “Komet”, “Kormoran”, “Penguin” etc. In this paper we are focusing on the early period of privateering, late 16th to mid-17th century, because it was the first time privateering was used so extensively and with such decisive results.

groups of the nobility (Weir 2009; O'Brien 2012). A series of charters such as the Magna Carta and the simultaneous rise of the English Parliament could be seen as a way of a relative monitoring against royal absolutism, or as the gradual rise of a “checks and balances” system, if we interpret those events through Buchanan’s and Tullock’s ([1962], 2004) ideas. For example, in contrast to the English policymakers who, at least since the Elizabethan era, promoted a decentralized type of overseas commerce by the private sector (Stone 1972; Davis 1973a, 41; De Vries and van der Woude 1997), Cameron (1993, 127) argues that Spanish and Portuguese commercial activity was a part of a monopoly planning being undertaken by the state.⁴

Mooers (1991), Warwick (1990, 83) and Rodger (1997, 2004, 578) argue that England did not have a strong central government but had a strong navy, while Weingast (1995) by analyzing English political institutions before and after the English civil war (1642-51) argues that England could be characterized even as a “commonwealth” mainly because: (i) there was a distinctive relationship of governance between regional and national level and (ii) because the state had a limited capability and will to impose its policies on the periphery. Weingast calls this regional autonomy in local-regional level of English regions as “limited government”, which appears to be one of today’s main prerequisites to proclaim a state as being of a federal type.

Another indication of the relative weakness of the central state in England, is the fact that according to contemporary claims (Palliser 1983, 12) England was the least heavily imposed and the least indebted country in Europe, where, according to one estimate, total revenue of the public sector reached less than 5% of GDP (Goldsmith 1987, 19). For example, Queen Elisabeth I had two important sources of revenue within her power, crown lands and customs, while she depended on Parliament for the “tenth” and “fifteenth” assessed every three years on laity and clergy and “subsidies”, granted under extraordinary conditions, mainly war.

Ferguson (2003, 4-5) makes this even more explicit when he states that, “*in England by comparison, the power of the monarch never became absolute, it was always limited, first by the country’s wealthy aristocracy and later by the two houses of Parliament. In 1649 an English king was even executed for daring to resist the political claims of Parliament. Financially dependent on Parliament, the English monarchs often had little option but to rely on freelances to fight their wars*”. Ferguson goes on to argue, in the tradition of the property rights theory, that this concealed a “future strength” because the monarch could not expropriate private wealth, this being an important incentive for entrepreneurs, in our case study,

⁴ To be more precise, Elizabethan and Dutch overseas trade led to the granting of state monopolies to companies such as the East Indian Company (EIC) and the Dutch East Indian Company (VOC). But the difference with Spain and Portugal is that in England and the UP the initiators were private investors (as against state sponsored, like Columbus), the diffusion of ownership was higher, (also because shares would be traded in the London and Amsterdam stock exchanges) and monopoly privileges were never absolute, and were challenged by competitors, an argument underlined by Acemoglu and Robinson (2012, chapters 4, 7). Even servants of the EIC and the VOC had the right to trade in parallel on their own (Sgourev and van Lent 2015).

“military entrepreneurs”. Black (2008, 41) also supports this writing, in a more general way: *“The Western states can then favourably be contrasted by arguing that they contained more space for semi-independent initiatives by autonomous groups”*.

Having shown the relatively weaker position of the central authority in England, we turn to the challenge it faced due to an “external shock”, the Spanish invasion. England had to develop market solutions, both for trade, the private joint-stock companies that developed into the state granted monopolies, such as the East Indian Company (EIC) and war, the joint-stock companies for privateering. Because these solutions proved to be superior, England developed by the beginning of the 17th century into an economically strong state.

Our main thesis is thus, that a state may be strong due to its market oriented economy and institutions, even if it has a relatively weak central government. Relatively weaker governments leave a greater space for market oriented solutions, and this fosters economic strength and growth. In opposition to relatively weak central governments, in states with strong central powers like Spain and Portugal and the great contemporary eastern empires, the Ottoman, Mughal India and Ming China, the central power decides, coordinates and retains most of the profits or rents in the form of taxes, custom duties etc.

In Spain for example, the state itself organised most expeditions to the New World (like Columbus’s expeditions for which crews and ships were provided by Queen Isabella and King Ferdinand) and exploited the new lands discovered. The same was true for Portugal half a century earlier, when Prince Henrique (Henry) the Navigator organised the voyages of exploration and discoveries on behalf of the state (Verge-Franceschi 1998). This is, of course, not to deny that commercial interests existed both in Spain and Portugal, but they were subordinated to the government. An indication of this is that no joint-stock companies such as the EIC emerged in Spain and Portugal.

Further, commercial interests played a minor (or almost non-existent) role in shaping policy. If they had a saying, Spanish traders would probably argue that Spain's involvement in the Habsburg Family’s German war was a pure waste of resources and would probably further argue that the costly wars against the Ottomans and their North African tributary Barbary states should take a secondary position vis-à-vis their New World and Asian trade interests.

Further, public private partnerships, to use a modern term, such as those being created in England did not happen in Philip's Spain.

THE EMERGENCE OF MARKET ORIENTED SOLUTIONS FOR WAR

By the second half of the 16th century, the Spanish Habsburg Empire of Phillip II extended from its American New World colonies, to the Philippines in Asia, and included in Europe, Spain itself, Portugal (annexed in 1580), the Low Countries, Sardinia, Sicily and the Kingdom of Naples, and Franche-Compté in today’s France. Phillip II was an ardent Catholic like his father Charles V and saw himself as the

protector of the true faith against heretic Protestants, German, Dutch and English alike.

