



A podcast about the economics of trade & policy  
with Chad P. Bown

## Episode 173. Did Britain's slave trade help drive its industrial revolution?

[Episode webpage](#)

December 8, 2022

Transcript

(lightly edited)



**Chad Bown:** This episode is about slavery.

**Steve Redding:** Slavery is the morally abhorrent practice when people are treated as property by law and deprived of most of the rights that individuals hold as free people, and in particular when they're forced to work in barbaric conditions for no remuneration.

**Chad Bown:** That is Steve Redding. Steve is an economics professor at Princeton University. He's a trade economist who works with teams on important questions from economic history.

On this week's show, Steve and I are going to talk about some brand-new research involving the slave trade during Britain's Industrial Revolution.

### INTRODUCTION

**Chad Bown:** Beginning in the 1500s, 10 million Africans were taken from their homes. Against their will, they were shipped on sailboats across the Atlantic Ocean to the Americas and Caribbean. During those voyages, many got sick and died.

The survivors were forced to spend the rest of their lives working, unpaid, under brutal conditions, in the colonies. They were enslaved by Europeans who owned plantations, growing things like cotton, tobacco, sugar, and coffee.



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For hundreds of years, generations of children were then born into the system of suffering in the Americas and Caribbean. For them, there was no escaping slavery.

Even though this form of slavery was legally abolished more than 150 years ago, its economic, political, and sociological effects persist today.

### **WHY UNDERSTANDING THE ECONOMIC IMPACT OF SLAVEY ON BRITAIN MATTERS**

This episode examines Britain and one especially horrific part of that story: Britain's role in the slave trade, how much the British economy profited from holding slaves, and why identifying those in Britain who benefited from this form of exploitation is needed to fully confront the lasting effects of slavery.

**Steve Redding:** There's a lot of evidence that slavery had a negative effect on economic development and society in Africa.

But we have much less evidence on its effects on economic development in enslaving countries such as Britain. Therefore, part of our motive is to understand that economic impact and add to this existing debate.

More broadly, much of the case of reparations is based on its inhumane and barbaric conditions. But part of that debate about reparations is understanding the extent to which some countries, in particular enslaving countries, benefited from this horrendous practice.

One of our key contributions is to quantify just how big those benefits were, both for local industrial development in Britain and then also for the British economy as a whole.

**Chad Bown:** You are listening to an episode of *Trade Talks*, a podcast about the economics of trade and policy. I'm your host, Chad Bown, the Reginald Jones Senior Fellow at the Peterson Institute for International Economics in Washington.

**Chad Bown:** Hi Steve.

**Steve Redding:** Hi Chad. Thanks for having me.



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## BRITAIN AND THE TRIANGULAR SLAVE TRADE

**Chad Bown:** Slavery dates back at least to ancient times, including to the Roman Empire.

The transatlantic slave trade – that involves European countries, their colonies and Africa – began in the 1500s.

**Steve Redding:** The Portuguese were the first Europeans to buy slaves from the west coast of Africa and transport them across the Atlantic in 1526. Britain's involvement in the slave trade starts in the 1560s with voyages of John Hawkins and Francis Drake, but really starts to expand in the 1640s onwards, following Britain's acquisition of its first American colonies at Jamestown in 1607 and Barbados in 1625.

One of the key forces that led to European involvement in the slave trade was the decimation of indigenous populations in the Americas through disease – in particular smallpox, influenza, and a number of different diseases – which meant that there was a scarcity of local labor.

**Chad Bown:** What is “triangular trade” when it comes to slavery during this period?

**Steve Redding:** For “triangular trade,” think of the three legs of a triangle.

The first leg runs from Britain to the West African coast. The second leg runs from the West African coast to the Americas, in particular to the Caribbean. And then the third leg of the triangle runs back from the Caribbean and the Americas to Britain.

On the first leg of the triangle, British manufacturing goods were exported to the West African coast where they were exchanged for slaves from West African traders. And then those slaves were carried across the middle leg – which was referred to as the middle passage – under barbaric conditions on slave ships with high rates of mortality and disease, to the Caribbean, where they were then sold and exchanged for products grown on plantations (sugar, coffee tobacco, and cotton). That then was transported back from the Americas to Britain. And then that ship (or another ship) would go around the legs of the triangle again.

