Rent-sharing, Hold-up, and Wages: Evidence from Matched Panel Data

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## ABSTRACT

A variety of bargaining models predict that more profitable firms pay higher wages, particularly in the presence of unions. Existing empirical studies have confirmed this prediction, although there is still some debate about whether the correlation between wages and profits is actually caused by rent sharing, or by other factors. A closely related literature suggests that bargaining over rents reduces the incentive for investment, since once capital is installed it becomes a source of quasi-rent, and some of the return is captured by workers. This "hold-up" phenomenon is thought to have contributed to the decline of unionized firms in the US and other countries with decentralized collective bargaining. In this paper we use a rich longitudinal dataset from the Veneto region of Italy that combines Social Security earnings records for 1.5 million workers with detailed balance sheet data for over 30,000 firms to measure the degree of rent sharing and test for potential hold-up problems. Our main empirical models include worker-firm match effects that allow us to abstract from permanent differences in productivity across workers, firms, and job matches. We also compare OLS and instrumental variables specifications that use sales of firms in the same industry in other regions of the country to instrument value-added per worker. We find consistent evidence of a modest degree of rentsharing, with a "Lester range" of variation in wages between profitable and unprofitable firms of about 15-20%. On the other hand we find no evidence of hold-up: firm-level bargaining in Italy appears to split the rents after fully accounting for the cost of capital. The absence of holdup concerns is confirmed by a reduced-form analysis of the effects of capital investment on future wages.