Religious, economic and political considerations thus made the Spanish empire fight against England of Elisabeth I. Phillip prepared fleets for invading England, which culminated in the defeat of the Spanish Armada in 1588, this being the first of three invasion fleets sent against England. England did not have a land frontier with any Spanish territory and at the time, did not yet possess any overseas colonies. Ireland being its only “foreign” dependency, though it is controversial to define it as a colony. During the same time, the English tried to actively participate, as newcomers, in international maritime trade, at first peacefully, but they encountered the hostility of Spain in her own territories, which sometimes expelled British traders by the use of force, as at San Juan de Ulua in 1568 (Konstam 2000b).

The Spanish wanted to keep a monopoly of trade with their colonies, which was one of the causes (the main economic one) for hostilities with England. Thus the English, went to war against Spanish trade and colonies. As was to be proved again many times in the future (for example during the American War of Independence, the 1812-1815 war of the USA against Great Britain and the American Civil War), a weaker belligerent’s best naval strategy, when faced by an initially stronger opponent, is to deploy its vessels to attack enemy shipping on the high seas and “*flood the seas with privateers*” (Davis and Engerman 2006, 98).

For this, they resorted to privateering, using market organisation forms to finance their expeditions. Queen Elizabeth had started a programme of building dedicated warships (sailing galleons) of which she had 34 in 1588 to face the Armada campaign, 13 of which were over 500 tons. This represented 18% of the total English fleet of 197 ships. Of them, 18 were built after 1581 and only three before 1570 (Tincey 1988). To these must be added 14 ships built before 1564 (Rodger 1997). This meant that when undeclared hostilities started in earnest by the beginning of the 1570s, there were practically no dedicated warships to carry out the war against the Spanish, just 17 being in service in 1577.

Most navies, the Spanish-Portuguese included (which also comprised some dedicated warships) made up their numbers by using merchantmen. Almost all merchantmen were armed, and by being up-gunned (with the addition of more guns) and up-crewed (with the addition of more crew members to serve the guns and in the Spanish navy with soldiers to serve as boarders) the merchantmen became relatively efficient men of war. Thus, the English could solve relatively easy the first part of the challenge, the availability of ships. The solution to the second part was less obvious: Who would organise and finance the war operations against the Spanish and how would this be accomplished? England, as stated above, had some royal ships, but retained them for home defence, as a fleet in being. Even more serious was the fact that the English crown did not have adequate finances for overseas expeditions.

Queen Mary, Elizabeth’s sister and predecessor, inherited from her father Henry VIII an empty treasury and a heavy foreign debt owed to foreign bankers. She managed her affairs with great prudence, a pattern followed by Elizabeth after she became queen in 1558. During 1565-1574 she spent on average just £16.000 per year

on her navy (6,5% of total income). But she had spent £246.380 on the fruitless Havre expedition (or about a year's total revenue) and she also had a considerable foreign debt (Rodger 1997). Elizabeth, out of prudence (learning of the risks and costs of overseas expeditions like Havre's) and necessity, could not finance costly overseas expeditions against Spanish commerce and New World colonies, from state revenues. Market solutions were found: the use of privateers-corsairs for a war for a private at first and public as a second way of making profit.

During the 16th century, merchants in England, like in the UP, started developing a new form of organisation, joint-stock companies (partnerships) for maritime trade. Similar forms of organisations had been created already in prototype forms in ancient and medieval maritime societies, like Athens (Slatyer 2012), Rhodes, Rome (Gibbon [1898] 2008, 534) Venice, Pisa and Genoa (Schmitthoff 1939; Ferguson 2009) leading us to assert that similar problems lead to similar solutions over the ages. The Italian experience may have influenced England and the UP, as did Venetian banking influence to the UP banking, the Bank of Amsterdam being modelled for example on the Venetian bank de la Piazza di Rialto. In England, the oldest joint-stock company were the Guinea Adventures, established in 1553 for trade with West Africa, followed in 1555 by the Muscovy company for trade with the then Duchy of Moscow.⁵

Joint-stock companies were the best solutions to solve the cooperation and coordination problem involved in long distance trade and fishing, as for example the firms, timber and cereal trade with Muscovy, the herring trade in the Atlantic and above all, the spices trade. In the absence of a government-imposed solution, merchants had to discover, probably through a process of trial and error, market solutions, as can be seen by their results, which we will analyse further in the next sections.

Joint-stock companies emerged as the best single mechanism in solving the problem of acquiring sufficient capital and making clear the leadership and distribution of profits (or losses) issues. Overseas trade required substantial capital and joint-stock companies permitted the pooling of resources and at the same time, reduction of risk to individuals, who would lose only the capital of their shares in joint-stock companies (Schmitthoff 1939, 88; Musgrave 1998, 150; Ferguson 2009). Overseas trade required intensive coordination and cooperation by the participants, and joint-stock companies were the best suited coordination and cooperation mechanism for this task.

There exists substantial and growing literature on coordination and cooperation mechanisms, mainly in the fields of organisation and game theory (Malone and Crowson 1994; Adler 2001; Kale, Dyer and Singh 2002; Xu and Beamon 2006 and Fink and Kessler 2010). As far as we know, we apply for the first time an analysis of joint stock companies both for trade and privateering, as coordination and cooperation

⁵ To be more precise, in the beginning, privateering partnerships were not chartered joint-stock companies but simple share partnerships based on their "letter of marque" license. But very soon, chartered companies like the Dutch West Indian and VOC, functioned also as privateering companies, so that the distinction became blurred. We owe this clarification to a comment by Prof. Hillmann.

mechanisms. Coordination and cooperation mechanisms create particular ways of finding solutions to specific problems based on shared information and a set of behavioural rules in the form of organisations by acting according to specified and normalised rules.

