

AREC 345: Global Poverty & Economic Development

Lecture 5:

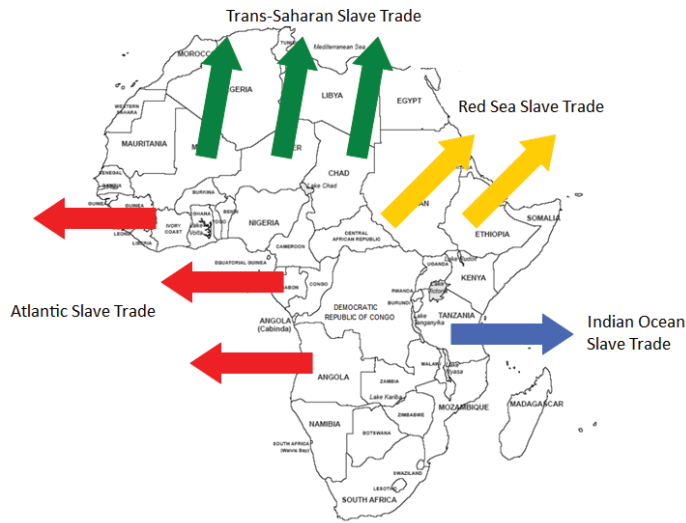
The African Slave Trade

Professor: Pamela Jakiela

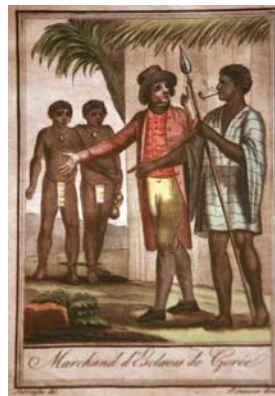
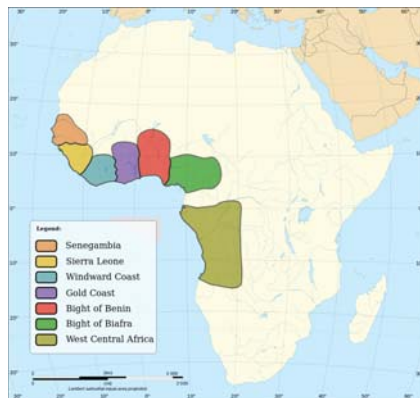
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The (beginning of the) end of the slave trade:

- 1807: British Parliament outlaws slave trade
- 1815: British Navy begins intercepting slave ships on the Atlantic, returning captives to new colony at Freetown, Sierra Leone

Atlantic Slave Trades

Slaves Exports	
Years	Exports
1450–1600	2,500
1601–1700	18,680
1701–1800	61,330
1801–1900	33,300

Over 18 million Africans were sold into slavery between 1400 and 1900

- 12 million were sent across the Atlantic to the Americas
- Historians estimates that, had the slave trades not taken place, Africa's population would have been twice as large in 1850

Which Countries Were Most Affected?

Sources of Data

Types of records available:



shipping records

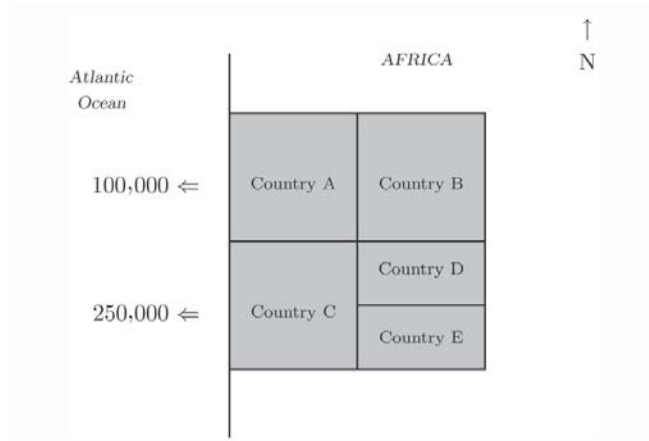


ethnicity records



- How to calculate slave exports:**
1. Calculate total numbers from each port
 2. Calculate ethnicity ratios from each port
 3. Map exports back onto countries

