

will fail, before hitting upon a path that is fruitful. However, once the right path is found by one firm, others can follow it without going through the costly trial and error process. The successes and failures of particular firms in trying different strategies in new markets provide information to other firms about what might work and what might not. This is another example of an information spillover. It is different than the type of information spillovers discussed in the section above. In that section, the focus was on information that already existed based on previous histories and experiences. The information simply had to be assembled, synthesized and disseminated. The information I am focussing on in this section can only be generated by the activities of private firms that try new ideas and different strategies in new markets. No one knows ahead of time what will work or not work and so the only way to generate the information is for firms to make the investments in sunk costs and try to succeed. Some will, and some won't. But the results of their activities, positive or negative, generate information to others. The issue is whether a free market will yield the efficient level of experimentation, or more specifically, will a sufficient number of firms be willing to make the investments in sunk costs to enter foreign markets?

Hausmann and Rodrik (2003) and Hausmann, Hwang and Rodrik (2007) developed a model which can be adapted to provide a useful way of thinking about this problem. In their model, there is uncertainty about costs and productivity for various goods within a country. Firms have to spend fixed (sunk) costs to try different opportunities. Their success or failure conveys information to other firms—if they are successful, entry occurs and the entrants can avoid paying the fixed discovery costs. This yields spillovers across firms. One implication is that there will be underinvestment in exploration of production opportunities. Hausmann et al. then explore the implications of this work for the design of an industrial policy.

Our focus here is not on industrial policy, but on the incentives of domestic firms to engage in foreign markets. However, their model can be reinterpreted and adapted to yield some insight into our problem. Suppose that firms in the home country