Coordination and cooperation mechanisms arise in particular circumstances, when bodies of men face, as groups or teams, specific tasks and challenges. In ancient Greek land battles for example, the new military equipment of the heavy infantry soldiers known as “hoplites” lead to the adoption of a particular tactical formation, the “phalanx”. The phalanx was a coordination and cooperation mechanism that ensured the best probability of victory in battle and personal survival. In the phalanx, the hoplites had to coordinate their marching order, in order not to break ranks, change direction if necessary, attack or retreat. The rear ranks of this dense, usually 8 deep formation, guaranteed its cohesion and force in shock tactics. In the phalanx, every single hoplite had to cooperate with all the others to guarantee victory and survival, especially since the big round shield protected not only himself, but the hoplite to his left (Kyriazis 2012; Kagan and Viggiano 2013).

Even more, in warships coordination and cooperation among different groups of specialists (in ancient Greek “triremes” rowers, sailors, marines, archers, officers) was necessary to ensure maximum efficiency, and again victory and survival. Coordination and cooperation mechanisms created a particular set of values, like equality (all warriors in the phalanx, including the generals and officers were equal), cohesion, self-confidence and trust. This was the case also on board the ancient triremes, and later warships. Cooperation and coordination as “mechanisms” are different from organisations (as for example, joint stock companies) or institutions, but their emergence influenced, as for example the phalanx and the triremes in ancient Greece, and they proved to become essential conditions for the emergence of democratic institutions (Kyriazis, 2012; Kyriazis, Paparrigopoulos and Economou, 2014). Within successful and long-lasting organisations, cooperation and coordination mechanisms also arise.

English joint-stock companies evolved through contracts between the stockholders of the company, and the company and the ships’ officers and crews (officers and even sailors were sometimes at the same time stockholders). Sailors and sometimes officers regarded themselves as shareholders in the voyage though it was their labour that they contributed, rather than capital (Rodger 1997, 321-322). The most important consequence of cooperation and coordination mechanisms is that they diminish transaction costs and enhance efficiency. In situations of risk, as the long range trading enterprises, and even more, privateering, cues are evolved and sometimes even take the form of a specific language that helps lower transaction costs in situations in which the risk that someone takes depends on the performance of another actor (Coleman 1990, 91).

Privateering was a highly risky but also highly lucrative type of enterprise. Ships have always been, as analysed by Kyriazis (2012) regarding the ancient Athenian triremes, and Rodger (1997), Black (2008) and O’ Brien (2012) regarding Elisabethan galleons, the supreme type of coordination and cooperation mechanism, requiring the

cooperation of many types of specialist groups, officers and sailors having to undertake different tasks like navigation (position finding), logistics, hygiene, sailing and gunnery in order to maximize the probability of surviving in battle and attaining victory. With each successful enterprise, the cooperation and coordination was fine-tuned, and the values created and associated with them, like trust, cohesion, self-reliance, self-consciousness, obedience to commands and teamwork, were enhanced.

But we would go a step further, suggesting that cooperation and coordination mechanisms and joint-stock companies for long distance trade and privateering were “proto-democratic” institutions. First, because joint-stock companies had meetings of stockholders where voting (according to the number of stock owned by each stockholder) was carried out, as was the case in ancient and direct democracies, eg, ancient Greek city-states as well as the post-medieval Swiss cities and cantons.⁶

During the late 16th / beginning of the 17th century, democratic voting, even if not on political issues, was a novelty and it helped introduce a new culture in the decentralised maritime states. On board privateering ships, another democratic idea may have become latent, though not yet explicit: the idea of common purpose or “common good”, in the sense that all members of the ship’s crew stood to profit from the successful achievement of the privateering enterprise. This common purpose was both personal profit and patriotism, even religious fervor against a Catholic enemy. We even suggest that the creation of this specific set of values and norms as the outcome of the particular type of cooperation and coordination mechanism represented by joint-stock companies and their ships, helped into the creation of the preconditions that made England together with the UP and Switzerland the most democratic states in the 17th century.

The joint-stock organisation form was adapted from the trade sector to the military one, when the necessity arose to combat the Spanish and Portuguese. Instead of searching for a new solution, the adaptation of a proven one was preferred, because this could potentially lead to a reduction of transaction costs. A totally new solution would require higher transaction costs, for information gathering, drafting of new types of contracts etc.⁷ Thus, when the necessity arose, the English created joint-stock companies for privateering, where participants (from Queen Elisabeth herself, to merchants and down to even simple sailors and “citizens”) took specific shares of

⁶ Erikson (2014) deals explicitly with cooperation and coordination in the EIC.

⁷ The interpretation we offer here concerning the English privateering activities is an extension of Simon's (1982, 1991) “bounded rationality”, which states that the human mind has limitations, for example in its capacity to absorb and use new information. In real life, instead of searching for an “absolute ideal” (as for example, utility maximisation according to microeconomic theory) we try to reach a solution that satisfies us, even if it is not the best possible one. Simon calls this behaviour “satisficing”. This enables us to find acceptable solutions with minimal expenditure of time and effort, thus reducing transaction costs. Satisficing behaviour diffuses known solutions and problem-solving rules to new problems, since this reduces again time and effort. Thus, a tried organisational solution, the joint-stock company, is transferred to a new problem, that of organising privateering expeditions and even 17th- early 18th piratical enterprises. Only if satisficing does not lead to solutions of new problems, we have an incentive to search for new ones, thus also increasing the stock of knowledge. We have analysed this in detail in Kyriazis and Metaxas (2010) and Kyriazis and Economou (2013a).

stock in the company according to their capital invested which entitled them to a similar percentage of prospective profits.

