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Entrepreneurial talent, occupational choice, and trickle up policies

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Abstract

We study market inefficiencies and policy remedies when agents choose their occupations, and entrepreneurial talent is subject to private information. Untalented entrepreneurs depress the returns to entrepreneurship because of adverse selection. The severity of this problem depends on the outside option of entrepreneurs, which is working for wages. This links credit, product and labor markets. A rise in wages reduces the adverse selection problem. These multimarket interactions amplify productivity shocks and may generate multiple equilibria. If it is impossible to screen entrepreneurs then all agents unanimously support a tax on entrepreneurs that drives out the less talented ones. However, if screening is possible, e.g., if wealthy entrepreneurs can provide collateral for their loans, then wealthy entrepreneurs do not support surplus enhancing taxes.

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1. Introduction

When an occupation is subject to adverse selection, talented individuals receive less than the full marginal social return of their talents. This typically creates inefficiencies. For example, if consumers cannot distinguish high-quality from low-quality goods, then the competitive equilibrium price will reflect the average quality [2]. As a consequence, producers of high-quality

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goods may produce too little or leave the market. Alternatively, suppose setting up a new business requires credit. If the probability that a loan is repaid depends on the unobserved talent of the entrepreneur, then the equilibrium interest rate will reflect the average talent in the market [21]. Therefore, untalented entrepreneurs impose a negative externality on talented entrepreneurs. This negative externality reduces the incentives of talented entrepreneurs to borrow and invest.

These consequences of adverse selection are well known. However, they have been derived in partial equilibrium models. In partial equilibrium, the entrepreneur's outside option is exogenously given. But suppose the outside option of the entrepreneur is to work for wages. The wage depends on investment and output decisions made by other entrepreneurs, which are influenced by the adverse selection problem. In this case it may be misleading to treat the outside option as exogenous when analyzing the adverse selection problem.

In this paper, we develop a general equilibrium model of occupational choice, where the entrepreneur's outside option is endogenized. The returns to different occupations depend on the quality of the pool of entrepreneurs, i.e., the extent of the adverse selection problem. But the severity of the adverse selection problem depends on the outside option of the entrepreneurs, which in turn depends on the returns to different occupations. Thus, there is a two-way interaction between allocation of talent and the returns to different occupations. This two-way interaction can make the adverse selection problem more severe. Policies such as subsidies to entrepreneurs may have unintended consequences. Unlike the Akerlof model, multiple equilibria can exist even if firms and banks are not price takers. On the other hand, our model yields a richer set of policy remedies. In particular, the adverse selection problem may be remedied by policies that influence the outside option, for example by raising the minimum wage.

In our model agents can choose between supplying labor as workers and becoming entrepreneurs. Entrepreneurs borrow capital from banks and sell their output in the product market. Entrepreneurial talent is private information, so adverse selection may occur in the credit or the product market (but not in the labor market). No screening instruments are available in the basic model. The product price or the interest rate depend on the *average* talent level in the pool of active entrepreneurs. This in turn depends on the wage in the labor market, which is the outside option of entrepreneurs. The wage is endogenously determined in general equilibrium. In equilibrium, the least talented entrepreneurs will typically be indifferent between remaining entrepreneurs and becoming workers. Because they are less talented than the average of the pool of active entrepreneurs, they impose a negative externality on other entrepreneurs. After a wage increase, the least talented entrepreneurs switch occupations, so the average quality of the pool goes up. This *pool quality effect* causes the price to go up or the interest rate to go down. Thus, a wage increase can be good not only for workers, but also for entrepreneurs, since it implies better terms for them in the product or credit markets.

The pool quality effect can potentially lead to a *positive* relationship between wages and aggregate labor demand. When the wage goes up, the improved terms in the product or the credit market may induce the remaining entrepreneurs to hire *more* labor. The more elastic is labor demand, the stronger is the pool quality effect on labor demand.

The model has significant policy implications. Policies that benefit workers, such as a minimum wage increase, drive the least talented entrepreneurs out of business. These entrepreneurs and their workers will transfer to firms run by more talented entrepreneurs. The talented entrepreneurs obtain better terms in the product and credit markets due to the pool quality effect, which justifies their expansion even at a higher wage. The benefits initially given to workers *trickle up* to the remaining entrepreneurs. This can potentially make *all* agents better off. Indeed, if there is no screening,