**Chad Bown:** Who owned the ships involved in this triangular trade, and why is that an important part of the story?

**Steve Redding:** The ships were owned by Europeans and British owned ships in particular are the focus of our analysis. In total, around 10 million Africans were transported across the



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Atlantic. Over the course of our period, 6 million were transported up to 1807, and Britain carried around one third of those 6 million slaves across the Atlantic.

The fact the ships were owned by Europeans was important because they accumulated great wealth through the slave trade, and many of them used that wealth to transition into slave holding and into owning plantations in the Caribbean and holding slaves there. That's important for our story because it's that wealth accumulated through the slave trade that then enables people to transition into slave holding on plantations. And then, in our study, we look at the impact of the wealth accumulated from slave holding on local economic activity and industrial development in Britain.

## **BRITAIN'S INDUSTRIAL REVOLUTION**

**Chad Bown:** If we turn to the latter part of this period where Britain is heavily involved in the slave trade – this is the late 1700s through early 1800s – what else is happening at the time in Europe and in Britain especially?

**Steve Redding:** The key economic development in Britain was the Industrial Revolution, which started around 1760, and refers to a whole set of related technological innovations and industrial developments, which led to the rise of manufacturing industry and reallocation of resources out of agriculture, and the movement of people increasingly from the countryside into towns and cities.

Key innovations included what is called the “spinning jenny” in the textiles industry – which made it more efficient to spin cotton and led to a movement of people from spinning cotton in their homes and into large-scale factories.

Another key innovation was the development of the steam engine. It was first invented in 1712 but further developed in a series of important improvements by James Watt in the 1760s through 1775, which increased the efficiency of the steam engine and enabled it to be used for rotary motion, which generated an important source of power in factories.

This large-scale economic development and transformation of industry literally transformed the face of Britain. It motivated writers such as Charles Dickens to think about the primitive conditions in cities at this time. Economists such as Adam Smith and David Ricardo started thinking about the changes in the world around them and the role of economics and international trade in understanding those developments.



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**Chad Bown:** The timing here is important. The transatlantic slave trade and the Industrial Revolution – these two incredibly important socio-economic transformations – took place almost simultaneously.

Now, obviously slavery did not cause the invention of the cotton jenny or the steam engine. But an important question for Britain is whether the profits it enjoyed by enslaving people allowed the country to deploy those sorts of inventions more extensively and become richer than it would have otherwise.

I asked Steve about the contemporary thinkers and what they believed the impact of the slave trade was on Britain's economy at the time.

#### **THE HISTORICAL DEBATE: THE ROLE OF THE SLAVE TRADE IN THE INDUSTRIAL REVOLUTION**

**Steve Redding:** There's a huge debate in economic history about the role played by the slave trade in Britain's Industrial Revolution, and indeed about the reasons behind the Industrial Revolution in general.

At the time there was considerable debate about this question of whether slavery was profitable for the British economy. Adam Smith considered slavery and the colonial system as economically inefficient.

Other people argued that it played a key role in Britain's industrial development. For example, Karl Marx argued that "the veiled slavery of the wage workers in Europe needed, for its pedestal slavery, pure and simple in the new world."

**Chad Bown:** Economic historians have had a long-running debate as to whether Britain's involvement in the slave trade and slave holding contributed to its Industrial Revolution.

A big part of that debate involves a man named Eric Williams. Williams would famously become the first Prime Minister of Trinidad and Tobago, helping the Caribbean country gain independence from Britain in 1962.

But long before that, Eric Williams was also an incredibly important scholar.

**Steve Redding:** Eric Williams was a black economist and economic historian who published an incredibly influential book called "Capitalism and Slavery," which advanced two key hypotheses.



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One of those hypotheses was that Britain accumulated great wealth from the slave trade and slave holding, and that wealth helped finance Britain's Industrial Revolution.

The second hypothesis was that slavery was not abolished in Britain for humanitarian reasons, but because it became economically less profitable over time. Thus, economics played a key role – both in wealth being accumulated and financing – in the Industrial Revolution, and then it also played a key role in the abolition of slavery.

He really framed the debate. A lot of research since then has been really trying to explore and quantify just how important the wealth accumulated from the slave trade and slave holding was for Britain's Industrial Revolution.

Some scholars argue it was relatively unimportant.