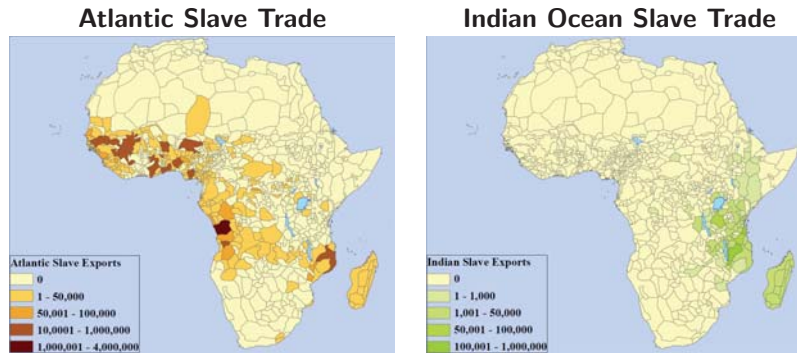
Calculating the Number of Slaves Exported



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Calculating the Number of Slaves Exported

ESTIMATED TOTAL SLAVE EXPORTS BETWEEN 1400 AND 1900 BY COUNTRY

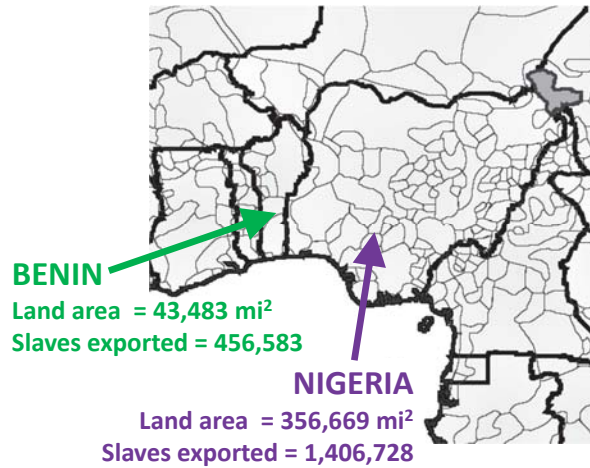
Isocode	Country name	Trans-Atlantic	Indian Ocean	Trans-Saharan	Red Sea	All slave trades
AGO	Angola	3,607,020	0	0	0	3,607,020
NGA	Nigeria	1,406,728	0	555,796	59,337	2,021,859
GHA	Ghana	1,614,793	0	0	0	1,614,793
ETH	Ethiopia	0	200	813,899	633,357	1,447,455
SDN	Sudan	615	174	408,261	454,913	863,962
MLI	Mali	331,748	0	509,950	0	841,697
ZAR	Democratic Republic of Congo	759,468	7,047	0	0	766,515
MOZ	Mozambique	382,378	243,484	0	0	625,862
TZA	Tanzania	10,834	523,992	0	0	534,826
TCD	Chad	823	0	409,368	118,673	528,862
BEN	Benin	456,583	0	0	0	456,583
SEN	Senegal	278,195	0	98,731	0	376,926
GIN	Guinea	350,149	0	0	0	350,149
TGO	Togo	289,634	0	0	0	289,634
GNB	Guinea-Bissau	180,752	0	0	0	180,752
BFA	Burkina Faso	167,201	0	0	0	167,201
MRT	Mauritania	417	0	164,017	0	164,434
MWI	Malawi	88,061	37,370	0	0	125,431
MDG	Madagascar	36,349	88,927	0	0	125,275

The Long-Run Impacts of the Slave Trade

Exposure to the Slave Trade & Income in 2000

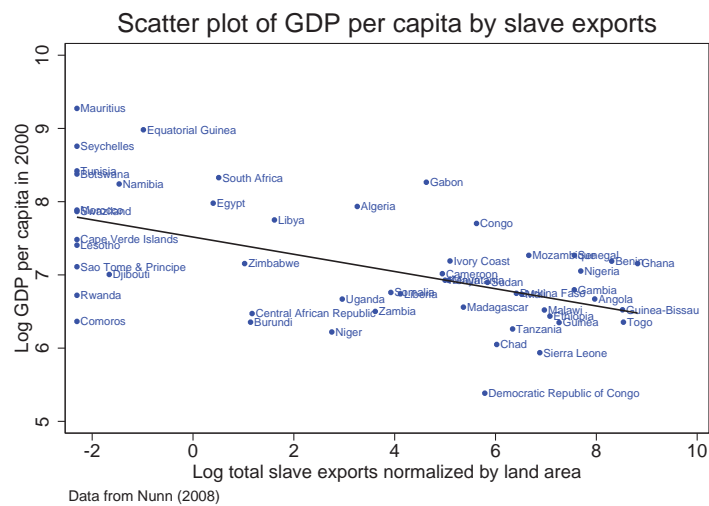
“If the slave trades are partly responsible for Africa's current underdevelopment, then one should observe that the parts of the continent from which the largest number of slaves were taken are also the parts of the continent that are the poorest today.”

