Contents lists available at ScienceDirect





journal homepage: www.elsevier.com/locate/jce

The labor supply of self-employed workers: The choice of working hours in worker co-ops $\stackrel{\text{\tiny theta}}{\to}$



FCONOMIC

John Pencavel*

Stanford University, Stanford, CA 94305-6072, United States

ARTICLE INFO

Article history: Received 30 May 2014 Revised 1 October 2014 Available online 5 November 2014

JEL Classifications: J22 J54

Keywords: Labor supply Hours Worker co-ops

ABSTRACT

Pencavel, John-The labor supply of self-employed workers: The choice of working hours in worker co-ops

Workers in cooperatives are self-employed workers and, if they resemble employees in conventional workplaces, they care about the length of their working hours. In this paper, their choice of hours is characterized as a conventional labor supply decision and a familiar hours-wage relationship is derived. This is estimated using mill-year observations on the plywood co-ops in the Pacific Northwest. The results are compared with those from the work behavior of other self-employed workers and with working hours in capitalist plywood mills. Journal of Comparative Economics 43 (3) (2015) 677-689. Stanford University, Stanford, CA 94305-6072, United States.

© 2014 Association for Comparative Economic Studies. Published by Elsevier Inc. All rights reserved.

1. Introduction

This article contributes to two literatures in economics. The first is the research on the supply of labor that focuses on the responsiveness of hours of work to wages. There is a huge body of work on this topic (Keane, 2011) prompted in part by the important public policy question of how revenue from income taxes will change when income tax rates change. In view of the fact that more than forty percent of Federal tax revenue derives from income taxes, the importance of knowing how income tax rates affect work hours and tax revenues is clear. The research on this topic will be drawn upon selectively to contrast the empirical results here with earlier findings.

The second literature touched on in this article relates to the behavior of worker cooperatives, that is, enterprises owned and managed by those who work in them. The case for and against such enterprises has been debated for many decades and this exchange is enriched when evidence can be provided on their actual operations. The orthodox characterization in economics of the behavior of the worker co-op is that it maximizes the net returns per member-worker. This monetary objective was proposed by Ward (1958) to contrast it with the profit maximization goal of the capitalist enterprise that is owned and managed (often indirectly) by the supplier of capital. A more general objective is offered here for the worker co-op, one that follows Scitovsky's (1943) amendment of profit maximization that endows the capitalist entrepreneur with

* Fax: +1 (650) 725 5702.

E-mail address: pencavel@stanford.edu

http://dx.doi.org/10.1016/j.jce.2014.10.001

^{*} Research assistance from Monica Bhole is gratefully acknowledged. The work reported in this paper formed the basis of a presentation at the Conference of the International Association for the Economics of Participation (IAFEP) in July 2014. I benefitted from comments of the participants at this conference and from two anonymous referees. The data used in this article are available in the appendix to the paper at http://siepr.stanford.edu/?q=/system/files/ shared/pubs/papers/13-036.pdf.

^{0147-5967/© 2014} Association for Comparative Economic Studies. Published by Elsevier Inc. All rights reserved.



Fig. 1. Softwood structural panel board production: percent of total U.S. production of plywood from Washington and Oregon and from Southern States, 1964–2011. Softwood structural panel board production includes plywood, waferboard and oriented strand board. The Southern States are Alabama, Arkansas, Florida, Georgia, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Texas, Virginia, and West Virginia. From U.S. Forest Service, Pacific Northwest Research Station, Production, Prices, Employment, and Trade in Northwest Forest Industries All Years, http://www.fs.fed.us/pnw/ppet/.

a utility function in which both monetary returns and working hours are arguments. Analogously, allowing the co-op to tradeoff income for working hours implies a labor supply decision for the co-op workers and this trade-off is estimated below.

As the co-op is a group of self-employed workers, all of whom work the same number of hours and earn the same hourly returns, their estimated labor supply behavior may be compared with that estimated for other self-employed individuals. If the hours of workers in co-ops are unrelated to their work incentives, Ward's maximand – net monetary returns per member–worker – is sustained.

The worker co-ops to be examined are those engaged in plywood production in the Pacific Northwest between 1968 and 1986. In the twentieth century, these enterprises constituted the most substantial worker-owned and worker-managed sector in United States manufacturing industry. After providing a brief description of these worker co-ops, the model will be outlined and then fitted to observations on these enterprises. On the assumption that the resulting hours-wage relationship reflects the preferences of plywood workers, the hours worked in co-ops are compared with the hours worked by employees in a conventional (capitalist) plywood mill. This comparison leads to the inference that hours are shorter in the capitalist mill than those preferred by plywood workers, a consequence of the higher wages that discourage the typical capitalist mill from selecting hours that workers prefer. In short, in the capitalist mill, the hours-wage relationship expresses the preferences of the owners or managers, not those of the workers.

2. The plywood mills of the Pacific Northwest

The establishment of the Olympia Veneer Company in 1921 is usually taken to represent the birth of the worker cooperatives in the plywood industry of the Pacific Northwest. It served as the paradigm for the worker-owned and worker-managed enterprises that were established in subsequent decades in the plywood industry. In the 1950s, almost one hundred percent of U.S. softwood plywood was produced in the Pacific Northwest and between one-quarter and one-fifth of that was made in the co-ops (Berman, 1967, p.93). After that time, the importance of the Northwest in the U.S. production of plywood declined because of depletion of its old timber forests, environmental restrictions on logging, and the subsequent rising cost of logs. The use of southern pine for plywood allowed the South to displace the Northwest as the major region of plywood production in the U.S.¹ See Fig. 1. So, with the empirical analysis restricted to mills producing plywood between 1968 and 1986, this is a study of firms in a declining industry in this location. As the industry contracted in the Pacific Northwest so many co-ops closed; some converted to conventional forms of organization. Whereas Berman (1967) surveyed 24 plywood co-ops in the Pacific Northwest in 1964, at the time of writing, I am able to confirm only one of them still operating in Washington state.²

The research reported below relies upon 55 mill-year observations on eleven co-op mills in even-numbered years between 1968 and 1986. The set of observations is not balanced. The identity of the co-ops examined here are listed in Table 1 together with the dates of their birth and, if known, the dates of their demise. All these plywood co-ops were in Washington state.³ Other information on these co-ops is supplied in Table 1 including their size and their capital equipment. By no means were these co-ops all the same and this will be recognized in the equations fitted below that allow for fixed differences among them.

¹ "The total wood cost in the South is slightly less than in Oregon and Washington. Most of this difference is due to lower logging and hauling costs. The terrain in the South is much gentler than that in western Oregon and Washington, so all logging can be done by tractors/skidders." Oregon Forest Resources Institute (2012, p.70).

² This is Hardel Mutual Plywood in Chehalis which was described by another plant's manager as "still going strong".

³ A number of plywood co-ops operated in Oregon and at least two in northern California, but the state of Washington conducted a survey of plywood mills every two years and this provided information on the output and raw material inputs of these mills. Oregon's mills contributed to the study of the co-ops' share prices (Craig and Pencavel, 1992), but information is lacking on their hours of work.

دريافت فورى 🛶 متن كامل مقاله

- امکان دانلود نسخه تمام متن مقالات انگلیسی
 امکان دانلود نسخه ترجمه شده مقالات
 پذیرش سفارش ترجمه تخصصی
 امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
 امکان دانلود رایگان ۲ صفحه اول هر مقاله
 امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
 دانلود فوری مقاله پس از پرداخت آنلاین
 پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات
- ISIArticles مرجع مقالات تخصصی ایران