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Comparing Micro-Evidence on Rent Sharing from Three Different Approaches

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Comparing micro-evidence on rent sharing from three different approaches*

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Abstract

Empirical labor economists have resorted to estimating the responsiveness of workers' wages on firms' ability to pay to assess the extent to which employers share rents with their employees. This paper compares this labor economics approach with two other approaches that rely on standard micro production data only: the productivity approach for which estimates of the output elasticities of labor and materials and data on the respective revenue shares are needed and the accounting approach which boils down to directly computing the extent of rent sharing from firm accounting information. Using matched employer-employee data on 60,294 employees working in 9,849 firms over the period 1984-2001 in France, we quantify industry differences in rent-sharing parameters derived from the three approaches. We find a median absolute extent of rent sharing of about 0.30 using either the productivity or the accounting approach. Only exploiting firm-level information brings this median rent-sharing parameter down to 0.16 using the labor economics approach. Controlling for unobserved worker ability further reduces the median absolute extent of rent sharing to 0.08. Our analysis makes clear that the three different approaches face important trade-offs. Hence, empirical economists interested in establishing that profits are shared should select the appropriate approach based on the particular research question and on the data at hand.

JEL classification : C23, D21, J31, J51.

Keywords : Rent sharing, wage equation, production function, matched employer-employee data.

1 Introduction

Contrary to the Walrasian (competitive) labor market model, collective bargaining models predict a positive relationship between wages of comparable workers and the profits of their firms.[1] Starting from this theoretical

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[1]Similar predictions are derived from a competitive labor market model with temporary frictions and positively sloped labor supply schedules, an efficiency wage model in which firms use higher wages as an incentive to improve employees' effort or a

conjecture, a multitude of empirical studies have examined the effect of industry or firm performance on wages using either industry or firm data and have tested the rent-sharing hypothesis (e.g. Katz and Summers, 1989, Blanchflower *et al.*, 1996 and Estevao and Tevlin, 2003 for the US; Christofides and Oswald, 1992 and Abowd and Lemieux, 1993 for Canada; Teal, 1996 for Ghana; Van Reenen, 1996 for the UK; Goos and Konings, 2001 and Brock and Dobbelaere, 2006 for Belgium; Blanchflower *et al.*, 1990, Holmlund and Zetterberg, 1991, Nickell *et al.*, 1994 and Hildreth and Oswald, 1997 for a sample of European countries). These studies, which are based on different identification strategies, show without exception that changes in industry or firm profitability feed through into long-run changes in wages. In general, the estimated elasticities between wages and profits per employee range between 0.02 and 0.20, depending on the quality of the instruments used to control for the endogeneity of profits. Following the seminal contribution of Abowd *et al.* (1999), providing a statistical decomposition of individual wages into worker and firm effects and focusing on the private sector in France, and thanks to the availability of matched employer-employee datasets, more recent studies account for non-random sorting of high-ability (and thus high-wage) workers into high-profit firms (e.g. Margolis and Salvanes, 2001 for France and Norway; Bronars and Famulari, 2001 for the US; Arai, 2003 and Nekby, 2003 for Sweden; Kramarz, 2003 for France; Rycx and Tojerow, 2004 and Du Caju *et al.*, 2011 for Belgium; Guertzgen, 2009 for Germany; Martins, 2009 for Portugal). Using matched employer-employee data to control for unobserved worker abilities, these studies typically obtain smaller effects of firms' ability to pay on individual wages (in the [0.01-0.04]-range) compared to studies based on firm-level data.

Although most empirical labor economists have provided evidence on rent sharing by testing the theoretical conjecture that firms' profitability is an important determinant of workers' wages, another set of studies have relied on embedding the efficient bargaining framework (McDonald and Solow, 1981) into standard production function theory to recover rent-sharing parameters. Using only production data, they either estimate a structural model with a full set of explicitly specified factor share equations and the production function (Bughin, 1996 for Belgium; Dumont *et al.*, 2006 for a sample of European countries) or extend the original Hall (1988) framework for estimating price-cost margins and estimate a reduced-form total factor productivity equation (Crépon, Desplatz and Mairesse, 1999, 2005 for France; Dobbelaere, 2004 and Abraham *et al.*, 2009 for Belgium; Boulhol *et al.*, 2011 for the UK). Depending on the estimation strategy, these studies find estimated absolute extent of rent-sharing parameters ranging between 0.10 and 0.60.

The aforementioned evidence on rent sharing stems from one particular empirical approach chosen by the researcher. Our contribution to the empirical collective bargaining literature is to paint a richer picture of rent sharing by examining how the extent of rent sharing is conditioned by the chosen approach. More specifically, this paper provides micro-evidence on rent sharing from orthogonal directions by exploiting different dimensions in the same data, a matched employer-employee dataset, covering 103,995 employees working in 14,921 firms belonging to 52 manufacturing industries over the period 1984-2001 in France. Our analysis serves the purpose of quantifying industry differences in rent-sharing parameters derived from three approaches that differ in terms of data requirements and modeling assumptions.

The first approach, developed in Dobbelaere and Mairesse (2013), uses econometric production functions as a tool for testing the competitiveness of labor and product markets and for assessing their degree of

labor contract model in which workers and firms are risk-sharing (see e.g. Blanchflower *et al.*, 1996; Hildreth and Oswald, 1997).

imperfection.[2] This approach, to which we refer as the *productivity approach*, only exploits the firm-level panel and requires data on production values, factor inputs and factor costs. It is based on the gap methodology which essentially starts from the observation that any factors that create misallocation of resources can be thought of as generating wedges in the first-order conditions of firm optimization problems. As such, differences between the estimated industry-specific output elasticities of labor and materials and their revenue shares are key to classifying industries in regimes characterizing the type of competition prevailing in product and labor markets. Considering two product market settings (perfect competition (PC) and imperfect competition (IC)) and three labor market settings (perfect competition or right-to-manage bargaining (PR), Nickell and Andrews, 1983, efficient bargaining (EB) and monopsony (MO), Manning, 2003), we distinguish six regimes.

We define both the labor market and the product market at the level of the 2-digit industry classification. The industry classification for product markets is rather straightforward. The operational definition of the labor market is motivated by the fact that France is characterized by industry-based unionism, justifying an analysis at the industry level. An additional reason for the selection of France is that the government often extends the terms of industry-level bargaining agreements to all employers, implying that collective bargaining coverage is very high (around 95%), making a rent-sharing analysis particularly relevant.

Taken the productivity approach as our benchmark, we select the 25 out of the 52 industries that are characterized by imperfect competition in the product market and efficient bargaining in the labor market. For these IC-EB-industries, we derive industry-specific estimates of extent of rent-sharing parameters and compare those with rent-sharing parameters obtained from the two other approaches, referred to as the *labor economics approach* and the *accounting approach*. From a conceptual point of view, these two approaches share a common feature. They are compatible with worker-firm negotiations that differ in terms of bargaining scope. Bargaining issues might involve only wages, in which case the firm retains the right to determine employment unilaterally (right-to-manage bargaining), wages and employment (efficient bargaining) or wages and working practices (labor hoarding, Haskel and Martin, 1992). However, they differ in terms of data requirements: similar to the productivity approach, the accounting approach only uses the firm-level panel whereas the labor economics approach exploits the worker-firm panel. In the labor economics approach, we estimate a wage equation taking into account unobserved worker and firm heterogeneity. From the estimated industry-specific wage-profit elasticities, we retrieve industry-specific rent-sharing parameters. Under the assumption of constant returns-to-scale and a particular measurement of the workers' alternative wage, we compute directly industry-specific measures of rent sharing from firm accounting information on production values, variable factor inputs and variable factor costs in the accounting approach.

Irrespective of the approach, we find sizeable differences in the absolute extent of rent sharing across the 25 IC-EB-industries with the degree of dispersion lying in the [0.10-0.20]-range. Based on the firm-level panel dimension only, the median absolute extent of rent sharing amounts to 0.29 according to the productivity approach and 0.32 according to the accounting approach. Only exploiting firm-level information brings the

[2] This approach has been implemented in three comparative studies: one using firm-level data for Belgium and the Netherlands (Dobbelaere and Vancauteren, 2014), one using firm-level data for France, Japan and the Netherlands (Dobbelaere *et al.*, 2015a) and another using firm-level data for Chile and France (Dobbelaere *et al.*, 2015b).

median absolute extent of rent sharing down to 0.16 using the labor economics approach. Controlling for unobserved worker ability –thereby considering the possibility that high-ability workers might be systematically sorted into high-profit firms– further reduces the median absolute extent of rent sharing to 0.08. Converting the rent-sharing parameters obtained from the productivity and the accounting approach into wage-profit elasticities shows that the median values of wage-profit elasticities lie in the [0.035-0.30]-range. The median wage-profit elasticities derived from the productivity or the accounting approach are 6 to 8 times higher than the ones derived from the labor economics approach. These differences across the three approaches can be attributable to differences in the sources of identification of the rent-sharing parameters and to differences in modeling assumptions about the underlying labor bargaining setting and the nature of competition in the product market. Hence, our analysis clearly shows that the three approaches face important trade-offs. Empirical economists interested in quantifying the impact of profitability conditions on wages should thus carefully select the appropriate approach based on the particular research question and on the data at hand.