A strong element on which joint-stock companies were based, apart from their founding charts, was trust. The relevant modern literature emphasizes trust as being important for the smooth functioning of institutions and organisations and as a transaction cost reducing mechanism. Trust has been recognised as a lubricant enabling organisations and societies to achieve Pareto superior outcomes (Arrow 1974; Fukuyama 1995; Kramer 1999). Trust among members who formed partnerships for trade, was a basic element for them to form partnerships in the form mainly of joint-stock companies, for war. This was made easier since in many cases the merchants participating in privateering enterprises were the same with those participating in peaceful trade.

But even before the establishment of the companies, an amount of trust must have existed (through personal ties of knowledge and information sharing) between the original members of the joint-stock companies to be created. This trust is the most important element that evolves, it is gradually strengthened and permits the smooth functioning of organisations as efficient cooperation and coordination mechanisms. For example, the Englishmen John Hawkins, Martin Frobisher, Francis Drake and many others, started as traders, then, became successful corsairs and then some were knighted and served as captains in the war against Spain in 1588 and after.

We suspect, although evidence is lacking because there are no lists of sailors serving on board the merchant ships of Hawkins and Drake, that many sailors who sailed on the five ships of Drake in 1577, must have previously served on board merchant ships commanded by Hawkins and Drake. Obviously, those sailors would have known their captains, could appreciate their abilities (seamanship, fairness etc.), would evaluate them positively, and thus have trust in them. So, having already acquired the necessary information by their previous experience, they would be willing to embark as volunteers on the privateering ships commanded by the same captains. Their experience on board the merchant ships would thus decrease transaction costs (mainly information costs) for sailors but also financiers (who had financed the previous commercial enterprises) when drafting the new privateering contracts with the same captains.

Thus, we argue that trust between captains, officers and men was a very important element for running a ship efficiently, both in trade and war. Ships, either merchant or warships, or even pirate ships, are another example of a cooperation and coordination mechanism. It requires intensive cooperation and coordination among the captain, the officers, and the sailors doing different tasks, like setting the sails, controlling steering, manning the guns etc. Building experience through repeated voyages aboard the ships both enhanced coordination and cooperation, built trust and thus, increased efficiency. This again is a validation of the well-known dictum that *“it took a few years to build a ship, but decades to build and upkeep a naval tradition”* (Palliser 1983).

Privateers and corsairs were distinguished from outlaw pirates, since they were empowered by their governments to wage war against their enemies, but not against

neutral states and their own ships. They received a “letter of marque” or “reprisal” stating this, and thus acted in a general sense on behalf of their government (Rodger 1997). What distinguished them from the official government and state owned ships was the organisation and financing of their expeditions and their latitude in pursuing their aims.

Privateers were “military entrepreneurs” and their enterprises were legal. The capital for their enterprises was supplied by financial circles, and not by stealing as in the case of pirates.⁸ According to Leeson (2009, 184) there were similarities in the organisation form of pirates and corsairs, both being a type of joint-stock company, informal per necessity in the case of pirates, since they were outlaws⁹ formal in the case of corsairs since they were legal, and differences, mainly in the form of management. Management on board corsair ships was more autocratic, since financiers appointed privateer captains (who were elected by their crews on board pirate ships). Privateer captains were accountable to the shareholders of their joint-stock companies, while pirate captains only to their crews, who were the “shareholders” of quasi (because out of established law) joint-stock companies.

Both operated under the profit motive and the profits were distributed to their respective shareholders, financiers in the case of privateers, officers and new members in the case of pirates. Corsairs organization was like merchant ships.¹⁰ By the end of the 17th century and later, the privateering market developed new forms of contacts, as well as regulation. Privateers developed a system of ransom and parole, under which they signed a contract, called a “ransom bill” with a captured prize. *“Under these terms the merchant ship captain obligated his ship’s owner, and failing that, himself, to pay the privateer upon presentation of the bill. In return the agreement entitled the*

⁸ As Rodger (2014) writes, private or commercial naval warfare was a normal aspect of the use of the sea at all times. In the Middle Ages and the early modern European period, there were few non-combatants at sea. During the Middle Ages, redress against an attack by a foreign vessel could be sought at courts, but often this did not result in compensation by the nation of the attacking vessel. As a last resort survivors of attacks at sea might have resource to the legal device known as a “letter of marque”, this being a document issued under species of international law called “marcher law” (eg., the law of the marches, the lawless frontier lands reminiscent of 19th century Far West) by the sovereign of a traveler or shipmaster who had been robbed by the subjects of a foreign prince and had been unable to obtain redress in the foreign prince’s courts. Under the principle of, as we would consider it nowadays, “collective responsibility”, the letter authorized the victim to make up his losses by seizures from subjects of his attackers. This was called later a “letter of reprisal” and could be issued only in peace-time, when the courts of the foreign country were open to the aggrieved party (Rodger 2014, 7).