Exposure to the Slave Trade

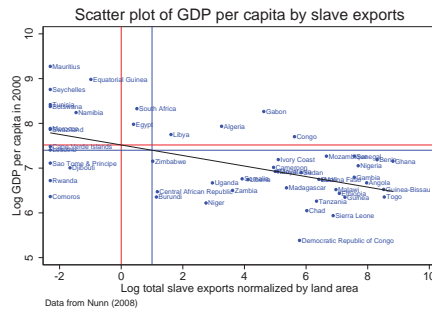


Main independent variable of interest: slaves exported per km²

Exposure to the Slave Trade & Income in 2000



Exposure to the Slave Trade & Income in 2000



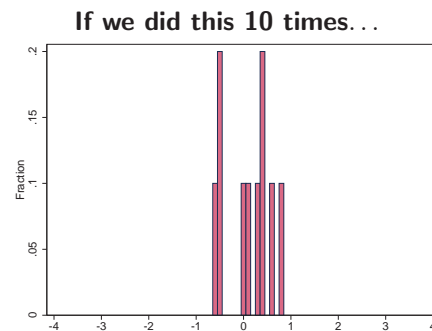
$$E(\text{GDP}) = 7.517 - 0.117 \cdot \text{slave exports} \quad \leftrightarrow$$

Dep. Var. = GDP	
	OLS (1)
Slave exports	-0.117*** (0.025)
Constant	7.517*** (0.126)

Standard Errors & Statistical Significance

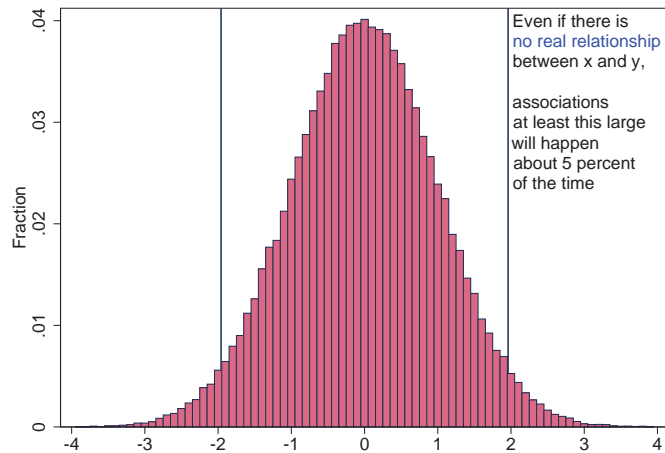
Is the association between log GDP per capita in 2000 and the intensity of exposure to the slave trade likely to have arisen by chance?

Thought experiment: what if we randomly permuted the data before regressing y on x — how big would the slope coefficient be then?



Standard Errors & Statistical Significance

If we did this 100,000 times...



Very large coefficients can occur by chance, but not very often

Exposure to the Slave Trade & Income in 2000

Use regression results to calculate **t-statistic**:

Regression results:

Dep. Var. = GDP	
OLS (1)	
Slave exports	-0.117*** (0.025)
Constant	7.517*** (0.126)

The formula for the t-statistic:

$$\text{t-stat} = \frac{\hat{b}}{\text{standard error of } \hat{b}}$$

=

=

Absolute value of t-statistic is greater than 2.58,

$|\text{t-stat}| > 2.58 \Rightarrow$ statistically significant at the 99 percent level

$|\text{t-stat}| > 1.96 \Rightarrow$ statistically significant at the 95 percent level

$|\text{t-stat}| > 1.64 \Rightarrow$ statistically significant at the 90 percent level

Exposure to the Slave Trade & Income in 2000

$$E(\log \text{ GDP per capita}) = 7.517 - 0.117 \cdot \log \text{ slave exports per square km}$$

Interpretation:

Country	Slave Exports	Log of Slave Exports	Predicted Log GDP	Predicted GDP	Actual GDP
South Africa	1.67	0.51	7.46	\$1,732.62	\$4,139
Uganda	19.30	2.96	7.17	\$1,300.75	\$788
Malawi	1062.97	6.97	6.70	\$813.74	\$ 679
Nigeria	2188.16	7.69	6.61	\$747.82	\$1,156

Clearly, exposure to the slave trade isn't the whole story!

Study Guide: Key Terms

- Atlantic, Indian Ocean, Red Sea, and Trans-Saharan slave trades
- ethnicity vs. shipping records
- t-statistic
- statistical significance