We proceed as follows. Section 2 discusses the productivity approach. Section 3 presents the labor economics approach. Section 4 focuses on the accounting approach. Section 5 compares industry differences in rent-sharing parameters across the three approaches. Section 6 concludes.

2 Productivity approach

2.1 Theoretical framework

This section discusses, what we call, the *productivity approach* to recovering the extent of rent sharing. In contrast to the most popular approach in empirical labor economics which relies on a wage equation estimation, this approach requires standard production data while allowing for three distinct labor market settings (perfect competition or right-to-manage bargaining, efficient bargaining and monopsony). Essentially, this approach nests the canonical rent-sharing models and the monopsony model in the seminal framework of Hall (1988) for estimating price-cost margins and scale economies. These imperfectly competitive models of wage determination are both intuitively appealing and tractable and can be viewed as representing two polar extremes: rent-sharing models allocate market power to employees through costs of firing, hiring and training while the monopsony model allocates market power to employers through search frictions or heterogeneous worker preferences for job characteristics which generate upward sloping labor supply curves to individual firms (Booth, 2014). We present the main ingredients of the theoretical framework. For technical details, we refer to Dobbelaere and Mairesse (2013).

We start from a production function $Q_{it} = \Theta_{it} F(N_{it}, M_{it}, K_{it})$, where i is a firm index, t a time index, N is labor, M is material input and K is capital. $\Theta_{it} = Ae^{\eta_i + u_t + \upsilon_{it}}$, with η_i an unobserved firm-specific effect, u_t a year-specific intercept and υ_{it} a random component, is an index of technical change or "true" total factor productivity. Denoting the logarithm of Q_{it}, N_{it}, M_{it}, K_{it} and Θ_{it} by q_{it}, n_{it}, m_{it}, k_{it} and θ_{it} respectively, the logarithmic specification of the production function gives:

$$q_{it} = (\varepsilon_N^Q)_{it} n_{it} + (\varepsilon_M^Q)_{it} m_{it} + (\varepsilon_K^Q)_{it} k_{it} + \theta_{it} \quad (1)$$

where $(\varepsilon_J^Q)_{it}$ $(J = N, M, K)$ is the elasticity of output with respect to input factor J.

Firms operate under imperfect competition in the product market (IC). We allow for three labor market settings (LMS): perfect competition or right-to-manage bargaining (PR)[3], efficient bargaining (EB) and monopsony (MO). We assume that material input and labor are variable factors. Short-run profit maximization implies the following first-order condition with respect to material input:

$$(\varepsilon_M^Q)_{it} = \mu_{it} \, (\alpha_M)_{it} \tag{2}$$

where $(\alpha_M)_{it} = \frac{j_{it} M_{it}}{P_{it} Q_{it}}$ is the share of material costs in total revenue and $\mu_{it} = \frac{P_{it}}{(C_Q)_{it}}$ refers to the mark-up of output price P_{it} over marginal cost $(C_Q)_{it}$. Depending on the prevalent LMS, short-run profit maximization implies the following first-order condition with respect to labor:

$$\begin{aligned} (\varepsilon_N^Q)_{it} &= \mu_{it} \, (\alpha_N)_{it} \qquad \text{if } LMS = PR && (3) \\ &= \mu_{it} \, (\alpha_N)_{it} - \mu_{it} \gamma_{it} \, [1 - (\alpha_N)_{it} - (\alpha_M)_{it}] \qquad \text{if } LMS = EB && (4) \\ &= \frac{\mu_{it} \, (\alpha_N)_{it}}{\beta_{it}} \qquad \text{if } LMS = MO && (5) \end{aligned}$$

where $(\alpha_N)_{it} = \frac{w_{it} N_{it}}{P_{it} Q_{it}}$ is the share of labor costs in total revenue. $\gamma_{it} = \frac{\phi_{it}}{1-\phi_{it}}$ represents the relative extent of rent sharing, $\phi_{it} \in [0, 1]$ the absolute extent of rent sharing, $\beta_{it} = \frac{(\varepsilon_w^N)_{it}}{1+(\varepsilon_w^N)_{it}}$ and $(\varepsilon_w^N)_{it} \in \Re_+$ the wage elasticity of the labor supply. From the first-order conditions with respect to material input and labor, it follows that the parameter of joint market imperfections (ψ_{it}):

$$\begin{aligned} \psi_{it} &= \frac{(\varepsilon_M^Q)_{it}}{(\alpha_M)_{it}} - \frac{(\varepsilon_N^Q)_{it}}{(\alpha_N)_{it}} && (6) \\ &= 0 \qquad \text{if } LMS = PR && (7) \\ &= \mu_{it} \gamma_{it} \left[\frac{1 - (\alpha_N)_{it} - (\alpha_M)_{it}}{(\alpha_N)_{it}} \right] > 0 \qquad \text{if } LMS = EB && (8) \\ &= -\mu_{it} \frac{1}{(\varepsilon_w^N)_{it}} < 0 \qquad \text{if } LMS = MO && (9) \end{aligned}$$

Assuming that the elasticity of scale, $\lambda_{it} = (\varepsilon_N^Q)_{it} + (\varepsilon_M^Q)_{it} + (\varepsilon_K^Q)_{it}$, is known, the capital elasticity can be expressed as:

$$(\varepsilon_K^Q)_{it} = \lambda_{it} - (\varepsilon_N^Q)_{it} - (\varepsilon_M^Q)_{it} \tag{10}$$

Inserting Eqs. (2), (6) and (10) in Eq. (1) and rearranging terms gives:

$$q_{it} = \mu_{it} \, [(\alpha_N)_{it} \, (n_{it} - k_{it}) + (\alpha_M)_{it} \, (m_{it} - k_{it})] + \psi_{it} (\alpha_N)_{it} \, (k_{it} - n_{it}) + \lambda_{it} k_{it} + \theta_{it} \tag{11}$$

2.2 Estimation method

We use econometric production functions as a tool for testing which type of product/labor market setting prevails and for assessing the degree of market power in product and labor markets. Since we define both the product market and the labor market at the level of the 2-digit industry classification and our study aims

[3] Our framework does not allow to disentangle perfect competition in the labor market from right-to-manage bargaining. In both settings, labor is unilaterally determined by the firm from profit maximization, i.e. the wage rate equals the marginal revenue of labor.

at comparing industry differences in rent-sharing parameters across three different approaches, we estimate average parameters. The empirical specification that acts as the bedrock for the regressions at the industry level is hence given by:

$$q_{it} = \mu\left[\alpha_N\left(n_{it} - k_{it}\right) + \alpha_M\left(m_{it} - k_{it}\right)\right] + \psi\alpha_N\left(k_{it} - n_{it}\right) + u_t + \zeta_{it} \tag{12}$$

with $\zeta_{it} = \omega_{it} + \epsilon_{it}$. Of the error components, ω_{it} represents unobserved productivity to the econometrician but possibly observed by the firm at t when input decisions are made (transmitted productivity shock), while ϵ_{it} captures all other sources of error or productivity that is not observed by the firm before making input choices at t. Our method of retrieving product and labor market imperfection parameters from the gap between the estimated *average* output elasticities of labor and materials and their *average* revenue shares allows to wash out firm-level differences in adjustment costs which are temporary in nature, i.e. related to the business cycle.

The most important methodological issues that emerge when estimating microeconomic production functions are the simultaneity bias, omitted price bias, selection bias/endogeneity of attrition and measurement error. We focus here on the first one.[4] The recent literature on production function estimation is dominated by two econometric approaches that differ in handling endogeneity of inputs and unobserved productivity in models linear in parameters. Intuitively, both approaches differ in the way they put assumptions on the economic environment that allow econometricians to exploit lagged input decisions as instruments for current input choices. The parametric generalized method of moments (*GMM*) approach relies on instrumental variables. The semiparametric structural control function approach uses observed variables and economic theory to invert out productivity nonparametrically and hence to obtain an observable expression for productivity. Since (*i*) we are primarily interested in retrieving consistent production function coefficients rather than an accurate measure of productivity and (*ii*) we prefer to implement the same estimation method in the labor economics approach (see Section 3.2), we judge the parametric *GMM* approach to be the most appropriate.

In particular, we rely on a general approach to estimating error components models designed for panels with few time periods and many individuals, covariates that are not strictly exogenous, unobserved heterogeneity, heteroskedasticity and autocorrelation within individuals, developed by Arellano and Bover (1995) and Blundell and Bond (1998) (*SYS-GMM* estimator). This approach extends the standard *(first-differenced) GMM* estimator of Arellano and Bond (1991) by relying on a richer set of orthogonal conditions.[5] The error components are an unobserved fixed effect (η_i), a possibly autoregressive productivity shock ($\omega_{it} = \rho\omega_{it-1} + \xi_{it}$ with $|\rho| < 1$) and serially uncorrelated measurement errors (ϵ_{it}), with $\xi_{it}, \epsilon_{it} \sim i.i.d.$ Consistent with our static theoretical framework, we estimate the restricted version of the Blundell-Bond model and only consider idiosyncratic productivity shocks (imposing $\rho = 0$).