⁹ Exequemelin ([1689], 1992) gives information about the contracts among the French and Dutch “buccaneers” in the Caribbean. Leeson (2009) considers them to be the predecessors of late 17th, early 18th century pirates, a type of “proto-pirates” For a short history of the buccaneers, see Konstam (2000a)

¹⁰ Many privateering contracts, regulating behaviour on board ships, distribution of plunder, and incentives are extant. For example, one contract stipulates an indemnity of £1000 for a crew member for the loss of an arm or leg and £100 for “*whoever first discovers a sail that proves to be a prize, shall receive £100 as a reward for his vigilance and whoever enters an enemy ship after boarding orders are issued, shall receive £300 for his valour*”. These data come from articles from a Salem Massachusetts privateer of 1780, during the American War of Independence (Konstam 2001b, 20).

merchantman to safe passage or “parole”, without plunder by other privateers from the ransoming privateer’s nation or allies, to a specified port within a proscribed period of time” (Leeson and Nowrasteh 2011, 310).

These contacts reduced transaction costs to the benefit of both parties: The captured merchantman paid only a percentage of the total value of his ship and goods (instead of losing it all) and the privateer reduced his cost and risk, since he did not have to put men aboard the captured vessel in order to bring it into a friendly port with the risk of recapture on the way.

Individual captains, or leaders of expeditions in cases where more than one ship participated (more and more common by the end of the 16th and beginning of the 17th century), were totally free to choose the region of their operations and the way they would operate, as well as the time they would devote to their operations. They waged an individual, decentralised type of war which, as we will show later, proved to be extremely efficient.

THE ECONOMIC EFFECTS OF PRIVATEERING – THE ENGLISH SEA DOGS

By 1563 Queen Elizabeth granted the first “letters of reprisal” (Downing 1992, 164; Rodger 1997, 195).¹¹ The corsairs’ enterprises linked trade, war and privateering and in some cases, with the religious feeling of “holy” war of the Protestants against the Catholic League of Phillip II, linking patriotism and economic gains. The organisation form of joint-stock companies, called “syndicate of investors” were chosen. These syndicates were open for participation to merchant-bankers, nobles, the captains and the sailors of the ships, but even members of government. As it has been mentioned already, the financing of Drake’s expedition of 1577 was undertaken by the usual merchant and banking circles, Sir Francis Walsingham, the Secretary of State, and Queen Elizabeth herself (Bradford 1965).

The gains were distributed according to everyone’s share in the enterprise, with the Lords of the Admiralty (e.g. the “Ministry of the Navy” of the time) receiving 10% of the sales at auctions of the seized enemy property. This can be interpreted in modern terms as a kind of sales tax, linked to the fact that the Admiralty granted the licences to the privateers (Andrews 1964; Rodger 1997; Konstam 2001a,b; Kyriazis and Zouboulakis 2003). The prize courts, which condemned a captured ship as a legal prize, giving thus permission to auctioning of the ship and the goods it carried, received an administrative fee. Further, import duties on the receipts of the vessel’s and cargo’s sale were appropriated by the commissioning government (Leeson and Nowrasteh 2011).

Investors earned a pre-negotiated share of the prizes, the officers and sailors another, according to the specific contract setting up the joint-stock company and, until 1708, the British government entitled itself to a share as well. The Admiralty

¹¹ As Ferguson (2003, 8) puts it: “*Elizabeth I took the eminently sensible decision to license what was happening anyway*”, eg, give a “*mantle of legitimacy*” to the private military entrepreneurs.

required a “performance bond” to secure its good conduct, eg., to limit action against enemy ships and not modest neutrals. Within privateering, two types of commissioned enterprises can be distinguished: Private ships of war, which were dedicated warships, like Drake’s “Golden Hind”, and armed merchant “vessels”, which can be seen as “occasional” privateers, combining normal trade activities with privateering if and when an opportunity arose.

The basic organisational-contract basis of the two categories were that, while both pursued “business interests” and profit (Hillmann and Gathmann 2011, 758), crews on privateer warships were remunerated on a “success fee” basis out of the profits of captured prizes (wages were uncommon) while in the second category, they were paid wages, since they were “ordinary” merchant vessels and only “occasional” privateers (Hillmann and Gathmann, 2011).¹² As suggested in Kyriazis and Metaxas (2011), the first successful expeditions initiated a continuous game, along which the enterprises became more elaborate, ambitious and bigger. Along each further step of the game, the decision makers gained every kind of new knowledge, financial, organisational, operational and technical. As it was stated above, after the successful repulse of the Spanish Armada in 1588, Elizabeth and the Lords of the Admiralty felt that since the danger of invasion was less acute, they could also use royal warships in privateering expeditions.

So, in some of the expeditions of the 1590s, Elizabeth contributed both funds and “means in kind”, e.g. royal warships. For the 1596 expedition against Puerto Rico, she contributed 33.266 pounds and some royal ships, totalling 26 ships. In general, guns from royal ships, as well as cords, ropes etc. were used to furnish the “private” privateering ships. We can interpret, in modern terms, this organisational development as one of the first historical cases of Public-Private Partnerships (PPP), which was a case of acquiring and deepening new organisational and institutional knowledge.

Technical knowledge went also hand in hand with an organisational one. Since the privateering enterprises were driven by market and profitability considerations, we should expect that cost and efficiency aspects were given particular attention. When “businessmen” undertook the privateering operations under the profit motive, they made their ex-ante calculations with this aim, much more so than, say, Spanish “bureaucrats” who were administering and appropriating state funds. This actually happened in England. We analyse two technical aspects to illustrate this.

