

The Screening Function of Certification- Evidence from the Freshmen Labor Market

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Abstract

There are three forms of occupational regulations: registration, certification and license (Kleiner 2008). Registration is the least restrictive form which without any qualification test. Certification is more restrictive than registration which any workers can perform a relative task, but those who pass examination will be certified and given a certain level of skill proof. Licensing is the most restrictive way of regulation which regulates the right to practice by law. The function of these regulations usually include minimize uncertainty for consumer, social implications like public security and reduce the labor supply (Kleiner 2006).

From the employer perspective, certifications provide a quick way to screen a matching candidate in job market as firms normally cannot (and if so, at high cost) assess the productivity or skill level in recruiting employees with no prior experience. From the employee's perspective, the certificate represents a certain level of human capital beyond educational credentials. It can be a clear proof of some specific human capital rather than a general human capital. The screening function of occupational certification plays an important role, which may be measured by how it shortens job search durations.

As Taiwan has experienced an educational expansion (ninety percent of university enrollment rate after 2006) and the unemployment rate for highly educated workers has reached historically high levels, the students are eager to take part in certification exams in order to improve their competitive position in the job market. Besides their bachelor diploma, fortyfive percent of college graduate students hold at least one certification and the ratio are increasing year by year. The most common certifications are IT and language (mainly English and Japanese). There are also some popular industry-sponsored certifications like financial certifications and technical certifications. Can these credentials make them better off

in finding a good job and getting a job sooner?

The survey used in this study is sponsored by Taiwan's National Science Council as well as Taiwanese Ministry of Education, and it was conducted by the Center for Higher Education Research. The respondents were college graduates who graduated in June 2005 (2005–2006 academic year juniors), and were surveyed between June 2007 and February 2008. A stratified sample of 88,694 college graduate students was randomly selected from 158 universities (262,743 students) to complete a questionnaire online. The original data contained about 33.76% (88,694 workers) of all college graduates for the year 2005. It also includes those who keep on study in graduate school (26.48%), are doing military service (10.6%, mainly male) and who are searching for a job (8.5%). We keep only graduates who have a job with pay for this study. Additionally, in order to maintain the consistency of all observations, respondents with some missing data were excluded. The final sample used in this study comprised 22,404 observations.

In the survey, the respondents were asked how many months they spent searching for the current jobs. Thus, discrete time duration models are used in the empirical analysis. The left hand side is a binary variable which represent the probability of the freshman to find his/her job. Right hand side variables include thirty duration spell indicators as well as a host of individual social demographic and firm characteristics. Seven categories of certification are reported in the survey: civil servant, teacher, financial, professional technicians, language, IT and others. Because the public sector job markets have different settings, we exclude the public sector and therefore eliminate civil servants and teachers for analysis. A positive coefficient to the independent variable means positive associate to the probability of a college student found her or his current job. In this data set, we cannot observe any change conditions across time and therefore no time varying covariate are included in the models. In addition, wage equations are applied to measure the wage differential among workers with different certificates.

The preliminary results show that having any type of certificate does not yield a wage premium but is associated with a shorter duration in landing a job. Among the certificates, language certification contributes in both getting a higher paid job and shortening duration of search. On the other hand, IT certificates result in a negative wage returns and no clear impact on search time. The financial certificates show a positive wage premium but also have no clear effect on search duration. For job seekers with professional technical certificates, the overall

contributions to wage are negative, but they can easily find a first job. The data set allow us to do a further exploration by regrouping job seekers into two different skill levels. The basic level skills significantly yield a negative return but find a job sooner. In contrast, an advanced skill certificate yield positive premium but take longer time in get a job. The channels used in searching for jobs proved to be important, too. In contract with the modern way of surfing on the internet, the traditional method of searching vacancy on news paper is not only associated with a lower pay but also with a longer time before finding a job.

The analysis so far based on separate estimations for wage and duration. We aware that the two factors might be simultaneously determined. A structural simultaneous equations approach will be employed for in next step.

JEL codes: J32, J33, M5, M12

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