We apply the two-step *GMM* estimator which is asymptotically more efficient than the one-step *GMM* estimator and which is robust to whatever patterns of heteroskedasticity and cross-correlation. We use a

[4] We refer the reader to Van Beveren (2012) for a descriptive overview and to Dobbelaere *et al.* (2015a) for a discussion of these issues.

[5] The Arellano-Bover/Blundell-Bond estimator assumes that the first differences of the instrumental variables are uncorrelated with the fixed effects, which allows the introduction of more instruments which might improve efficiency dramatically.

finite-sample correction to the two-step covariance matrix developed by Windmeijer (2005). We build sets of instruments following the Holtz-Eakin *et al.* (1988)-approach which avoids the standard two-stage least squares trade-off between instrument lag depth and sample depth by including separate instruments for each time period and substituting zeros for missing observations. To avoid instrument proliferation, we only use 2- and 3-year lags of the instrumented variables as instruments in the first-differenced equation and the 1-year lag of the first-differenced instrumented variables as instruments in the original equation. The validity of *GMM* crucially hinges on the assumption that the instruments are exogenous. We report both the Sargan and Hansen test statistics for the joint validity of the overidentifying restrictions.[6] In addition to the Hansen test evaluating the entire set of overidentifying restrictions/instruments, we provide difference-in-Hansen statistics to test the validity of subsets of instruments.

2.3 Data requirements: Firm-level panel

The key insight from the productivity approach is that industry-specific parameters of product and labor market imperfections can be uncovered from production data with only information on production values, usage of inputs and inputs costs, therefore only exploiting the firm-level panel. The firm accounting data are sourced from EAE ("Enquête Annuelle d'Entreprise", "Service des Etudes et Statistiques Industrielles" (SESSI)). Our estimation period covers the years 1984-2001. Since our instrumentation strategy entails using up to 3-year lags of input factors as instruments and we have firm accounting information prior to 1984, we restrict our total sample to firms having at least four consecutive observations during the period 1981-2001. After some trimming on firm input shares in total revenue, firm input growth rates, firm average wages and firm accounting profits to eliminate outliers and anomalies in the total sample, our estimation sample consists of an unbalanced panel of 14,921 firms covering the period 1984-2001. Table B.1 in Appendix B gives the panel structure of the total sample (period 1981-2001) and the estimation sample (period 1984-2001).

Output is defined as current production deflated by the two-digit producer price index.[7] Labor (N) refers to the average number of employees in each firm for each year. Material input (M) is defined as intermediate consumption deflated by the two-digit intermediate consumption price index. The capital stock (K) is measured by the gross bookvalue of fixed assets. The shares of labor (α_N) and material input (α_M) are constructed by dividing respectively the firm total labor cost and undeflated intermediate consumption by the firm undeflated production and by taking the average of these ratios over adjacent years.

[6] We opt to report both the Sargan and the Hansen statistics after the two-step estimations since the Sargan tests do not depend on an estimate of the optimal weighting matrix and are hence not so vulnerable to instrument proliferation. On the other hand, they require homoskedastic errors for consistency which is not likely to be the case. As documented by Andersen and Sørensen (1996) and Bowsher (2002), instrument proliferation might weaken the Hansen test of instrument validity to the point where it generates implausibly good p-values (see Roodman, 2009 for a discussion).

[7] As in many firm-level datasets, we observe firm-level revenues and not prices and quantities separately. The productivity literature is dominated by two approaches to deal with this issue. One approach deflates firm-level revenues by an industry-level price index and thus estimates a revenue production function rather than an output production function. The other approach follows Klette and Griliches (1996) which amounts to adding the growth in industry output as an additional regressor. Theoretically, this approach relies on the assumption that the market power of firms originates from product differentiation. Intuitively, in the case of product differentiation, the demand for an individual firm's products is a function of its relative price within the industry. Relative price differences can then be expressed in terms of relative output growth differences in the industry. We follow the predominant approach in the literature and use the former.

Table 1 reports the mean, standard deviation and quartile values of our main variables needed for implementing the productivity approach. The average growth rate of real firm output is 3.1% per year over the period 1984-2001. Labor, materials and capital have increased at an average annual growth rate of 1.1%, 4.4% and 0.5% respectively. The median shares of labor and materials in total revenue amount to 0.29 and 0.52 respectively.

<Table 1 about here>

As discussed above, we allow for heterogeneity of the production technology across firms by breaking the estimation sample into 52 manufacturing industries, which are based on the French industrial classification ("Nomenclature économique de synthèse - Niveau 3" [NES 114]). The fourth column of Table B.2 in Appendix B presents the number of firms and the number of observations for each industry in the estimation sample (minimum: 547 observations).

2.4 Identification of *IC-EB*-industries

For each industry $I \in \{1, \ldots, 52\}$, we estimate the standard Cobb-Douglas production function [Eq. (12)] using the *SYS-GMM* estimator.

Eq. (8) shows that the gap between the estimated output elasticities of labor and materials and their revenue shares are key to empirical identification of the product and labor market imperfection parameters. Intuitively, in a perfectly competitive labor market or in a right-to-manage bargaining setting, the marginal employee receives a wage that equals his/her marginal revenue. As such, the only source of discrepancy between the estimated output elasticity of labor and the share of labor costs in revenue is the price-cost mark-up, just like in the materials market, yielding the value zero of the joint market imperfections parameter. In an efficient bargaining setting, the marginal employee gets a wage that exceeds his/her marginal revenue since efficient bargaining allocates inframarginal gains across employees, yielding the positive value of the joint market imperfections parameter. In a monopsony setting, on the other hand, the marginal employee obtains a wage that is less than his/her marginal revenue, yielding the negative value of the joint market imperfections parameter.

On pragmatic grounds, we consider that defining perfect competition in both product and labor markets as respectively implying $\mu_I = 1$ and $\psi_I = 0$ is too excessive. We have chosen $\mu_{I0} = 1.10$ and $|\psi_{I0}| = |0.10|$ as reasonable threshold values. Our classification procedure is entirely based on the point estimates of the price-cost mark-up μ_I and the joint market imperfections parameter ψ_I. For example, if our null hypothesis is that imperfect competition in the product market and efficient bargaining in the labor market feature the industry, we perform the following test: $H_{10} : (\mu_I - 1) > 0.10$ and $H_{20} : \psi_I > 0.10$. The test rejects that the *IC-EB*-regime applies if either H_{10} or H_{20} is rejected. This procedure is summarized in Appendix A. Once the regime is determined, we are able to derive industry-specific estimates of price-cost mark-up (μ_I) and rent-sharing (ϕ_I) parameters if the efficient bargaining model prevails or price-cost mark-up and labor supply elasticity ($\left(\varepsilon_w^N\right)_I$) parameters in case of the monopsony model (see Eq. (8) and (9), respectively).

Table B.3 in Appendix B presents the industry classification. For details on the specific industries belonging to each regime, we refer to column 8 of Table B.2 in Appendix B. Given that rent sharing is more likely to take place in industries where rents can be extracted, we select industries characterized by imperfect competition in the product market and efficient bargaining in the labor market (IC-EB) to compare average industry-specific rent-sharing parameters derived from the three approaches. The IC-EB-regime is by far the most predominant regime: 25 out of the 52 industries (48%) belong to this regime. The IC-EB-industries contain 66% of the firms ($9,849$ out of the $14,921$ firms) and represent 58% of total employment. They include the clothing, leather goods, publishing, furniture, shipbuilding, aircraft, metal products, medical and surgical equipment, paper products, rubber products and electronics industries. The lower part of Table 1 reveals a lower average growth rate of real firm output, labor and capital (of 2.6%, 0.9% and 0.3% per year, respectively) in the IC-EB-sample compared to the estimation sample which includes all the prevalent regimes.

2.5 Average rent-sharing parameters in *IC-EB*-industries

From Eq. (8), it follows that the productivity approach allows to identify average industry-specific relative rent-sharing parameters by comparing the estimated average industry-specific production function coefficients, i.e. the estimated average industry-specific output elasticities of labor and materials, with the average industry-specific shares of labor and materials in revenue:

$$\widehat{\gamma}_I = \frac{(\widehat{\varepsilon}_N^Q)_I - \left[(\widehat{\varepsilon}_M^Q)_I \frac{(\alpha_N)_I}{(\alpha_M)_I}\right]}{\frac{(\widehat{\varepsilon}_M^Q)_I}{(\alpha_M)_I}\left[(\alpha_N)_I + (\alpha_M)_I - 1\right]} \tag{13}$$

Average industry-specific absolute extent of rent-sharing parameters are calculated as $\widehat{\phi}_I = \frac{\widehat{\gamma}_I}{1+\widehat{\gamma}_I}$. The standard errors of $\widehat{\gamma}_I$ and $\widehat{\phi}_I$ are computed using the Delta Method (Wooldridge, 2002).[8] Table 2 reports different measures of rent sharing. The left part presents the average industry-specific relative and absolute extent of rent-sharing parameters which are directly derived from the productivity approach, to which we refer as γ_I^{prod} and ϕ_I^{prod} respectively. The middle part reports the average industry-specific wage-profit elasticities capturing the responsiveness of average firm wages to profits per employee. We consider two variants. The first variant is defined as follows:

$$\overline{\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I}^{prod} = \gamma_I^{prod} \times \text{ mean}\left(\widetilde{\left(\frac{\pi}{w \times N}\right)_{it}}\right) \tag{14}$$

where $\widetilde{\left(\frac{\pi}{w \times N}\right)_{it}}$ is the smoothed ratio of profits per employee to average firm wages, defined as $\frac{1}{5}\sum_{k=t-4}^{t}\left(\frac{\pi}{w \times N}\right)_{ik}$ if $\left(\frac{\pi}{w \times N}\right)_{it-4}$ is not missing, otherwise equal to $\frac{1}{4}\sum_{k=t-3}^{t}\left(\frac{\pi}{w \times N}\right)_{ik}$, and $\text{mean}\left(\widetilde{\left(\frac{\pi}{w \times N}\right)_{it}}\right)$ is the average of this ratio in industry I. The motivation for using the smoothed ratio is that firm profits exhibit large volatility.