Till the middle of the 16th century, most guns were made of bronze, which offered many advantages compared to iron guns.¹³ But for the English, and for privateering in particular, iron guns offered a decisive advantage, that of cost. Iron abounded in the country and iron guns cost one tenth of the price of bronze guns. During the period under consideration, a period of increasing inflation in Europe and in England, the price of cast iron guns actually fell from 10-12 pounds per ton in 1565-1570 to 8-9

¹² In this paper, the authors analyse English-British privateering operations for a later period (1689-1815) than our own focus. They show that privateering was a “successful” business enterprise. The expansion of overseas trade and the rising naval power of Britain during the 19th century resulted in the decline of privateering.

¹³ For gunnery and tactics development, see Rodger (1996, 1997).

pounds in 1600 (Davies 1963). As expected, privateering ships (and royal ships as well) were increasingly supplied with iron guns. This again led to a great impetus to the iron industry in England. Thus, cost considerations linked with the profitability motive of the privateering expeditions led to long lasting economic effects (Kyriazis and Zouboulakis 2003).

Privateering ships were, also due to cost considerations, relatively small, compared to their prey, the Spanish and Portuguese Atlantic and Asian galleons. Drake's "Golden Hind" for example had a displacement of 120 tons and was armed with 18 iron guns (Bradford 1965) compared to 700 and up to 1.200 tons of the enemy galleons and "naos", the Portuguese big merchant sailing ship. In order to be able to defeat their enemies in battle, the small English privateering ships had to develop a technical advantage: They were better sailing ships, but also, they achieved a much higher rate of fire. This again was due to the development of a new gun carriage (four short wheels against two big ones as in land guns in most Spanish ships) and tackle system, which permitted a faster reloading of guns. According to some estimates, the English could fire a shot every two minutes, while the Spanish usually needed double that time. The new gun carriage-tackle system was first introduced in the "Mary Rose" of 1545 but it was generalised by the 1560s in all privateering ships and parallel to them, in the royal ships. It is clear, that the new innovation was efficiency enhancing.

We turn now to a brief summary of privateers operations and their economic effects. Most famous amongst them was Drake's expedition of 1577 which would result in the second, after Magellan's, circumnavigation of the world. Drake started the expedition with five ships and 164 men, but finished only with his own "Golden Hind" (Bradford 1965, 101). In the Pacific Ocean, off the coast of Peru, he captured the Spanish galleon "Nuestra Señora de la Concepcion" loaded with 26 tons of silver from the silver mines of Potosi. At the Molucas islands in the Pacific he added a second ship carrying spice before returning to Plymouth in 1580. The value of his plunder was the astronomical sum of 600.000 pounds, double the annual English crown revenue. His investors had a rate of return of 4.700%, which makes it probably the best single investment in history.

During the last two decades of the 16th century, the cargoes of Spanish ships seized by privateers were valued at 100-200.000 pounds per year, representing about 15% of total English imports. During the period after 1588, they seized over 1.000 ships and organised a total of 150 expeditions against Spanish towns and settlements in the New World, leading to the conquest and plunder of many of them, such as Puerto de Caballos in Mexico (plundered six times) Porto Bello in Panama, even the strategic city of Cadiz in Spain in 1587 and 1596. Their success was such that the prices of colonial goods of the Spanish empire were often lower in the London than in the Seville market! (Andrews 1984; Rodger 1997)

Robbing the Spaniard became a matter of decentralised strategy as a total of individual actions by the individual military entrepreneurs under the profit motive. From 1585 to 1604 between 100 and 200 corsair ships a year set off to harass Spanish vessels and outposts in the Caribbean (Ferguson 2003, 8).

The importance of privateering for England is illustrated also by the fact that the amount of coinage during Elizabeth's reign is given as £5,4 mio, out of which £4,6 mio were silver coinage. According to Goldsmith (1983, 180) "*most apparently came from Spanish America, partly as the result of naval privateering operations*". Craig (1953, 127) estimated the amount of silver captured from Spain at £ 1,25 mio, or 27% of total silver circulation within the English economy.

With the Treaty of Westphalia of 1648 Spain managed to retain most of its colonies in America, with the loss of only some of them in the Caribbean. But Spain was in decline and did not regain its leading position as the greatest European power during the 16th century. During the period from 1557 to 1647 there were six consecutive bankruptcies, which brought down with them great financial houses, ruining its financial credibility and destroyed in the long-run the development of a stable financial and banking system as well as stock exchange in Spain (Cooper 1970; Kennedy 1988; North 1990; Rodger 1997).

In general, both historians and economists agree on the decline of Spain as a result of the war with England and the UP. Rodger (1997, chapters 18, 20 and 24) describes the results for Spain's commerce and gives a vivid description of the ruin of Spanish shipyards. Older historians already had described this. Trevor-Roper (1970, 263) has written: "*The war had now proved long, meaningless and disastrous*", Cooper (1970, chapter VIII) writing on a change in the balance of sea-power and the rise of the English naval supremacy and Kennedy (1988, 41) writes on the conclusion of the war "*...they revealed that the age of Habsburg in Europe was over*".

Rodger (1997, 296) remarks: *Twenty years of war changed England's perspective. While before the Queen possessed an imposing but almost isolated fleet, now naval strength had become a national matter. It was clear that England's future laid in the open seas... The English had learned that the sea was more than a defence against a hostile world: it had become the means to discover new worlds for gold, fame and glory.*¹⁴ On the appendix we offer two tables with statistical data based on J. Glete's (1993) estimations, through his monumental book *Navies and Nations*, each one being accompanied by a figure elaborated by us through the Office Excel 2010 program. Through them we show the rise of naval strength in England during the 1500-1650 period.

