

**Title:** "Asymmetric Trade Costs: Evidence from Sailing and Steamships"

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**Abstract (preliminary):**

"International trade between two countries can be cheaper in one direction than the other, for example due to divergent shipping costs or tariff rates. We explore asymmetric bilateral trade costs with a unique historical data set on individual shipments across the Atlantic in the 19th century. Before the advent of steampower, eastwards and westwards sailing times for transatlantic shipping differed depending on the direction and strength of winds. This led to a differential in bilateral transportation costs. We also exploit the removal of the bilateral asymmetries brought about by the switch from sailing to steampower technology. We derive predictions from trade theory about the response of trade flows to this asymmetry, and we test them empirically. We find substantial bilateral asymmetries that tend to increase over longer distances. The degree of asymmetry acts as a substantial dampening force on trade flows."