Under the assumption that $\widetilde{\left(\frac{\pi}{w \times N}\right)}$ is lognormally distributed, i.e. $y = \ln\widetilde{\left(\frac{\pi}{w \times N}\right)}$ is normally distributed with mean μ_y and standard deviation σ_y, the second variant is defined as follows:

[8] Dropping subscripts, $(\sigma_{\widehat{\gamma}})^2 = \left(\frac{\alpha_M}{\alpha_N+\alpha_M-1}\right)^2 \frac{\left(\widehat{\varepsilon}_M^Q\right)^2\left(\sigma_{\widehat{\varepsilon}_N^Q}\right)^2 - 2\,\widehat{\varepsilon}_N^Q\,\widehat{\varepsilon}_M^Q\left(\sigma_{\widehat{\varepsilon}_N^Q,\widehat{\varepsilon}_M^Q}\right) + \left(\widehat{\varepsilon}_N^Q\right)^2\left(\sigma_{\widehat{\varepsilon}_M^Q}\right)^2}{\left(\widehat{\varepsilon}_M^Q\right)^4}$ and $\left(\sigma_{\widehat{\phi}}\right)^2 = \frac{(\sigma_{\widehat{\gamma}})^2}{(1+\widehat{\gamma})^4}$.

$$\widetilde{\left(\varepsilon^{w}_{\frac{\pi}{N}}\right)}_I^{prod} = \gamma_I^{prod} \times e^{\mu_y + \frac{(\sigma_y)^2}{2}} \tag{15}$$

To assess the impact of profits on the wage distribution, Lester's range of wages due to rent sharing (Lester, 1952) is reported in the right part. Similar to the wage-profit elasticities, we define the two variants as follows:

$$L_I^{prod} = \overline{\left(\varepsilon^{w}_{\frac{\pi}{N}}\right)}_I^{prod} \times 4 \times \frac{\text{sd}\left(\widetilde{\left(\frac{\pi}{N}\right)}_{it}\right)}{\text{mean}\left(\widetilde{\left(\frac{\pi}{N}\right)}_{it}\right)} \tag{16}$$

$$L_I^{prod} = \widetilde{\left(\varepsilon^{w}_{\frac{\pi}{N}}\right)}_I^{prod} \times 4 \times \frac{\text{sd}\left(\widetilde{\left(\frac{\pi}{N}\right)}_{it}\right)}{\text{mean}\left(\widetilde{\left(\frac{\pi}{N}\right)}_{it}\right)} \tag{17}$$

where $\widetilde{\left(\frac{\pi}{N}\right)}_{it}$ is smoothed profits per employee, defined as $\frac{1}{5}\sum_{k=t-4}^{t}\left(\frac{\pi}{N}\right)_{ik}$ if $\left(\frac{\pi}{N}\right)_{it-4}$ is not missing, otherwise equal to $\frac{1}{4}\sum_{k=t-3}^{t}\left(\frac{\pi}{N}\right)_{ik}$, and $\text{sd}\left(\widetilde{\left(\frac{\pi}{N}\right)}_{it}\right)$ and $\text{mean}\left(\widetilde{\left(\frac{\pi}{N}\right)}_{it}\right)$ are the standard deviation and the average of smoothed profits per employee in industry I, respectively. Lester's range measures to which extent differences in profits per employee could explain differences in wages and is based upon the idea that –when the number of observations is large– 4 times the standard deviation is the approximate width of the 95% confidence interval for a future observation. Put differently, this statistic indicates the extent to which wages would increase if a worker were to move from a firm at the bottom of the profit distribution (two standard deviations below the mean level of profits) to a firm at the top of the profit distribution (two standard deviations above the mean) *ceteris paribus*.

In addition to the rent-sharing parameters reported in Table 2, Table B.5 in Appendix B also reports the computed factor shares, output and scale elasticity estimates, joint market imperfections parameter and price-cost mark-up, and the diagnostic tests. For reasons of completeness, Table B.5 also presents the industry-specific *SYS-GMM* estimates of the industries which are classified in the 5 other regimes (*PC-PR*, *IC-PR*, *PC-EB*, *PC-MO* and *IC-MO*). In Table B.5, industries within the *PC-PR*- and *IC-PR*-regimes are ranked according to μ_I. Within the *PC-MO*- and *IC-MO*-regimes, industries are ranked according to $\left(\varepsilon_w^N\right)_I$. In Tables 2 and B.5, we rank industries within the *IC-EB*-regime in increasing order of γ_I^{prod}. Focusing on the *IC-EB*-industries, the Sargan test statistic fails to confirm the joint validity of the moment restrictions, which might be due to the existence of heteroscedasticity. In 5 out of the 25 *IC-EB*-industries (ind. $I = 6, 8, 11, 44, 48$), the Hansen test also rejects the joint validity of the identifying restrictions. For industry $I = 6, 11, 48$, the difference-in-Hansen tests reject the exogeneity of the 1-year lagged first-differenced inputs as instruments in the levels equation.

Table 2 shows that the absolute extent of rent-sharing parameter (ϕ_I^{prod}) is estimated to be lower than 0.22 for the first quartile of industries and higher than 0.35 for the top quartile. The average and median values of ϕ_I^{prod} are both estimated at 0.29. Since the two variants of both the wage-profit elasticity and Lester's range of wages due to rent sharing are very similar, we focus the discussion on the first variant. The wage-profit elasticity is lower than 0.22 for industries in the first quartile and higher than 0.34 for industries in the third quartile. The average and median values of $\overline{\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)}_{I}^{prod}$ amount to 0.28 and 0.25 respectively. This implies that, on average, a doubling of profits per employee increases average firm wages by 28% *ceteris paribus*. These large wage-profit elasticity estimates are close to the firm-level results of Abowd and Lemieux (1993), Teal (1996), Van Reenen (1996), Estevao and Tevlin (2003) and the matched worker-firm results of Martins (2009). These studies rely on, what we call, the labor economics approach to estimating rent sharing which boils down to estimating a wage equation and control for endogeneity of (quasi-) rents by using exogenous demand shifters as instruments.[9] Lester's range of wages due to rent sharing is lower than 0.73 for the first quartile of industries and higher than 1.31 for the top quartile. The average and median values of $\overline{L}_{I}^{prod}$ amount to 1.18 and 0.98 respectively. Hence, on average, it appears that the wage of a worker would increase by 118% if she switched from a low-profit to a high-profit firm *ceteris paribus*.

<Table 2 about here>

3 Labor Economics approach

3.1 Theoretical framework

This section discusses the *labor economics approach* to recovering the extent of rent sharing. Using a standard Nash-bargaining setup, we present three bargaining models –the canonical efficient bargaining and right-to-manage models and the labor hoarding model– which are characterized by a different bargaining scope and which predict that workers will receive wages in excess of their best alternative, with this difference depending positively on their firms' profitability.

3.1.1 Efficient bargaining model

The efficient bargaining (EB) model assumes that the workers and the firm negotiate simultaneously over wages and employment in order to maximize the joint surplus of their economic activity. The bounds of the bargaining range are given by the minimum acceptable utility levels for both parties. In the absence of an agreement, both parties receive their fallback utility. It is the objective of the workers to maximize $U(w_{it}, N_{it}) = N_{it}w_{it} + (\overline{N}_{it} - N_{it})\overline{w}_{it}$, where $\overline{N}_{it}$ is the competitive employment level ($0 < N_{it} \leq \overline{N}_{it}$) and $\overline{w}_{it} \leq w_{it}$ the alternative wage. Consistent with capital quasi-fixity, it is the firm's objective to maximize its short-run profit function: $\pi_{it} = R_{it} - w_{it}N_{it} - j_{it}M_{it}$, where $R_{it} = P_{it}Q_{it}$ stands for total revenue and $Q_{it} = \Theta_{it}F(N_{it}, M_{it}, K_{it})$. The revenue-shifting parameter (Θ_{it}) is a function of the production technology and the demand for the final good. In the absence of an agreement, the representative worker receives the alternative wage. If no revenue accrues to the firm when bargaining breaks down, the firm's short-run profit equals zero in which case the firm has to bear only the fixed costs of capital. Hence, the generalized Nash product is written as:

$$\Omega_{EB} = \left\{N_{it}w_{it} + \left(\overline{N}_{it} - N_{it}\right)\overline{w}_{it} - \overline{N}_{it}\overline{w}_{it}\right\}^{\phi_{it}} \left\{R_{it} - w_{it}N_{it} - j_{it}M_{it}\right\}^{1-\phi_{it}} \tag{18}$$

[9] In particular, Abowd and Lemieux (1993) use prices of imports and exports, Teal (1996) exchange rate variation, Van Reenen (1996) past technological innovations, Estevao and Tevlin (2003) demand shifters retrieved from input-output tables and Martins (2009) interactions between the exchange rate and the share of exports.