CONCLUSION

Due to the particular historical circumstances of the second half of the 16th century, England, a relatively poor newcomer state in the international arena, having relatively weaker central authority than contemporary empires (the Spanish, Ottoman, Mughal and Ming) had to find new means to face the Spanish challenge.

England adopted market oriented solutions, to wage war for profit using partnership joint-stock companies as an organisation form to mount privateering expeditions. It was a decentralised form of war-making, since privateers followed

¹⁴ The last phrase has been attributed to Sir Walter Raleigh, a famous corsair, admiral and poet.

their own aims and tactics, not according to a central plan. They could expect maximization of profits if they attacked the enemy's commerce, both ships and settlements. In due time this strategy of commerce raiding proved to be the Achilles heel of the enemy. As we have sketched above, the privateering-commerce raiding activity brought wealth and profits to England and ruined Spain.

Although a more or less privateering strategy was implemented by the Late Medieval era Italian city-states, such as Venice and Genoa, in the cases of England and the UP it was the first time in history that privateering was used on such a scale and to such effect, although of course privateering and piracy are almost as old as maritime history itself. Thus, it comes as no surprise that this commerce raiding strategy has been adopted during the following years as a strategy of the weaker naval opponent against the stronger one, with varying successes, as for example, by the French against the Anglo-Dutch during the War of Spanish succession (1702-1713), the Napoleonic Wars, and the German submarine warfare against the Allies during the two World Wars.

Economists of course have very often argued about the superiority of market regimes as against state planned ones in terms of economic efficiency and growth. The main point of our analysis here is that market solutions can prove to be superior in war strategy as well, even though they came about, as in the case of England, by chance or by trial and error. It seems that pursuing personal profit, as the privateers did, they operated under an "Invisible Hand of the market of war" (to paraphrase the well-known dictum of Adam Smith) which in the end maximized operational efficiency and economic benefits.

On the other hand, the more centralised Spanish empire had an elaborate policy driven by non or mainly non-economic motives. Kennedy (1988, 51), for example gives as the main policy aims of the Habsburgs religion "protector of Catholic Christendom" and "reputation". The relative strength of the central authority in Spain, coupled to centrally laid policy aims led to "acts of economic folly" (*ibid*, 52) and institutional solutions that in the long run were growth inhibiting. North (1981) and Kennedy (1988) give many examples of bad institutional choices taken by the Spanish empire, as for example the taxation of the "mesta" guild (wool producer of Spain) that inhibited the enclosure movement in Spain and thus long run efficiency in agriculture.

As it has already been mentioned, Phillip II of Spain, for example, used his considerable wealth to wage war at the same time against the Ottomans in the Mediterranean, the revolted Dutch, the English and the German Protestants. His resources were not sufficient for all these operations. Further, he neglected one of his empire's crucial regions, the New World possessions and his lines of communication. Were he to operate under more market oriented considerations, his policy priorities would have been to strengthen the defences of his New World territories and of his sea communication, instead of wasting money fighting the Protestant German princes and the Dutch.

Moreover, the privateering war against Spain fostered new norms and values, which were market oriented and not imposed by a central authority, such as self-confidence, self-reliance, trust, a "sense of destiny" and the profit motive. This was

the basis for searching and finding new institutional solutions to a new formidable challenge, that of Spain's threat to the independence and the economic interests of England. The answers were market based institutions and organisations, like partnerships and joint-stock companies both for trade and for war, and later a whole interdependent complex of financial institutions, banks, insurance and stock exchanges.

The success of privateering in England, combined with their naval victory against the Armada, initiated England's "turn to the sea", its transformation into a nation that depended mainly on its navy for offense and defense, sea communications, maritime trade and the first steps towards colonisation and later, Empire. At the end of the 16th century this had initiated a new ideology, which was inspired also the re-discovery of the ancient world. Dee, for example, wrote in 1597 his culminating work "BPETTANIKH ΘΑΛΛΑΤΟΚΡΑΤΟΙΑ", as a then modern parallel to 5th-4th century BC Athens (Armitage 2000, 16). In a previous work of 1577 he was inspired, in his counsel to Queen Elisabeth I, by Pericles of Athens. During the next century, Nedham followed further this analogy.

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APPENDIX

TABLE 1 English naval strength 1500-1650 (sailing warships)

Year	Number of warships	Year	Number of warships	Year	Number of warships
1500	9	1555	26	1605	30
1505	6	1560	26	1610	30
1510	7	1565	24	1615	29
1515	23	1570	20	1620	29
1520	25	1575	20	1625	34
1525	18	1580	21	1630	38
1530	11	1585	22	1635	41
1535	10	1590	36	1640	43
1540	11	1595	35	1645	53
1545	32	1600	34	1650	72
1550	37				

Source: (Glete 1993, 130)

