

public assistance) also more likely to participate in such programs? Does the use of such programs cause export success, or does export success increase the demand for the use of government services that fall under this category?

Bernard and Jensen (2004) use a panel of data on US firms. This allows them to control for unobserved heterogeneity. They find that state-level expenditures on export promotion have no effect on the probability that firms will export. However, they note that their panel contains data on relatively larger firms; since most export promotion agencies tend to target small and medium sized firms, their sample may exclude those firms for which such programs are most effective. Alvarez (2004) uses firm-level data and investigates the effects of Chilean government export assistance programs on export success. He models the participation of firms in public export assistance programs and finds that that trade shows and trade missions do not increase the probability of export success, although participation in government-supported export committees is positively correlated with export success.

Rose (2005) does not look at export promotion programs *per se*, but rather asks whether the presence of embassies and consulates (and their personnel) in a country contributes to increased exports to that country. There is an important endogeneity problem in that one would export a much larger foreign service presence in a country with which there is a larger trading relationship—that is, trade success could be determining the size of the foreign service contingent rather than vice versa. Rose uses a gravity model with panel data. Fixed effects control for unobserved heterogeneity and instrumental variables are used to control for endogeneity. He concludes that the establishment of a consulate appears to have a small positive effect on exports to a country.

Hence at this stage, there is very little evidence on the effectiveness of government-sponsored programs to promote exports. There is some evidence that export success is correlated with the presence of this type of program, but only a couple of studies have attempted to grapple with the reverse causation issue. This is a fruitful area for future research.