The Transatlantic Slave Trade, The South Sea Company and the Financial Revolution in Great Britain

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The South Sea Company was a public-private corporation created by Act of British Parliament in 1711 to swap high-interest government debt for Company equity. The Company was at the heart of the British Financial Revolution that helped establish Parliaments credible commitment to repay its debts. The government also awarded the Company the international monopoly to supply slaves to the Spanish American colonies the Asiento de Negros. We use historical slave trade and financial data to estimate the parameters of a Capital Asset Pricing Model to determine if Asiento-related slave trading increased risk-adjusted returns on South Sea Company stock. We find that Asiento-related slave trading created substantial positive returns on Company stock, and precisely when the government relied on the Company to refinance its debt. Contrary to previous literature, we find that Asiento-related slave trading was profitable and helped Britain win the 18th century race to empire against France.
At least since Williams (1944), the idea that the Atlantic slave trade explains the emergence of western European nations as dominant economic and imperial powers has been a source of empirical inquiry and debate for economists and historians.
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We consider a particular episode in economic history—the awarding of the Asiento to the South Sea Company in 1711—and its effects on the risk-adjusted returns on South Sea Co. equity.
Motivation

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- Our notion of profitability is that of excess returns and capital gains from the buying and selling of equity, which is distinct from the typical accounting notion of revenue and cost residuals associated with selling goods/services.
Our theoretical framework casts the South Sea Company and British public debt nexus as a portfolio choice problem. In particular, as in McWatters (2008) and Daudin (2004) we infer the profitability of slave-trading and its consequences from investment returns associated with it.
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We appeal to the Capital Asset Pricing Model (CAPM) to evaluate the excess returns on South Sea Co. equity.
Given the wealth maximizing objective of investors in the South Sea Co., a CAPM specification of equilibrium expected return on equity is \( \mu_i = r + \frac{\sigma_{ip}}{\sigma_p^2} (\mu_p - r) \), where \( r \) is the risk-free rate of return, \( \mu_p \) is the expected return on the market portfolio, \( \sigma_{ip} \) is the covariance between the return on South Sea Co. equity and the market portfolio, and \( \sigma_p^2 \) is the variance of return on the market portfolio.
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Defining $\beta_i = \frac{\sigma_{ip}}{\sigma_p^2}$, the CAPM enables a specification of the expected return on an equity as a linear function of the expected return on the market portfolio relative to the risk-free return as

$$\mu_i - r = \beta_i (\mu_p - r),$$

where $\beta_i$ is a measure of market/systematic risk associated with holding the equity.
A CAPM equilibrium specification of returns on South Sea Co. equity enables a regression specifications that permits a consideration of how the Asiento conditioned returns on South Sea Co. equity, and British central government fiscal space. Let $A$ be a binary variable for the years $t = 1 \ldots T$ in which the South Sea Co. had the Asiento:

$$
\mu_t - r_t = \beta_0 + \beta_1 A_t + \beta_2 (\mu_{pt} - r_t) + \beta_3 [A_t \times (\mu_{pt} - r_t)] + \epsilon_t \quad (1)
$$

where $\epsilon_t$ and $\nu_t$ are error terms.
If $\partial(\mu_t - r_t)/\partial A_t > 0$, an implication is that the South Sea Trading Co. slave-trading while it held the Asiento was associated with abnormal/excess returns. In this context, the estimated parameters of the CAPM enable a determination of how profitable slave-trading was—at least for holders of South Sea Co. equity by generating capital gains—enabling profits on equity investments.
Our approach to determining the effects of slave-trading on the South Sea Co. is that of a regression-based event study (Cable and Holland, 1999; Pynnonen, 2005).
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The inclusion of a dummy variable for the Asiento in our CAPM and fiscal capacity specifications enables an estimate of how slave-trading—or at least the right to trade slaves under the Asiento—induced abnormal returns on equity and affected the risk premium as measured by estimates of $\beta_1$ and $\beta_3$ respectively.
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- In particular we use the data on monthly stock prices for the Bank of England, South Sea Co, and the East India Co. from 1711 - 1795.
Data and Results

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- We estimate ARCHT/GARCHT specifications as financial time series typically exhibit a characteristic known as volatility clustering whereby large changes tend to follow large changes, and small changes tend to follow small changes resulting in a serially dependent error term (Engle, 1982; 2001; Bollerslev, 1986).
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- To allow for the possibility that the conditional variance is asymmetric in its response to say increases versus decreases in asset returns, we allow for threshold effects based upon the magnitude of the lagged errors (Zakoian, 1994).
Our estimates are based on specifications that control for the possibility that South Sea vessels engaged in contraband commerce during the Asiento, hence biasing the estimated profitability of slave-trading, and the effects of various resource-consuming wars, and asset price bubbles, and debt-equity swaps.
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Lastly, we added controls for post-Bubble events designed to stabilize British equity markets—the conversion of 1/2 of South Sea equity into perpetual annuities bearing 5 percent interest, and the issuance of 3 percent Consols.
In general, the ARCHT/GARCHT parameter estimates reported in Tables 2 - 6 suggest that the CAPM explains excess returns on South Sea Co. stock over the time period under consideration.
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Moreover, the Asiento was associated with higher excess returns—abnormal returns—as the Asiento dummy is always positive and significant.
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The monopoly right to trade slaves for the South Sea Co. was apparently a unique source of excess returns as rival firms in the market saw negative returns over the same time period, suggesting investors expected the Asiento to provide high returns relative to the Bank of England and East India Co., as they did not have the option to trade slaves.
The minimum AIC specification in Table 6 suggests that the Asiento increased the excess return on South Sea Co. equity by approximately 8 percent annually, which translates into a practical impact of shareholder wealth worth at least 741,752 pounds nominally and approximately in a given year for which the South Sea Co. actually made at least one shipment in a month to the Spanish possessions in the Americas.
Our findings provide additional support for William’s (1944) thesis that slave-trading was an important catalyst for the rise of European nations as dominant economic and imperial powers—in this case the UK. For the Bank of England and East India Trading Co., the Asiento was associated with negative excess returns. This suggests that the effects of the Asiento on South Sea Co. excess returns and the enhanced British fiscal space enabling it to expand empire reported in Tables 2 - 5 are causal.
As Asiento-related slave-trading was associated with substantial positive abnormal/excess risk-adjusted returns on Company stock and precisely when the British government relied on the Company to refinance its debt, our findings implicate slave trading as a major economic determinant of the success of these institutional and financial innovations in Britain.
Our results also provide support for the Williams thesis that profitable slave-trading was an important catalyst for the rise of Great Britain as a dominant economic and imperial power in Europe, as profitable slave-trading under the Asiento strengthened its financial capacity to engage ongoing and future imperial war campaigns.