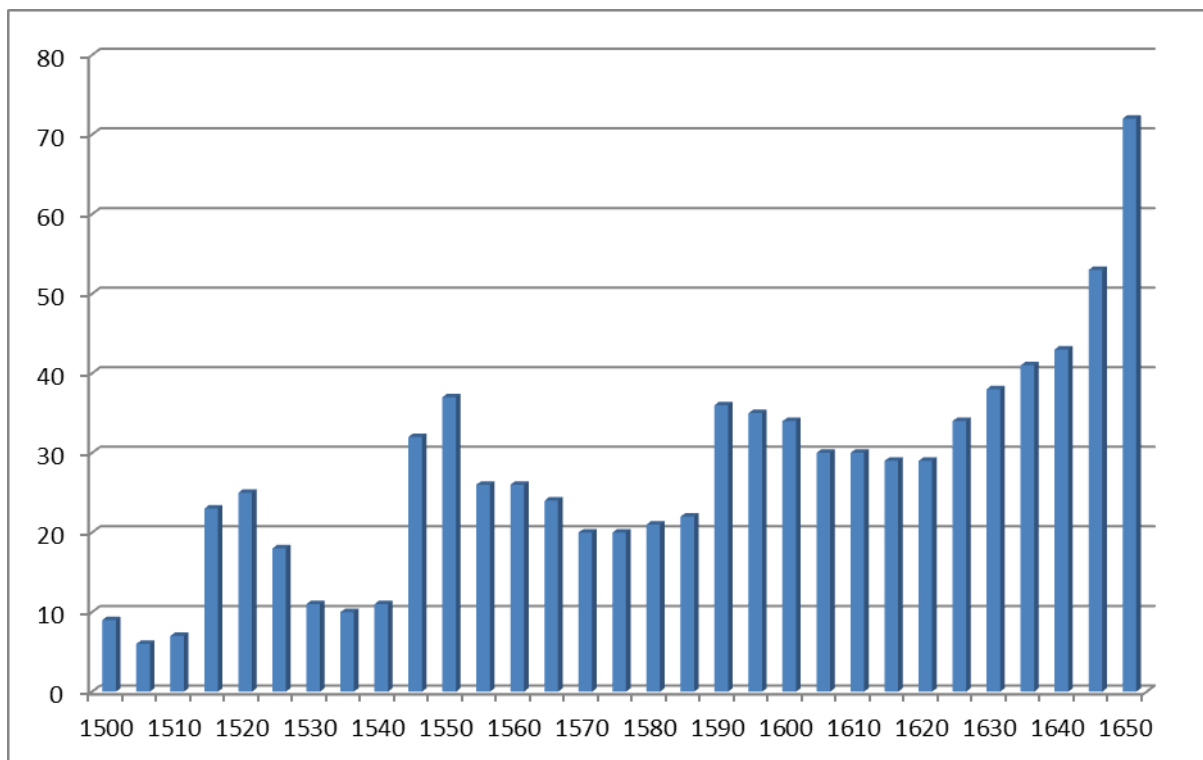


FIGURE 1 English naval strength trend 1500-1650 (sailing warships) (table 1 data)

TABLE 2 New construction of sailing warships 1650-1680 (displacement in 1000 tons)

Year	England	Netherlands	France	Denmark & Norway	Sweden	Portugal
1651-55	38	50	2	1	6	13
1656-60	9	13	6	2	3	16
1661-65	5	46	20	10	9	19
1666-70	27	41	83	7	7	17
1671-75	18	11	47	6	6	12
1676-80	42	8	30	4	6	18

Source: Glete (1993, 199)

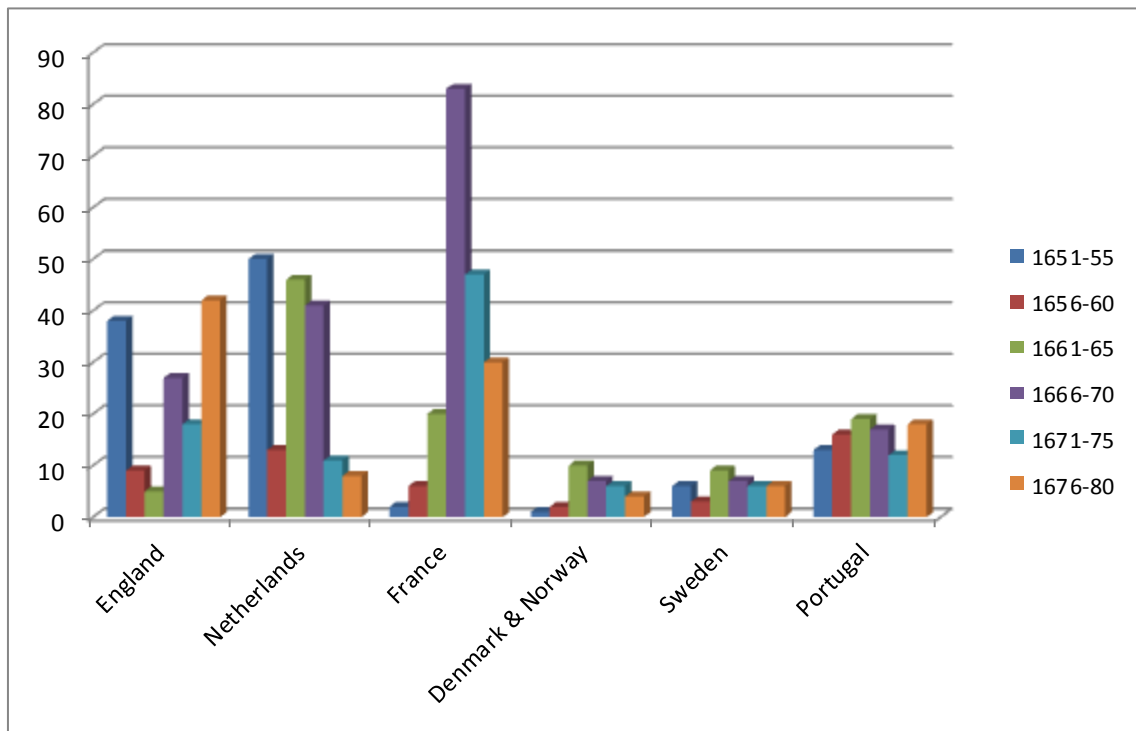


FIGURE 2 New construction of sailing warships 1650-1680 (table 2 data)