Introduction

For many who lived through it, the early modern period was an era of turmoil, both in political and religious terms. However, it was also a period of dramatically changing fortunes that shifted the economic balance in a direction that has brought us to the modern age. For the first time in history, Europe began to challenge the economic lead which the East had possessed for millennia, whilst, within Europe, the axis of economic power shifted decisively away from the Mediterranean and towards the north west of the continent. The Dutch economy underwent a spectacular Golden Age and Britain was firmly on the road to the Industrial Revolution. In this lecture, we will examine how and why the balance of power shifted so decisively - how the north west of Europe came to overtake the Mediterranean, and, with it, how Europe came to overtake the East. We will consider the factors that historians have traditionally emphasised, namely the rise of representative government and the development of markets, and then go on to look at some new explanations, including Joel Mokyr’s Enlightenment theory and Robert C. Allen’s high wage theory. As we will see, at the root of the north west’s success in each of these regards was a feminist wave which started five hundred years before we commonly think, which not only brought dramatic changes in the lives of young women, but also provided foundations for economic growth. Feminism was not only good for women - it was good for the economy. Without it, Western economies would not have been able to achieve the riches they possess today.

Europe’s place in the World

From the perspective of the modern day, we tend to look back at history and assume that “the West has always been best”; that, from the time of the ancient Greeks, all of the major
technological and intellectual achievements in history were a result of the pioneering nature of Europeans.¹ We are frequently told that the East is only catching-up as a consequence of adopting Western-style markets and institutions. However, this commonly accepted story is nothing but a myth. As historians of science well know, and as was revealed by a former Master of my own Cambridge College, Joseph Needham, for most of history the East - and not the West - has in fact been ahead. Most of the major technological achievements in history, including the development of farming, urbanisation and the written word, occurred outside of Europe. Europe was an imitator and not an innovator.

The regions of Europe that were most closely connected with the East (through Constantinople and along the Silk Road), including, most noticeably, Italy, were those parts of Europe that triumphed early on in history. The riches of cities such as Venice, seen so clearly in the paintings of Canaletto, were built on the back of monopoly trading privileges which allowed Italian merchants to source eastern goods and then sell them to European consumers at high prices. Over time, with this transfer of goods came a flow of knowledge and, by the end of the medieval period, it was clear that Europe was, in many ways, catching-up with the East. The result was the Renaissance - what Patricia Fara has termed an “intellectual fizz”² - no more visible than in the Arts. Unsurprisingly, given its connections with the East, this Renaissance was centred on Italy.

It was partly in response to the great riches on show in Italian cities that navigators and kings elsewhere in Europe began a search for their own route eastwards. Vasco da Gama established connections by navigating along the African coast and up into the Indian Ocean. This was soon followed by an influx of merchants of Portuguese origin, competing with the already established connections, and which helped to break the back of the Italian monopoly. The extra competition in the spice trade is visible in the reduction in the real prices charged for Eastern goods in Europe, bringing clear benefits for European consumers.³

In contrast to the Portuguese, the Spanish attempted to find their own route to the East by navigating in a different direction, sailing westwards around the globe in the hope of finding a back door to China. Little did Christopher Columbus realise that another continent - the Americas - stood in the way. However, whilst the door to China was (at least in this direction) closed, a window opened: the discovery of silver mines. The problem which had always faced European traders was that whilst Europeans had a great appetite for Eastern goods, the East didn’t want to import much from Europe (after all, Europe was relatively underdeveloped).
With the discovery of silver, this all changed, giving Europeans the potential to import ever growing quantities of goods from the East. Hence, it is perhaps unsurprising that in the first half of the sixteenth century, trade boomed. In fact, at 2.4% p.a., the growth of world trade was not far from that in the twentieth century (3.44% p.a.).\textsuperscript{iv} Europe’s trade with the Americas and the East was, therefore, fundamentally linked. The global economy with Europe at its centre was in the process of being born. It is at this point that our story begins.

The South declines and the Seventeenth Century Crisis sets in

At the start of the early modern period, and as it had been for millennia, southern Europe was the richest part of the continent. Whilst economic power was certainly shifting away from its traditional Italian heartland in response to the development of new global connections, this shift was very much taking place within the south - from Italy to Iberia. However, Iberian success was not sustained for long. Much of the associated colonial trade was monopolised and regulated,\textsuperscript{v} and poorly developed markets at home (hampered by unfavourable geography and poor institutions) limited the extent to which the benefits being experienced in the port cities could spread deep into the economy. Without an internal dynamic, the Iberian economy soon stagnated, and any nascent industry that did exist was made uncompetitive by the inflows of silver, which pushed prices upwards.\textsuperscript{vi} The lack of internal sources of growth meant that as other economies also began to enter the race for colonies, Spain and Portugal were not in a sufficiently strong enough position to maintain their hold. Their economies were ultimately doomed.