Other scholars emphasized the profits, not just from the slave trade but also from slave holding, and that the wealth accumulated from slave holding was around 10 times bigger than the profits accumulated through the slave trade.

But at the end of that debate, at this moment, it's still an open question.

## **BRITAIN BEGINS THE PROCESS OF ABOLISHING SLAVERY**

**Chad Bown:** By the early 1800s in Britain, the tide against the slave trade was slowly starting to turn.

And in 1807, the British Parliament passed 'An Act for the Abolition of the Slave Trade.'

**Steve Redding:** Over time, reports of barbaric conditions on slave ships led to increasing political protests against the slave trade. Therefore, in 1807, Britain abolished trade in slavery. And from that point onwards, it was illegal for British ships to participate in the slave trade.

Initially, abolitionist hoped that the end of the slave trade would make slavery itself unsustainable. Unfortunately, that did not come about, and a further legislative process was delayed.

**Chad Bown:** In 1807, Britain did pass that first law that made trading slaves illegal across its empire. Unfortunately, that was not enough to end Britain's role in slave holding. That took another quarter century.



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The 'Slavery Abolition Act 1833' did finally stop the British from holding slaves. And what it took to pass that legislation was both horrific and incredibly important for Steve's research.

**Steve Redding:** A key feature of the British situation is that the abolition of slavery was heavily opposed by what was known as the West India Interest, which was primarily slaveholder owners of plantations in the Caribbean, who opposed the abolition of slavery.

As part of the political economy process to try to get the Abolition of Slavery Act through Parliament the British government agreed to pay slave holders compensation for their economic losses as a result of the abolition of slavery. And this is a particularly horrendous feature of the British historical context where, instead of the enslaved being compensated, it was actually the enslavers who were compensated by the British government.

The amounts of money involved were huge. It corresponded to 40% of British government revenue, and it's estimated to be around 5% of British GDP at the time.

That's important for our research because as part of these compensation payments, the British government collected detailed data about who held these slaves and how many were held in which plantations, on which islands, and in particular, a slavery compensation committee was set up. Slave holders had to apply to that committee, specifying how many slaves they held, and the plantations on which they held them. The government collected very detailed information about the people who held those slaves, their addresses, the number of people involved, and recorded the total amount of compensation paid to each person.

We used that detailed information to locate slaveholders at different places within Britain, and hence track where the wealth was held in different locations within Britain.

**Chad Bown:** Again, this 1833 Abolition Act was so awful. Instead of compensating the people who had been enslaved, the Act paid huge sums to those, in Britain, who had been holding and exploiting and benefiting from the slaves.

The only good news was that the Act also created a long in detailed paper trail. And that paper trail would be pieced together as clues by an incredible group of historians.

**Steve Redding:** We're very fortunate because historians at University College London spent around a decade compiling these data into the *Legacies of British Slavery Database*.

They started with the records of the compensation committee, but then they augmented those records by tracing the participation in slavery throughout the British economy. For example,



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they've followed genealogical histories back in time. They've connected which slave holders were also members of Parliament and which slave holders were members of the aristocracy.

One of the really interesting findings from their work and in the data is just how prevalent slave holding was within the British economy. Not only individuals with very large estates held many enslaved people, but also individuals – e.g., widows inherited enslaved people and might often only have one or two enslaved people that they claimed, but that they received income from.

### **PIECING TOGETHER CENTURIES OF BRITISH ECONOMIC AND SLAVEHOLDER DATA**

**Chad Bown:** A big part of Steve's project is to build from the *Legacies of British Slavery Database* by combining that information with centuries worth of detailed British economic data.

What are the various outcome measures that you are interested in tracking?

**Steve Redding:** One of our contributions is to put together this extremely rich, spatially disaggregated data set which combines information on population, employment, and property values for individual locations in Britain.

And then into that information, which is typically reported at what is known as a parish – a small local area – into those locations. We combine information on the addresses of slave holders. We matched the information on the compensation that was received by individual people living in each of these parishes.

We then also combine that information with the *Slave Voyages Database*, which contains information on every single individual voyage of a slave trading ship by slave traders worldwide. We merge information on British slave traders into these parishes, and then we track their ancestors back in time as part of our empirical analysis.

It is an incredibly rich data set that combines local economic activity going all the way back to Norman Times through until the 1830s, together with information on slave holding and slave trading back across the centuries.

