

the period of the slave trade and that of colonial rule.

## The Atlantic Slave Trade

The existence of slavery and an export trade in slaves in sub-Saharan Africa was one consequence of the low population density just discussed. As land was relatively abundant, in many places there was little incentive to create institutions that enforced individual property rights in land. Labor, however, was relatively scarce. The **Nieboer-Domar** hypothesis, developed in the context of Eastern Europe, suggests that where labor is scarce, the **reservation wage** will be too high for the employment of wage labor to be profitable.<sup>35</sup> In this context, landowners will invest in coercive means to control labor. In sub-Saharan Africa, the outcome was the widespread prevalence of slavery and **pawnship**, which in many African economies existed alongside systems of family labor, co-operative work groups, and patron-client relationships as means of organizing the labor force.

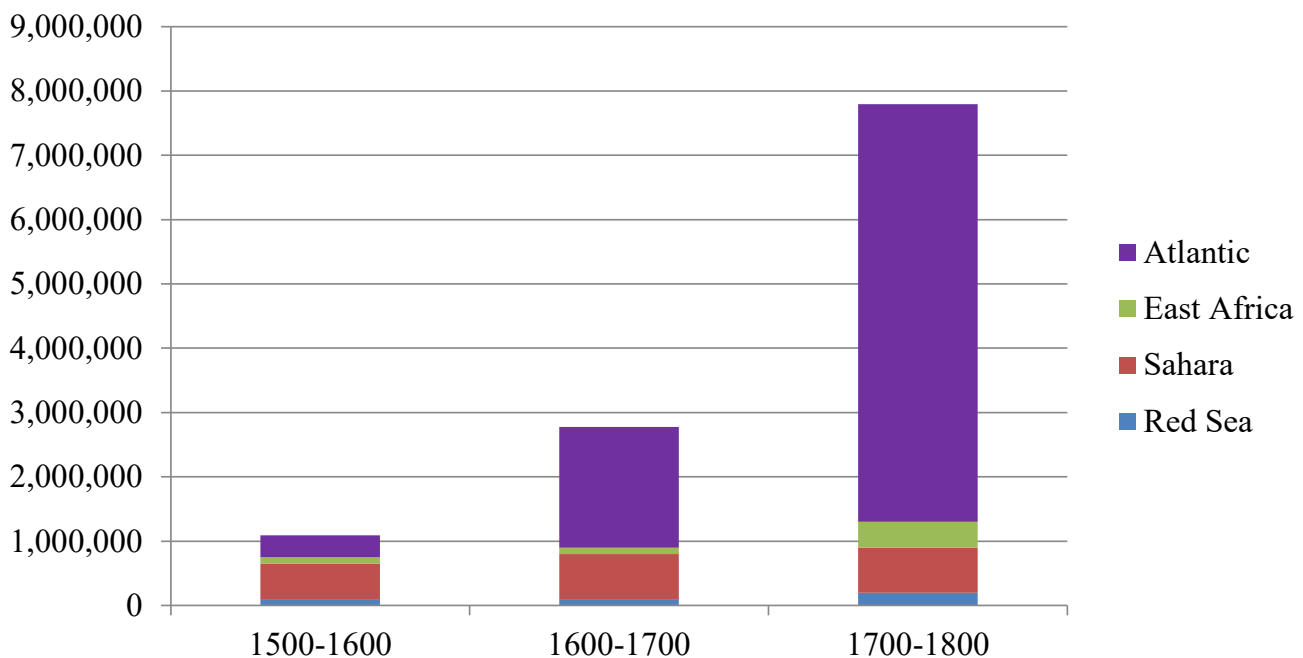
The export of slaves also had a long history. Slaves were traded in the classical and medieval trade networks discussed in the previous section. The East

African and Red Sea slave trades also increased during the period when the trans-Atlantic slave trade was expanding, particularly with the establishment of plantations along the Indian Ocean and off the East African coast. However, slave exports along these routes were small in scale compared to the trans-Atlantic slave trade, which first emerged in the fifteenth century. FIGURE 61 gives current estimates of the number of slaves exported along particular routes from c. 1500.

The Atlantic slave trade began relatively slowly, with the export of a few slaves from the West African coast by Portuguese traders. The Portuguese exported slaves to work on sugar plantations on islands like Madeira, the Canary Islands, and the Cape Verde Islands. They also moved them between West African ports in exchange for gold and other African exports.<sup>37</sup>

It was not until the rapid growth of plantation economies in the Americas that the Atlantic slave trade eclipsed the trans-Saharan and Indian Ocean slave trades. Accounting for the volume of the slave trade has been one of the more controversial aspects of African economic history. Early estimates

# FIGURE 61



African slave exports by trade route, 1500–1800<sup>36</sup>