Maximization of Eq. (18) with respect to the wage rate gives the following first-order condition:

$$\begin{aligned} w_{it} &= \overline{w}_{it} + \gamma_{it} \left[\frac{R_{it} - w_{it}N_{it} - j_{it}M_{it}}{N_{it}} \right] \\ &= (1 - \phi_{it})\, \overline{w}_{it} + \phi_{it} \left[\frac{R_{it} - w_{it}N_{it} - j_{it}M_{it}}{N_{it}} \right] \end{aligned} \tag{19}$$

Eq. (19) shows that wages are a weighted average of firms' ability to pay, $\frac{R_{it}-w_{it}N_{it}-j_{it}M_{it}}{N_{it}}$, and the worker's alternative market wage $\overline{w}_{it}$.

Maximization of Eq. (18) with respect to labor gives the following first-order condition:

$$w_{it} = (R_N)_{it} + \phi_{it} \left[\frac{R_{it} - (R_N)_{it}\, N_{it} - j_{it}M_{it}}{N_{it}} \right] \tag{20}$$

with $(R_N)_{it}$ the marginal revenue of labor.

Solving simultaneously Eqs. (19) and (20) leads to the following expression for the contract curve:

$$(R_N)_{it} = \overline{w}_{it} \tag{21}$$

Eq. (21) shows that under risk neutrality, the firm's decision about employment equals the one of a (non-bargaining) neoclassical firm that maximizes its short-run profit at the alternative wage. Put differently, the firm hires workers until the marginal revenue of labor is equal to the wage a worker would receive if fired, i.e. the employment level does not depend on the bargained wage.

3.1.2 Right-to-manage model

The right-to-manage (RTM) model postulates that the workers negotiate with the firm over wages while the firm chooses its profit-maximizing employment level. The generalized Nash product to be maximized now becomes:

$$\Omega_{RTM} = \left\{ N_{it}(w_{it})w_{it} + \left(\overline{N}_{it} - N_{it}(w_{it})\right)\overline{w}_{it} - \overline{N}_{it}\overline{w}_{it} \right\}^{\phi_{it}} \left\{ R_{it} - w_{it}N_{it}(w_{it}) - j_{it}M_{it} \right\}^{1-\phi_{it}} \tag{22}$$

where $N_{it}(w_{it})$ represents the optimal employment level chosen by the firm given the level of the bargained wage. This optimal level of employment is obtained from the solution to the firm's profit maximization problem:

$$(R_N)_{it} = w_{it} \tag{23}$$

Eq. (23) shows that employment is endogenous with respect to bargained wages.

Maximization of Eq. (22) with respect to the wage rate subject to Eq. (23) is equivalent to Eq. (19).

3.1.3 Labor hoarding model

The labor hoarding (LH) model is based on two key assumptions. First, there exists overhead labor at the firm, denoted by $(N_O)_{it}$, which can either be interpreted as a proportion of the workers' time that is paid for but unproductive to the firm due to e.g. illicit shirking, set-up of machinery or coffee breaks, or the proportion of the workforce (rather than the hour) that is paid for but unproductive due to generous crew sizes or overmanning. Second, workers value on-the-job leisure and their preferences are represented by the following objective function: $V(w_{it}, (N_O)_{it}) = (w_{it} - \overline{w}_{it}) \left(\left(\frac{N_O}{N_P}\right)_{it} - \overline{\left(\frac{N_O}{N_P}\right)}_{it} \right)$, with $(N_P)_{it}$ productive labor, $\left(\frac{N_O}{N_P}\right)_{it}$ the degree of overmanning and $\overline{\left(\frac{N_O}{N_P}\right)}_{it}$ the alternative overhead labor ratio. The workers and the firm negotiate simultaneously over wages and overhead labor while productive labor is unilaterally chosen by the firm at the profit-maximizing level:

$$(R_{N_P})_{it} = w_{it} \tag{24}$$

with $(R_{N_P})_{it}$ the marginal revenue of productive labor. Assuming that both types of labor are paid the same, the generalized Nash product is now written as:

$$\Omega_{LH} = \left\{ (w_{it} - \overline{w}_{it}) \left(\left(\frac{N_O}{N_P}\right)_{it} - \overline{\left(\frac{N_O}{N_P}\right)}_{it} \right) \right\}^{\phi_{it}} \{R_{it} - w_{it}((N_O)_{it} + (N_P)_{it}) - j_{it}M_{it}\}^{1-\phi_{it}} \tag{25}$$

Maximization of Eq. (25) with respect to the wage rate subject to Eq. (24) is equivalent to Eq. (19) with $N_{it} = (N_O)_{it} + (N_P)_{it}$.

Maximization of Eq. (25) with respect to overhead labor gives the following first-order condition:

$$\phi_{it} \left(\left(\frac{N_O}{N_P}\right)_{it} - \overline{\left(\frac{N_O}{N_P}\right)}_{it} \right)^{-1} \frac{1}{(N_P)_{it}} = \frac{(1-\phi_{it})w_{it}}{R_{it} - w_{it}N_{it} - j_{it}M_{it}} \tag{26}$$

Rearranging Eq. (26) and using the definition of N_{it} leads to the following expression for the overhead labor ratio:

$$\left(\frac{N_O}{N_P}\right)_{it} = (1-\phi_{it}) \overline{\left(\frac{N_O}{N_P}\right)}_{it} + \phi_{it} \left[\frac{R_{it} - w_{it}\,(N_P)_{it} - j_{it}M_{it}}{w_{it}\,(N_P)_{it}} \right] \tag{27}$$

3.2 Estimation method

Following standard practice in the collective bargaining literature, the statistical specification of the equilibrium wage-profit relation that results from the bargaining process described above [Eq. (19)] is given by:

$$\ln w_{j(i)t} = \beta_0 + \beta_1 \ln \overline{w}_{it} + \varepsilon_{\frac{w}{\frac{\pi}{N}}} \ln \left(\frac{\pi}{N}\right)_{it} + \beta_2 \ln \left(\frac{K}{L}\right)_{it} + \alpha_{j(i)} + \alpha_i + \alpha_t + \epsilon_{jt} \tag{28}$$

where $w_{j(i)t}$ are net nominal earnings of individual j working in firm i at date t. The alternative wage $\overline{w}_{it}$ is captured by the 5^{th} percentile value of the worker wage distribution of the employing firm i at time t. π_{it}, N_{it} and $\left(\frac{K}{L}\right)_{it}$ are respectively the accounting profits, employment and capital intensity of firm i at time t.

$\alpha_{j(i)}$ is the individual effect, α_i the firm effect, α_t year effects and ϵ_{jt} the statistical residual. Our parameter of interest is $\varepsilon^{w}_{\frac{\pi}{N}}$, the wage-profit elasticity.

From the previous section, it is clear that Eq. (19) is independent of the true nature of the employment function. Since Eq. (28) is simply the empirically testable wage equation of this equilibrium wage-profit relation that we estimate for each industry I, the rent-sharing parameter estimates that are derived from the estimated wage-profit elasticities are compatible with worker-firm negotiations that differ in terms of bargaining scope: either only wages (RTM model), wages and employment (EB model) or wages and working practices (LH model). We follow most of the literature by estimating Eq. (19) in logs rather than in levels (Martins, 2007). The motivation of estimating the wage equation in logs is essentially that bargaining does not apply to negative profits. By taking the natural logarithm of our profits-per-worker variable, we lose 7% of the observations in the sample.

The most important methodological issues that arise when identifying the impact of firm profitability on worker wages are the endogeneity of profits per employee, omitted variable bias and measurement error. The endogeneity of profits is due to two sources of reverse causality. First, the wage-profit elasticity might be underestimated due to the accounting relationship between wages and profits, implying that higher wages lead to lower profits. Second, theories of incentive pay and efficiency wages (Shapiro and Stiglitz, 1984; Akerlof and Yellen, 1986) predict that higher wages might lead to higher profits, which could generate an upward bias in wage-profit elasticities. Omitted variables, correlated with the profit measure, might render the rent-sharing coefficients inconsistent. Wages might vary across firms due to differences in firms' skill compositions, wage and employment policies, organization type, technological conditions or a set of unknown factors. Not accounting for a systematic sorting of workers across firms might also bias the estimated wage-profit relation. A variety of firm-specific measures of profits or productivity have been used in the literature including accounting profits per employee, the rate of return on capital, quasi rents (profits adjusted by alternative opportunity costs for labor and capital) per employee, Tobin's q and Solow residuals. Each of these variables are likely to be measured with error, potentially causing biased and inconsistent rent-sharing estimates, particularly with differenced data.