**Chad Bown:** Steve's team has this incredibly precise information on where slave traders and slave holders were located geographically in Britain. He then compares that with where Britain's industrialization was concentrated during this same period.





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**Steve Redding:** Slave trading was overwhelmingly concentrated in the three ports of Liverpool in the northwest of Britain, Bristol in the southwest of Britain, and London in the southeast. Liverpool was by far the most important, accounting for around 49% of British slave trading voyages. In part because slave trading was often a route into slave holding, slave holding is also concentrated and clustered around those three ports. But it also extends throughout England and Wales, particularly in coastal regions, and particularly in the main population concentrations in towns and cities.

When we look at the data, we see a high correlation between the areas that have high levels of economic activity in 1833 and those that have high levels of slave holding wealth in 1833, as measured in our compensation data.

## **HOW ECONOMISTS FIGURED OUT WHETHER THE SLAVE TRADE CONTRIBUTED TO BRITAIN'S INDUSTRIALIZATION**

**Chad Bown:** You just said “correlation.” But we're economists and we're never happy with correlation, we're interested in causation.

Why might we be worried that correlation could be mis-telling the story here?

**Steve Redding:** On one hand, it's possible that the wealth accumulated through slavery was invested in local industrial activity and helped propel the industrial revolution. On the other hand, it could be that local wealth accumulated in Britain was then invested in slave holding.

In other words, causality could either run from slave holding to local industrial activity, or it could run in the other direction from wealth, from local industrial activity into slave holding.

**Chad Bown:** Causation is important because Steve really wants to know how much of Britain's industrial revolution – how much of its economic transformation, how much of its economic growth, and how much of it getting rich – was being driven by the slave trade and slave holding, and *not* other important changes taking place in Britain at the same time.

**Chad Bown:** You've convinced me. Establishing causality is important. So how are you going to do that here?

**Steve Redding:** Many families started off as slave traders and then transitioned into slave holding. We're going to use the idea that while they were slave traders, in the age of sail, the primary determinant of how long voyages would take across the Atlantic was wind conditions.



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Given the barbaric conditions on slave ships, when voyages took much longer than was expected because of bad wind conditions, water would rapidly begin to run out, and infectious diseases would begin to spread, and this would lead to high levels of mortality among the enslaved.

While many voyages experienced mortality rates of 5- 10%, some saw rates of 20% or more.

The idea is some slave traders were “lucky,” in the sense that they faced favorable wind conditions, and their passage across the Atlantic was quick, and that meant that fewer enslaved people on the ship perished. That meant that they received more wealth from that slave trading voyage.

In contrast, other slave traders were “unlucky” in the sense that they faced unfavorable wind conditions, the voyage across the Atlantic took much longer, and therefore many more enslaved people died, which reduced the wealth accumulated from that slave trading voyage.

The key idea is that those wind conditions are completely unrelated to local economic activity in Britain, or to the entrepreneurial ability of the individual slave trader. Those wind conditions were completely beyond their control.

## **THE RESULTS: BRITAIN’S SLAVE TRADE DID HELP ACCELERATE ITS INDUSTRIAL REVOLUTION**

**Chad Bown:** So that's your setup. What do you find?

**Steve Redding:** We find that in locations with more wealth from slave holding for weather-related reason, there's higher manufacturing employment, lower agricultural employment, more cotton mills, more steam engines, higher property values, and higher population density.

These are all key measures of industrial development.

**Chad Bown:** Britain's involvement in the slave trade really was a causal contributor to its Industrial Revolution. Steve has this evidence at the local level, at the level of all these little parishes – how much some parishes grew, how much others did not – that can be traced back to their slave holdings.

When you aggregate that up to look at Britain as a whole, what do you find?

**Steve Redding:** We find that the wealth accumulated from slave holding increased Britain's national income by around 3.5% each year.



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That's large relative to rates of economic growth at the time. For example, that corresponds to more than a decade of growth in income per capita at the time.

**Chad Bown:** How about when you look at different regions?

**Steve Redding:** We find that the wealth accumulated from slave holding played an important role in shaping the geography of industrial activity in Britain.

The areas that had the most slave holding wealth – so think of the areas around Liverpool, London, and Bristol – experienced increases in total income of around 40%, increases in the income of capital owners of factories and buildings of more than 100%, and a reduction in the income of landowners of around 7%.