Perhaps the key institution that most historians have argued was holding back the Spanish economy was absolutism: the excessive power of the monarch.\textsuperscript{vii} Indeed, rising absolutism is argued to have beset much of Europe in the sixteenth and seventeenth centuries, which could be argued to have ushered in a more general economic decline across the continent, known as the seventeenth century crisis. Everywhere, states were becoming stronger. In theory, stronger states could aid market development. They could, for example, ensure a stable currency, ensure that law and order were upheld and work to eliminate internal barriers to trade, such as tolls. However, certain states initially developed in an absolutist direction, and used their power in a way that undermined markets,\textsuperscript{viii} such as through the increasing fiscal pressures that came from heavy state expenditure, uncertainty over property rights,\textsuperscript{ix} a perversion of the course of justice (e.g. in France and Spain\textsuperscript{x}), and religious intolerance.
In the fiscal domain, increasing conspicuous consumption at the court level, together with rising military expenses as the absolutists embarked upon military campaigns, placed great pressure on the nation’s finances. Much of this pressure was borne in the form of heavy taxation by those with the least political privilege and power - the less well-off small-scale producers and workers. The fiscal pressures also increased uncertainty regarding property rights and eroded the system of justice. By expropriating private property and using the courts to unfairly extract wealth, absolutists found a simple short-term solution to their fiscal problems. The longer term consequence, however, was an environment in which economic incentives were damaged. In England, the result was a stand-off between the monarch and Parliament, which resulted in the Civil Wars in the middle of the seventeenth century.

Through abusing property rights, disrespecting the law and persecuting individuals on the basis of their religion, not only did the rise of absolutist states hinder market development at the national level, it also created inter-state conflict that resulted in a series of wars that disrupted not only local but also long-distance trade. Germany, for example, suffered badly in the seventeenth century as a result of The Thirty Years War, which arguably had its origins in both religious and inter-state conflict. Poland also suffered as surrounding states sought to extend into the region, with the ensuing warfare having serious effects on trade.

The result was what historians have called a seventeenth century crisis. However, whilst much of Europe was feeling the pain, two economies managed to buck the trend: the Netherlands followed by England.

**Dark Horses: The Dutch and the English**

The performance of north west Europe in the early modern period looks remarkable when placed in a comparative context. Whilst many other European economies were in decline, the Netherlands underwent a spectacular Golden Age (in the seventeenth century), and England began its rise from backwater to the Industrial Revolution. The result was a full scale reorientation of the axis of economic power away from the Mediterranean for the first time in history.

Whilst we lack reliable data for economic growth, we do have estimates of urbanisation, agricultural productivity and wages, which allow us to place the performance of the Dutch and English economies in the context of the rest of Europe.
Looking at urbanisation to begin with (Figure 1.1), at the start of the early modern period, the Netherlands already had one of the highest urbanisation rates in Europe. England, however, had one of the lowest. But, in the course of the next three hundred years, England’s urbanisation changed faster than any other European economy.

Moving on to agricultural productivity (Figure 1.2), we see that with the exception of Belgium, there was little difference at the start of the early modern period between the European economies. Subsequently, however, the Netherlands and then England underwent agricultural revolutions, leaving a big gap between the north west of Europe and the rest by the end of the period. xii

Figure 1.3 provides an indication of what was happening to the real wage or standard of living of unskilled workers in Europe, using Allen’s ‘Welfare Ratios’. Here, a value above one indicates that ‘families had extra income over and above their basic needs’ when working 250 days a year. A value of less than one indicates that families would have had to cut back on their basic consumption of goods such as food or to work for more than 250 days per year. During the Medieval years of the fourteenth and fifteenth centuries, real wages had risen across Europe in response to the labour scarcity that followed the Black Death. By the early sixteenth century, however, real wages were marching downwards across Europe. Population was recovering to its pre-Black Death level and so was pushing up the prices of land-based goods (food and energy), pulling down the standard of living. Exceptionally, however, real wages managed to maintain their higher level in the north west of Europe, leaving what Allen calls “a great divergence” within Europe by the end of the early modern period.
So, what explains the success of the north west in this period? Traditionally, historians have emphasised factors such as representative government (including the Netherlands’s “booting out” the Spanish, and England’s Glorious Revolution in 1688 \(^{xiv}\)). These political changes supposedly helped to further the development of markets and trade, which, economic theory teaches us provide incentives for investment and innovation. However, recent research has suggested that markets were not sufficient for economic growth: they had existed for too long, and in too many other parts of the world, to explain Europe’s rise in the early modern period.\(^{xv}\)