Consistent with the productivity approach, we deal with the endogeneity problem by applying the two-step *SYS-GMM* estimator. A common instrumentation strategy in the literature is to use lagged values of firm profitability as instruments (see e.g. Blanchflower *et al.*, 1996; Hildreth and Oswald, 1997). As data limitations precluded us from using exogenous firm demand shifters as a source of variation of profits that does not impact directly upon wages, we follow this common practice. In particular, we use the 2- and 3-year lags of the smoothed profits-per-employee variable as instruments in the first-differenced equation and the 1-year lag of the first-differences smoothed profits-per-employee variable as instruments in the levels equation. We evaluate both the entire set of instruments using the Sargan and Hansen test statistics and subsets of instruments using difference-in-Hansen statistics. Having repeated information on individuals, we control for unobserved worker ability and firm fixed effects. We take into account differences in firms' labor skill composition by including the capital intensity for each firm-year (Griliches, 1969; Bronars and Famulari, 2001 Duffy *et al.*, 2004). If capital and skilled labor are complements, capital-intensive firms will hire workers with greater observed and unobserved skills, implying that the wage-profit elasticity estimates might simply pick up the impact of higher unobserved ability.[10]

We restricted the estimation of Eq. (28) to individuals working in the same firms across different years, i.e. we exclude worker mobility. Our motivation is twofold. First, we are primarily interested in obtaining consistent estimates of the wage-profit elasticity $\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)$, rather than separately identifying individual and firm-level unobserved heterogeneity $\left(\alpha_{j(i)}\text{ and }\alpha_i\text{, respectively}\right)$ themselves. Therefore, $\theta_s = \alpha_{j(i)} + \alpha_i$ is defined as the unobserved spell effect for individual-firm spell s (Abowd *et al.*, 1999; Andrews *et al.*, 2006). Second, although we have data for several years and for several individuals in the firm, we could have chosen to control for individual unobserved heterogeneity as well as firm-level unobserved heterogeneity in a single fixed-effects estimation. The problem is, however, that separate identification of both types of unobserved heterogeneity relies on workers who move between employers. This identification strategy is only valid if workers' employer switches are exogeneous and random, which is not likely to be the case (see Gibbons and Katz, 1992) and impossible to verify without having information on the reason of mobility.

3.3 Data requirements: Matched worker-firm panel

Following the most recent stream of the empirical collective bargaining literature, we use matched employer-employee information to recover industry-specific rent-sharing parameters using the labor economics approach. Our employer-employee data are drawn from the DADS ("Déclarations Annuelles des Données Sociales"). The DADS is a large-scale administrative database collected by INSEE ("Institut National de la Statistique et des Etudes Economiques") and maintained in the Division des Revenus. The data are based on a mandatory employer report of the gross earnings of each employee subject to French payroll taxes. These taxes apply to essentially all employed individuals in the economy. The Division des Revenus provides an extract of the DADS for scientific purposes, covering all individuals employed in French enterprises who were born in October of even-numbered years, excluding civil servants.

Our estimation sample is obtained by merging the firm current account and balance sheet data of the 14,921 firms covering the years 1984-2001 that we used in the productivity approach with the matched employer-employee information. Because of the 1990 Census, however, we excluded the year 1990 from the DADS database. For each observation, we have information on the exact starting date and end date of the job spell in the firm and the full-time/part-time status of the worker. Each firm-worker-year observation additionally includes information on the individual's sex, month, year and place of birth, current occupation and total net nominal earnings during the year. Employer characteristics include the location and industry of the employing firm. As motivated above, we only select individuals who remained at the same firm across different years (labelled as stayers) for regression purposes.[11] In addition, we restrict the estimation to full-time stayers who worked 12 months a year for at least 2 years. After some trimming on net nominal earnings to eliminate outliers and anomalies, our matched worker-firm estimation sample contains 648,889 observations, corresponding to 103,995 employees working in 14,921 firms covering the period 1984-2001. The

[10] From a theoretical perspective, the inclusion of capital-intensity might be motivated by the fact that ϕ_{it} in the Nash product [Eqs. (18), (22) or (25)] represents the *average* absolute extent of rent sharing across skill groups.

[11] Looking at the original sample of individuals who worked full-time, 12 months a year for at least 2 years, we observe that 91% of the individuals are non-movers, 5% of the individuals change employers once and 4% move twice between employers.

sixth column of Table B.2 in Appendix B presents the number of workers and the number of observations for each of the 52 industries (minimum: 1,468 observations). Table B.4 in Appendix B gives the panel structure of the estimation sample.

Sorting firms by average number of workers and looking at the distribution of workers across firms, we observe 4 workers per firm for firms in the first quartile, 10 workers per firm for firms in the second quartile and 26 workers per firm for firms in the third quartile. The number of observations per worker (firm) is 3 (8) for the first quartile of workers (firms), 5 (11) for the second quartile and 9 (14) for the third quartile.

Our empirical rent-sharing analysis is restricted to those industries that are characterized by imperfect competition in the product market and efficient bargaining the labor market according to the productivity approach. The *IC*-*EB*-sample consists of 60,294 employees (58% of the estimation sample) working in 9,849 firms (66% of the estimation sample). Using the matched worker-firm panel, the wage $\left(w_{j(i)t}\right)$ refers to the average net nominal wage per worker-year. In addition to defining the wage at the worker level, we compute the firm average wage per worker directly from the firm accounting information as the wage bill divided by the average number of employees in each firm for each year (w_{it}). Our profits-per-employee variable $\left(\frac{\pi}{N}\right)_{it}$ is drawn from the firm-level panel and is measured by value added minus labor costs divided by the average number of employees in each firm for each year. Given the high volatility of firm profitability, we use the smoothed profits-per-employee variable $\widetilde{\left(\frac{\pi}{N}\right)}_{it}$ as the main covariate in the wage regressions.[12] In addition to the variables discussed in Section 2.3, Table 1 reports the mean, standard deviation and quartile values of $\left(\frac{\pi}{N}\right)_{it}$, $\widetilde{\left(\frac{\pi}{N}\right)}_{it}$, w_{it}, $w_{j(i)t}$ and $N_{j(i)t}$ which is the number of workers observed in each firm-year based on the matched worker-firm panel.

3.4 Average rent-sharing parameters in *IC-EB*-industries

The different measures of rent sharing for each of the 25 *IC*-*EB*-industries obtained from the labor economics approach are presented in Table 3. We consider two sets of estimates. The first set results from estimating $\ln w_{j(i)t} = \beta_0 + \beta_1 \ln \overline{w}_{it} + \varepsilon_{\frac{w}{\frac{\pi}{N}}} \ln \widetilde{\left(\frac{\pi}{N}\right)}_{it} + \beta_2 \ln \left(\frac{K}{L}\right)_{it} + \alpha_{j(i)} + \alpha_i + \alpha_t + \epsilon_{jt}$ using the *SYS-GMM* estimator. In these estimates, we control for interfirm differences in workers' skills. We denote these rent-sharing estimates by superscript "*lab,ww*". The second set does not control for skill differences across wage bargains and estimates $\ln w_{it} = \beta_0 + \beta_1 \ln \overline{w}_{it} + \varepsilon_{\frac{w}{\frac{\pi}{N}}} \ln \widetilde{\left(\frac{\pi}{N}\right)}_{it} + \beta_2 \ln \left(\frac{K}{L}\right)_{it} + \alpha_i + \alpha_t + \xi_{it}$ using the *SYS-GMM* estimator. In the second specification, we do not take into account that high-profit firms may pay higher wages because they employ high-skilled workers, not because their wages are higher for workers of a given ability. We only indirectly control for differences in firms' labor composition through including capital intensity as a regressor. We denote these rent-sharing estimates by superscript "*lab,fw*". Comparing both sets of results gives insights into the importance of this omitted variable problem.

For each set of results, the left part of Table 3 reports the average industry-specific wage-profit elasticity estimates $\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)_I^{lab,ww/fw}$ and Lester's range of wages due to rent sharing $L_I^{lab,ww/fw}$. The middle part

[12] This is consistent with using the smoothed ratio of profits per employee to average firm wages $\left(\widetilde{\left(\frac{\pi}{w \times N}\right)}_{it}\right)$ to recover wage-profit elasticities from relative extent of rent-sharing parameters and using in turn smoothed profits per employee to recover Lester's range of wages due to rent sharing from the wage-profit elasticities in the productivity approach.

reports the average industry-specific relative extent of rent-sharing parameters. We consider two variants. Focusing on the first set of results, the first variant is defined as follows:

$$\overline{\gamma}_I^{lab,ww} = \left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)_I^{lab,ww} \times \text{mean}\left(\left(\widetilde{\frac{w \times N}{\pi}}\right)_{it}\right) \tag{29}$$

where $\left(\widetilde{\frac{w\times N}{\pi}}\right)_{it}$ is the smoothed ratio of average firm wages to profits per employee, defined as $\frac{1}{5}\sum_{k=t-4}^{t}\left(\frac{w\times N}{\pi}\right)_{ik}$ if $\left(\frac{w\times N}{\pi}\right)_{it-4}$ is not missing, otherwise equal to $\frac{1}{4}\sum_{k=t-3}^{t}\left(\frac{w\times N}{\pi}\right)_{ik}$, and $\text{mean}\left(\left(\widetilde{\frac{w\times N}{\pi}}\right)_{it}\right)$ is the average of this ratio in industry I. The motivation for using the smoothed ratio is evidence of high volatility in the firm profits series (see supra).