**Chad Bown:** Within Britain, slavery also had important distributional consequences. Again, the slaves were located far away in the colonies and not in England or Wales.

But beyond the slaveholders themselves, some British individuals benefited indirectly from the system of slave holding.

**Steve Redding:** We find large scale distributional consequences. Capital owners were the main beneficiaries. That is, people who owned machinery and buildings employed in manufacturing and industrial activity benefited.

At the aggregate level, we find an 11% increase each year in the income of capital owners. And that's not only slave holders, but that is all owners of capital, machines, and factories.

In contrast, the main “losers” were the owners of land who experienced a small reduction in their income of around 1% each year, as economic activity was reallocated away from agriculture towards manufacturing and industry.

But of course, these are only the people who suffered economically in Britain.

It's impossible to compare those economic losses to the extreme suffering of those who were enslaved, of those who perished on slave ships as they were transported across the Atlantic, and those who survived and yet suffered and experienced inhumane and barbaric conditions on colonial plantations in the Americas.



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**Chad Bown:** We have this linkage between slave trading and slave holding and this industrial development in Britain during this time period.

What do you think is the main channel through which that was able to arise?

**Steve Redding:** The key feature of economic activity at this time is that financial markets were not very highly developed. Therefore, this wealth accumulated from slave holding could be invested in buildings and machines, and manufacturing was the main industry in which those buildings and machines were used.

Greater wealth accumulated from slave holding led to more investment in buildings and factories and a larger expansion in industry and manufacturing.

#### **DID OTHER COUNTRIES SIMILARLY GAIN FROM THEIR PARTICIPATION IN THE SLAVE TRADE?**

**Chad Bown:** British ships were responsible for roughly a third of the slaves traded across the Atlantic. But there were at least 4 million Africans that other countries shipped as slaves to the Americas and Caribbean during this same period.

I asked Steve who shipped those slaves and whether those countries similarly benefited from the wealth that their slave traders were accumulating and reinvesting back at home.

**Steve Redding:** The Portuguese were the first Europeans to become involved in the slave trade, and they were quantitatively extremely important. Also, in addition to the Portuguese and the British, France and Spain also participated heavily in the slave trade.

While our findings focus on slave holding in Britain, I think they have important implications for other countries involved in the slave trade and slave holding. The wealth that was accumulated from slave holding could affect local economic activity in those countries as well.

One of the challenges is we only have this detailed and disaggregated data on wealth obtained through slave holding for Britain as a result of the features of the Abolition of Slavery Act.

In other countries, it's much harder to obtain the same kind of data, but an important area for further research is trying to explore, in other countries, the same mechanism – whether that wealth accumulated from slave holding affects local economic activity – also extends to those other settings.



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## WHY THIS RESEARCH MATTERS

**Chad Bown:** You've convinced us that Britain's involvement in the slave trade and slave holding helped further advance its Industrial Revolution and its economic growth.

Stepping back from all this, what do you think are the primary implications of these results?

**Steve Redding:** I think it is important for Britain and other European countries such as Portugal, Spain, and France that participated in the slave trade and slave holding to acknowledge the wealth that was accumulated from this barbaric and horrific practice.

I think our findings are also relevant for the debate about reparations. Much of that debate is about the suffering that was experienced from those who were enslaved and those who perished as a result of the slave trade and slave holding.

But as part of that debate, it's important to understand how much enslaving countries benefited from this horrific and inhumane practice.

**Chad Bown:** Steve, thank you very much.

**Steve Redding:** Thanks Chad for having me.

## GOODBYE FOR NOW

**Chad Bown:** And that is all for *Trade Talks*. A huge thanks to Steve Redding at Princeton University. Do check out his new paper with Stephan Hebllich and Hans-Joachim Voth, "Slavery and the British Industrial Revolution."

You can find links to that paper, as well as some of the other research that Steve mentioned, in the show notes on the *Trade Talks* website. This is such an incredibly important topic; we will hope to cover some other aspects in future episodes.

Thanks to Melina Kolb, our supervising producer. Thanks, as always, to Collin Warren, our audio guy.

Do follow us on Twitter. We are on at @Trade\_\_Talks. That's not one, but two underscores, @Trade\_\_Talks. ■



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