As, for example, Professor Abulafia emphasised in the last lecture, commercialisation was a central feature of medieval times and, as others have pointed out, merchant practices had a long history in the Middle East, India and China. In fact, not only were goods markets already developing well before the early modern period, so were those for finance: the interest rate on private sector loans fell from around 30% in the 12th century to 5-6% by the 15th century.\(^{xvi}\) In some ways, policy was working against - not in favour - of the market in early modern England, making it difficult to argue that markets were responsible for her rise. Whilst we might like to
think of Britain as having been a free-trade nation, the English state pursued mercantilist policy from Tudor times through to the nineteenth century, as Ha-Joon Chang has shown.xvii

Hence, instead of purely market based explanations of economic success, economic historians have more recently gone in search of other factors that could explain the rise of the north west, and, with it, the rise of Europe.

**The Enlightenment**

According to Mokyr, the Enlightenment has a central role to play in the rise of Europe.xviii It heralded a new - more scientific - way of looking at the world and provides the “elephant in the room” that historians have been neglecting in their explanations of the rise of Europe.xix

This change in mind-set made continued progress possible, and, to understand why, it may be useful to take an example. Let us suppose that the local church roof was to collapse. Before the Enlightenment, the majority response to this might have been to blame the vicar for last Sunday’s sermon; the disaster would have been interpreted by many as the result of heavenly forces. After the Enlightenment, the majority response might instead be to question the way in which the roof had been constructed and so to try to improve engineering and construction techniques. As this and other similar examples should serve to make clear, it is only when individuals hold a scientific view of the world that material progress (technological or otherwise) becomes possible. Without it, it is difficult to imagine how we could learn from our mistakes - or from events around us - in a way that facilitates continued technological and with it economic improvement.

Not only did the Enlightenment make progress possible, it also made it desirable. Before the Enlightenment, the central view of life for many was that one should accept one’s position in society and behave in a way that would facilitate passage to the afterlife (which may include prayers, fasting, or, in other words, doing something other than working to acquire riches). In Mokyr’s language, the aim was to be ‘good’ and not necessarily ‘happy’. After the Enlightenment, people began to strive for improvement in the present life and in a more materialistic sense. Material fulfilment was no longer seen as in opposition to other goals in life. Indeed, striving to make a better life for one’s children and grandchildren was something to be proud of.xx

In an effort to achieve the progressive goal, enlightened individuals started to work together. Nothing is more evident of this than the increasing number of societies that began to form
across Europe, including geographic, meteorological, medical, scientific, agricultural and so on. Scientists shared knowledge between themselves and also began to diffuse it to the general public through the medium of publishing and public lectures. With this ‘public knowledge’, dots could be joined, needless repetition avoided, and connections formed between different ideas, all of which increased the level of knowledge base of the economy. The dissemination and sharing of this knowledge helped to bring together three important parties: those with (scientific) ideas, those with the craft skills required to take an idea and build a machine which could exploit it, and entrepreneurs with a keen eye for a profit (who could see the value of using a machine). Without all three sets of people coming together through communal endeavour, even if progress is being made, it remains within the doors of the ‘ivory towers’ and so never has the means through which to impact the economy.

In many ways, the Enlightenment brought the very opposite of a market system to science - a more cooperative and communal scientific research spirit, in which ideas were openly and freely distributed and scientists worked not for financial reward but for recognition and to push forward the frontier of knowledge for the common good of society. The emergence of this communal and gift based system brought a number of significant advantages. Not only did it allow ideas to spread and successfully bring minds together in a way that was more likely to lead to results, it also allowed avenues to be explored which might - in the market’s judgement - initially have seemed unprofitable but which led to unexpected advances which later brought great reward.

The Enlightenment created the supply side conditions for technological change, giving the economy a scientific capability. However, according to Robert C. Allen, this was not enough by itself. If scientific research is to impact the economy at the ground level, it is also necessary for businesses to have an incentive to use technology in their production processes. In particular, firms need to have an incentive to save on labour costs - to replace labour with machines. If wages are low, there may be little incentive to use scientific advance in a way that mechanises production - it will simply remain in the ‘Ivory Towers’, with little effect on the ground level where firms are actually producing. According to Allen, what was special about the north west of Europe was that wages were high, which stimulated the development of labour-saving machinery and provided firms with an incentive to invest in such machinery in an effort to lower costs. Britain also possessed another advantage which pushed in the same direction: cheap coal. To understand where these high wages came from, we need to turn back in time to the fourteenth century.
The origins of high wages: the first Feminist wave

In 1348, population across Europe witnessed a spectacular collapse: the Black Death had arrived, resulting in between one quarter and one third of the population losing their lives. As argued by Tine De Moor and Jan Luiten Van Zanden, whilst the plague had devastating effects on many of those living at the time, it also helped to place north western Europe on a higher growth plane that would pay off in the centuries which followed.