Under the assumption that $\left(\widetilde{\frac{w\times N}{\pi}}\right)$ is lognormally distributed, i.e. $z = \ln\left(\widetilde{\frac{w\times N}{\pi}}\right)$ is normally distributed with mean μ_z and standard deviation σ_z, the second variant is defined as follows:

$$\widetilde{\gamma}_I^{lab,ww} = \left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)_I^{lab,ww} \times e^{\mu_z + \frac{(\sigma_z)^2}{2}} \tag{30}$$

Using the labor economics approach, the identification of the industry-specific extent of rent-sharing parameter –which are comparable to the productivity approach– is hence driven by differences between the estimated industry-specific wage-profit elasticity and the industry-specific smoothed ratio of the wage bill to total profits.

<Table 3 about here>

In addition to the wage-profit elasticities reported in Table 3, Table B.6 in Appendix B also reports the responsiveness of wages to the alternative wage or capital intensity, and the diagnostic tests. The industries in Tables 3 and B.6 are ranked according to $\overline{\gamma}_I^{lab,ww}$. For both sets of estimates, the Sargan test rejects the null of exogeneity of the instruments in all industries. Focusing on the first set of estimates, using $\ln(w_{j(i)t})$ as the dependent variable, shows that the Hansen test rejects the joint validity of the moment conditions in 23 out of the 25 industries.[13] Focusing on the second set of estimates, using $\ln(w_{it})$ as the dependent variable, reveals that the Hansen test only fails to confirm the joint validity of the identifying restrictions in 3 out of the 25 industries (ind. $I = 31, 33, 44$). The difference-in-Hansen tests suggest that the 1-year lagged first-differenced smoothed profits per employee as instruments in the levels equation may be to blame (exogeneity rejected).

Using individual worker wages, Table 3 reveals that wages do not seem to depend on firms' ability to pay $\left[\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)_I^{lab,ww}\right]$ for the first quartile of industries, whereas the wage-profit elasticity is estimated to be higher

[13] For 3 out of these 23 industries (ind. $I = 34, 46, 52$), the difference-in-Hansen tests reject the exogeneity of the 1-year lagged first-differenced smoothed profits-per-employee variable as instruments in the levels equation. The difference-in-Hansen tests additionally reject the validitiy of (i) the 2-year lags of the smoothed profits-per-employee variable as instruments in the first-differenced equation for 2 industries (ind. $I = 11, 49$), (ii) the 3-year lags of the smoothed profits-peremployee variable as instruments in the first-differenced equation for 2 industries (ind. $I = 39, 43$) and (iii) the 2- and 3-year lags of the smoothed profits-per-employee variable as instruments in the first-differenced equation for 7 industries (ind. $I = 5, 8, 19, 26, 33, 44, 45$). For 6 out of these 23 industries (ind. $I = 6, 18, 21, 29, 47, 48$), only the use of the 2- and 3-year lags of the smoothed profits-per-employee variable as instruments in the first-differenced equation does not prove informative.

than 0.049 for the top quartile . The average and median values of $\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I^{lab,ww}$ are estimated at 0.030 and 0.035 respectively, implying that on average a doubling of profits per employee increases individual worker wages *ceteris paribus* by 3%. Lester's range of wages due to rent sharing is estimated to be lower than 0.1% for the bottom quartile and higher than 19% for the top quartile. The average and median values of $L_I^{lab,ww}$ amount to 13% and 11% respectively, meaning that on average a worker who were hypothetically to move from a low-profit to a high-profit firm, would experience a wage increase of 13% *ceteris paribus.* Focusing on the first variant of rent-sharing parameters, we do not find evidence of rent sharing for the first quartile industries but estimate the absolute extent of rent-sharing parameter $\left(\overline{\phi}_I^{lab,ww}\right)$ to be higher than 0.20 for the top quartile. The average and median values of $\overline{\phi}_I^{lab,ww}$ are estimated at 0.10 and 0.08 respectively. The second variant results in rent-sharing parameters which are about 23% lower than those using the first variant.

Does not controlling for interfirm skill differences generate an upward bias in the price-quantity, i.e. wage-profitability, relationship as found in the literature? To answer this question, we focus on the wage estimates using a firm's average wage as the dependent variable. We confirm that not taking into account skill differences across wage bargains results in higher wage-profit elasticity estimates (about 30% higher). More specifically, the wage-profit elasticity $\left[\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I^{lab,fw}\right]$ is estimated to be lower than 0.027 for the first quartile of industries and higher than 0.057 for the top quartile. The average and median values of $\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I^{lab,fw}$ are both estimated at about 0.046. As a result, we observe an increase in Lester's range of wages due to rent sharing. On average, Lester's range increases from 13% to 19% when not taking account of systematic sorting of high-ability workers in high-profit firms. The absolute extent of rent sharing $\left(\overline{\phi}_I^{lab,fw}\right)$ is estimated to be lower than 0.10 for the first quartile of industries and higher than 0.27 for the top quartile. The average and median values of $\overline{\phi}_I^{lab,fw}$ are both estimated at 0.16.

How do these elasticity estimates match up with other studies? Drawing on firm-level data, the estimated elasticity between wages and profits per worker ranges between 0.01 and 0.30. Using data on Anglo-Saxon countries, Carruth and Oswald (1987), Denny and Machin (1991), Christofides and Oswald (1992), Blanchflower *et al.* (1996) and Hildreth and Oswald (1997) find a central elasticity estimate of 0.04. These low estimates could be the result of not (adequately) controlling for the endogeneity of rents. Confirming this presumption, Abowd and Lemieux (1993) for Canada, Teal (1996) for Ghana, Van Reenen (1996) for the UK and Estevao and Tevlin (2003) for the US report an elasticity estimate between 0.15 and 0.30. Studies drawing on matched employer-employee data report lower estimates. Margolis and Salvanes (2001) for France and Norway, and Arai (2003) for Sweden find an elasticity estimate in the [0.01-0.03]-range. Using a cross-section of manufacturing workers, Fakhfakh and FitzRoy (2004) point to an elasticity of 0.02 for France. For Belgium, Rycx and Tojerow (2004) and Du Caju *et al.* (2011) obtain an elasticity estimate of 0.06 and 0.03, respectively. Guertzgen (2009) and Martins (2009) find an wage-profit elasticity varying between 0.02 and 0.07 for Germany and Portugal, respectively. Note, however, that these studies consider all manufacturing industries while our focus is on the *IC-EB*-industries.

We checked the sensitivity of the absolute extent of rent-sharing parameters and Lester's range of wages due to rent sharing to (*i*) the measurement of the alternative wage and (*ii*) not controlling for differences in firms' capital intensity. In particular, we measure the alternative wage by either the 1^{st} or the 10^{th} percentile value of the worker wage distribution of the employing firm i at time t. This sensitivity check is summarized in Table B.7 and visualized in Graphs B.1 and B.2 in Appendix B. Let us focus the discussion on the first variant of the median absolute extent of rent-sharing parameter estimates. These estimates only appear to be sensitive to the choice of the alternative wage value when controlling for systematic sorting of unobservably high-ability workers into high-profit firms (see Graph B.1a). As expected, we find that a decrease in the alternative wage value increases the median absolute extent of rent sharing ($\overline{\phi}_I^{lab,ww}$ increases from 0.08 to 0.11) whilst the opposite holds for an increase in the alternative wage value ($\overline{\phi}_I^{lab,ww}$ decreases from 0.08 to 0.04). Not controlling for differences in firms' capital intensity significantly increases the median absolute extent of rent-sharing parameter estimates. This is true irrespective of whether or not taking into account unobserved worker ability: $\overline{\phi}_I^{lab,ww}$ increases from 0.08 to 0.14 and $\overline{\phi}_I^{lab,fw}$ from 0.16 to 0.23 (see Graph B.1c). The same pattern holds when focusing on the impact on Lester's range of wages due to rent sharing (see Graphs B.2a and B.2b).

4 Accounting approach

4.1 Theoretical framework

This section discusses the *accounting approach* to recovering the extent of rent sharing. From a conceptual point of view, the accounting approach is similar to the labor economics approach in terms of being compatible with worker-firm negotiations that differ in terms of bargaining scope. Indeed, dividing the equilibrium wage-profit relation [Eq. (19)] – which is independent of the true nature of the employment function– by total revenue (R_{it}) and defining the wage premium as the difference between the bargained wage and the alternative wage in the event of a bargaining dispute, $w_{it} - \overline{w}_{it}$, we compute directly the relative and absolute extents of rent sharing γ_{it}^{acc} and ϕ_{it}^{acc} from the firm accounting information as follows:

$$\gamma_{it}^{acc} = \frac{(w_{it} - \overline{w}_{it})N_{it}}{P_{it}Q_{it} - w_{it}N_{it} - j_{it}M_{it}} \tag{31}$$

$$\phi_{it}^{acc} = \frac{\gamma_{it}^{acc}}{1 + \gamma_{it}^{acc}} = \frac{(w_{it} - \overline{w}_{it})N_{it}}{P_{it}Q_{it} - \overline{w}_{it}N_{it} - j_{it}M_{it}} \tag{32}$$

4.2 Data requirements: Firm-level panel

Similar to the productivity approach, the accounting approach allows to uncover industry-specific rent-sharing parameters from production data with only information on production values, usage of variable inputs and input costs, therefore only exploiting the firm-level panel. Contrary to the productivity approach, however, the accounting approach requires a measure of the alternative wage ($\overline{w}_{it}$), which we proxy by the 5^{th} percentile value of the firm wage distribution in the industry in which the firm operates. In addition to the variables discussed in Sections 2.3 and 3.3, Table 1 reports the mean, standard deviation and quartile values of the labor share computed at the alternative wage $(\overline{\alpha}_N)_{it}$ and the wage premium $(w_{it} - \overline{w}_{it})$.

