This paper uses the historical episode of the near-elimination of commuting from the West Bank into Israel, which caused a large and rapid expansion of the local labor force in the West Bank, to test the predictions of the Heckscher-Ohlin-Vanek (HOV) model of trade. I use variation between districts in the West Bank to test these predictions, and find strong support for them: Wage changes were not correlated with the size of the shock to the district labor force (Factor Price Insensitivity); Districts that received larger influx of returning commuters shifted production more towards labor intensive industries (Rybczynski effect); And on the consumption side, the data are consistent with the assumption of identical homothetic preferences, which, combined with the production results, supports the Heckscher-Ohlin-Vanek theorem on the factor content of trade.