The Black Death created a shortage of workers, in response to which wages rose (so long as you survived the plague, you were in the money!). Higher wages meant that where job opportunities were available (whether in farming, domestic service or in early manufacturing), younger people could now earn enough to survive independently of their parents. This had a particularly large effect on young women: perhaps for the first time in history, and after centuries of being seen as a financial burden (being “married off” at as young an age as possible), teenage girls now had the ability to earn enough to financially support themselves. This economic freedom dramatically changed women’s lives, and with it the structure of families.

With their newfound economic freedom, women could now choose whether, who and when to marry (free from parental interference). They entered the workforce and waited to marry until they found someone of their own choosing - very different to the traditional system in which they were “married off” and were expected to move into the family home of the groom, looking after his extended family under the watchful eye of the mother-in-law.

Women waited until they found “the right man” and, once they did so, saved with their partner until they could afford to “set up house” (their newfound freedom meant they had no intention of living with either their own or their husband’s parents!). Since women were getting married later in life, they tended to have smaller families than ever before. Fewer new mouths to feed meant less pressure on food in the economy, which helped to maintain the high wage that came after the Black Death. Furthermore, with smaller families and higher wages, parents could now better afford to educate their children (in the form of apprenticeships), increasing the skill base of the economy. As people could no longer rely on being looked after by their own children in old age (like themselves, they would fly the nest to live an independent life), it was also necessary to save for retirement, which provided a greater pot of potential investment funds for the economy. All of this added up to create the conditions required to push the north
west ahead of southern Europe - and with it to push Europe ahead of the East - for the first
time in history.

Of course, the changes to women’s power did not go without resistance. In the century or so
after the Black Death, men responded by trying to restrict women’s freedom, such as by
limiting their rights to borrow and spend. However, the forces pushing women forward could
not be resisted forever and by the sixteenth century it was clear that these early feminists had
won the battle. In fact, you might be surprised by just how late in life women were getting
married in Britain in the 1500s, 1600s and 1700s - an age remarkably close to that in modern
economies: 25 years old.

Conclusion

The Early Modern period was a formative period in European history. If we want to understand
how the West arrived at its current position after millennia of Eastern dominance, we need to
consider the centuries running up to the Industrial Revolution. Traditionally, economic
historians have argued that what was special about this period was the development of
markets: political revolutions resulted in a growing role for the market, which incentivised
investment and invention, culminating in the Industrial revolution. However, recent research
has revealed that markets had longer historical roots and were present outside of Europe. If
markets had been enough for growth, that growth would likely have set in sooner, and in places
outside of Europe. What instead stands out about this period of history is the birth of modern
science, which, when combined with the first feminist wave taking place in north western
Europe created both the supply and demand side conditions required for Europe to eclipse the
East. As Europe began to industrialise, the East deindustrialised. The rest, as they say, is
history.

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1 The “West is Best” myth has been highlighted and critiqued by, amongst others, Fara, *Science: A four thousand year
   history* (2010).
2 Ibid.
   Lane’s hypothesis fifty years on’, Economic History Review, 62(3), pp.655-84
   Working Paper 8186 (2001), p.3, p.32-3 (Table 1).
5 A useful reference is Acemoglu, D., Johnson, S., and Robinson, J.A., ‘The rise of Europe: Atlantic trade, institutional
   Explorations in Economic History, 42(3), pp.349-380
In line with Epstein’s view (expressed in *Freedom and Growth*), others argue that political fragmentation was instead responsible for economic difficulties. See, for example, Voth, J., ’Debt, Default and Empire: State capacity and Economic Development in England and Spain in the Early Modern Period’, Tawney Lecture, Economic History Society Annual Conference (University of Cambridge, 2011); Grafe, R., Distant Tyranny: markets, power, and backwardness in Spain, 1650-1800 (Princeton, 2012).

The development of absolutist states is discussed in Ertman, T., *Birth of the Leviathan* (Cambridge University Press, 1997). Ertman discusses how the demand for a strong monarch or leader existed in areas subject to external threats, internal religious strife and where bottom-up institutions were becoming paralysed by vested interests.


Caenegem, *An Historical Introduction*.

Allen, ’Economic structure’.

Allen, ’The great divergence’, p.427. Data can be found on p.428, Table 6.


See, for example, Bateman, *Markets and Growth in Early Modern Europe* (2012).

See, for example, Epstein, *Freedom and Growth* (2000).


Mokyr, *The Enlightened Economy*.

Here, also see McCloskey, who has emphasised changing attitudes to markets and entrepreneurship (*Bourgeois Dignity*, 2011).

In addition to the work of Mokyr, also see van Zanden, *The long road to the Industrial Revolution* (2009), on printing and the diffusion of books.