Brain drain has been perceived as a hindrance to poor countries’ development. However, by increasing the expected returns to education, improved prospects for skilled emigration may stimulate human capital investment at home. Empirical evidence on the net effect of emigration prospects is scarce, largely because characteristics that drive human capital investment also directly affect the decision to emigrate. This paper focuses on a natural experiment that involves the recruitment of Nepali men into the British Army, a tradition that originated during British colonial rule in South Asia. In 1993 a change in the educational requirement for Nepali recruits resulted in an exogenous, differential increase in their skilled versus unskilled emigration prospects. Due to a historical pattern of recruitment established in the mid-19th century, Nepali men of Gurkha ethnicity were disproportionately affected by this change. I use individual-level information on ethnicity, gender, and age to motivate a set of difference-in-difference and synthetic control strategies to estimate effects on school attainment. Eligible men responded to the rule change by raising their schooling by over one year, a 30% increase over the average. This increase also occurred for eligible men who did not emigrate, so there was a net increase in the human capital stock of eligible men.

What is the effect of increasing the returns to male education on the education of female children in the same household? Theoretical household models identify potentially offsetting mechanisms, such as resource constraints versus sharing of fixed costs. Given these factors, estimating the net effect of inter-sibling spillovers in human capital investment becomes an empirical question. However estimates could be biased because household characteristics are
correlated with its members’ educational choices. This paper overcomes the endogeneity problem by utilizing a natural experiment in Nepal where a change in the education requirement to join the British Gurkha Army led to an exogenous increase in returns to education for age eligible boys from the Gurkha ethnic group. I use ethnicity, presence of male siblings, and the male siblings’ age in a triple difference strategy to estimate the educational impacts on girls living in Gurkha households with an eligible male sibling. The results suggest that having an eligible boy in the household decreased the female sibling’s education by an average of 0.11 years. This reflects a 7% decrease compared to girls without an eligible male sibling. The negative effect is strengthened for larger numbers of eligible male siblings and for smaller age differences between the male and female.

CHAPTER 3
ACCESS TO NORTH-SOUTH ROADS AND ECONOMIC BENEFITS IN RURAL NEPAL

Transportation infrastructure in rural areas is an important development strategy in low-income countries. However, accurate estimates of the economic benefits from such investments are limited. Comparing regions with various degrees of infrastructure gives a biased estimate of its effect on economic development because development in and of itself also increases demand for infrastructure. I overcome this endogeneity by constructing an instrument for road networks based on a unique geographic feature that partly determines the placement of rural roads in Nepal. The cheaper cost of constructing a north-south road relative to an east-west road to connect the district headquarters led to greater access for villages in north-south hinterlands relative to those in east-west hinterlands. I use this to estimate the positive impacts of better rural transportation infrastructure on individuals’ labor market outcomes as well as their propensity for urban migration. The results are robust to controls for various geographic characteristics such as elevation, ruggedness, and steepness.