4.3 Average rent-sharing parameters in *IC-EB*-industries

From Eq. (31), it is clear that variations in the wedge between the wage premium of all employees and the firm's short-run profit identify the relative extent of rent sharing. For each industry within the *IC-EB*-regime, the left part of Table 4 presents the distribution of the firm-specific relative and absolute extent of rent-sharing parameters (γ_{it}^{acc} and ϕ_{it}^{acc}, respectively), which highlights within-industry variation in the extent of rent sharing. The industries in Table 4 are ranked according to the median value of γ_{it}^{acc}. Focusing on the median distribution, the absolute extent of rent-sharing (median value of ϕ_{it}^{acc}) is computed to be lower than 0.27 for the first quartile of industries and higher than 0.36 for the upper quartile. The average and median values are both equal to 0.32. The right part of Table 4 reports the corresponding average industry-specific wage-profit elasticities and Lester's range of wages due to rent sharing. Consistent with the productivity approach, we consider for each of them two variants. Focusing on the first variant, we find an average (median) wage-profit elasticity and Lester statistic that is about 8% (25%) higher than the corresponding estimate based on the productivity approach. In particular, the wage-profit elasticity $\left[\overline{\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I}^{acc}\right]$ is computed to be lower than 0.28 for the bottom quartile of industries and higher than 0.33 for the top quartile. The average and median values of $\overline{\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I}^{acc}$ are both computed to be 0.31, implying that on average a doubling of profits per employee increases *ceteris paribus* average firm wages by 31%. Lester's range of wages due to rent sharing is lower than 0.95 for the first quartile of industries and higher than 1.38 for the top quartile. The average and median values of $\overline{L}_I^{acc}$ amount to 1.27 and 1.25 respectively. Hence, on average, it appears that the wage of a worker would increase by 127% if she moved from a low-profit to a high-profit firm, keeping all her other characteristics unchanged.

<Table 4 about here>

How sensitive are the absolute extent of rent-sharing parameters and Lester's range of wages due to rent sharing to the measurement of the alternative wage? We compare the baseline computation of the absolute extent of rent sharing (median value of ϕ_{it}^{acc}) to 5 different values of the alternative wage: the 1^{st} or the 10^{th} percentile value of the firm wage distribution, or the 1^{st}, 5^{th} or 10^{th} percentile value of the worker wage distribution.[14] This sensitivity check is reported in Table B.7 and visualized in Graph B.3 in Appendix B. Focusing on the computation of the absolute extent of rent sharing, we find that decreasing the alternative wage value based on the firm wage distribution increases the median absolute extent of rent sharing from 0.32 to 0.42, whilst an increase in the alternative wage value decrease this rent-sharing parameter from 0.32 to 0.26. Measuring the alternative wage based on the worker wage distribution leads to a large increase in the rent-sharing parameter (from 0.32 to 0.55). The magnitude of the increase does not depend on the percentile value of the worker wage distribution (see Graph B.3a). The same pattern holds when evaluating the sensitivity of the baseline computation of Lester's range of wages ($\overline{L}_I^{acc}$) to different values of the alternative wage (see Graph B.3b).

[14] Measuring the alternative wage based on the worker wage distribution evidently requires resorting to the matched worker-firm panel.

5 A comparison of rent-sharing parameters across approaches

How sizeable are differences in average measures of rent sharing across the productivity approach, the labor economics approach and the accounting approach for industries within the *IC-EB*-regime? To highlight these differences, which can be attributable to differences in the sources of identification of the rent-sharing parameters and to differences in modeling assumptions, Table 5 presents the distribution of relative and absolute extent of rent-sharing parameters, wage-profit elasticities and Lester's range of wages due to rent sharing across the three approaches. In this section, we concentrate on the first variant of the relevant rent-sharing parameters.

Given that we take the productivity approach as our benchmark, we first focus the discussion on the industry-specific absolute extent of rent-sharing parameters. Looking at within-approach industry differences in this rent-sharing parameter, we observe the most sizeable dispersion within the labor economics approach using worker wages as the dependent variable (interquartile range of 0.20) and the smallest dispersion within the accounting approach (interquartile range of 0.10). Hence, as expected, exploiting the worker-firm information clearly widens the distribution of absolute extent of rent sharing parameters. Looking at industry differences in this rent-sharing parameter across approaches, the median value varies between 0.08 and 0.32. Taking into account non-random sorting of high-ability (and thus high-wage) workers into high-profit firms, we find an average absolute rent-sharing parameter of 0.08. Not controlling for interemployer differences in workers' skills within the labor economics approach results in a doubling of this median parameter (value of 0.16). Moving to either the productivity or the accounting approach leads to another doubling of this value (value of 0.29 or 0.32, respectively).

Recall that obtaining wage-profit elasticities from relative extent of rent-sharing parameter estimates using either the productivity or the accounting approach requires multiplying the latter by the average smoothed ratio of profits to the wage bill. Sizeable industry variation in this ratio causes differences in absolute extent of rent sharing parameters across approaches to be mapped into even larger differences in wage-profit elasticities.[15] Looking at industry differences in the latter across approaches, the median wage-profit elasticity is estimated to range between 0.035 (labor economics approach controlling for unobserved worker ability) and 0.30 (accounting approach). The wage-profit elasticities based on either the productivity or the accounting approach are 6 (8) times larger than the ones based on the labor economics approach not controlling (controlling) for unobserved worker heterogeneity. Within the labor economics approach, our results show that not controlling for skill differences across wage bargains increase the average responsiveness of wages to firm profitability by 50%.

These sizeable wage-profit elasticity differences across approaches have important consequences when it comes to evaluating the contribution of variability in firm profitability to observed wage inequality. Recall that, for each of the three approaches, Lester's range of wages due to rent sharing is obtained by multiplying the wage-profit elasticities by four times the ratio of the standard deviation to the mean value of smoothed profits

[15] More specifically, the average smoothed ratio of profits to the wage bill is lower than 0.51 for the first quartile of *IC-EB*-industries and higher than 0.87 for the upper quartile. The average and median values of this ratio are computed to be 0.70 and 0.61, respectively.

per employee.[16] As the average of this ratio is about 1, the median value of Lester's range of wages due to rent sharing –measuring the implications on wages due to a movement from the bottom to the top of the profits distribution which is assumed to have a width of four standard deviations– varies between 11% (labor economics approach controlling for unobserved worker ability) and 123% (accounting approach).

<Table 5 about here>

To illustrate the differences in rent-sharing behavior across the three approaches graphically, Graphs 1 and 2 present box diagrams for the relative and absolute extent of rent-sharing parameters, wage profit elasticities and Lester's range of wages due to rent sharing by approach within the IC-EB-regime. Graph 1 shows the first variant of the relevant parameters whereas Graph 2 displays the second variant.

<Graphs 1 & 2 about here>

Table 6 presents a matrix giving the correlations between all pairs of the different rent-sharing measures. Two types of correlations are reported: Spearman's rank correlation coefficients and biweight midcorrelation coefficients. The latter, which is based on Wilcox (2005), gives a correlation that is less sensitive to outliers and therefore more robust. Focusing on the absolute extent of rent-sharing parameters, Table 6 reports a strong and significantly positive correlation between (i) ϕ_I^{prod} (productivity approach) and median value of ϕ_{it}^{acc} (accounting approach), (ii) $\overline{\phi}_I^{lab,ww}$ (labor economics approach controlling for unobserved worker ability) and $\overline{\phi}_I^{lab,fw}$ (labor economics approach not controlling for unobserved worker ability) and (iii) $\overline{\phi}_I^{lab,fw}$ and median value of ϕ_{it}^{acc}. These correlations hold for both types of correlation coefficients. In addition, we find a significantly positive robust correlation between ϕ_I^{prod} and $\overline{\phi}_I^{lab,fw}$. None of the wage-profit elasticity correlations appear to be significant. Focusing on Lester's range of wages due to rent sharing, Table 6 presents a significantly positive correlation between (i) $\overline{L}_I^{prod}$ (productivity approach) and $L_I^{lab,fw}$ (labor economics approach not controlling for unobserved worker ability) and (ii) $\overline{L}_I^{prod}$ and $\overline{L}_I^{acc}$ (accounting approach). This is true for both types of correlation coefficients with the robust correlation coefficients being very small. In addition, we observe a significantly positive robust correlation between (i) $\overline{L}_I^{prod}$ and $L_I^{lab,ww}$ (labor economics approach controlling for unobserved worker ability), (ii) $L_I^{lab,ww}$ and $\overline{L}_I^{acc}$ and (iii) $L_I^{lab,fw}$ and $\overline{L}_I^{acc}$.

<Table 6 about here>

Rent sharing introduces allocative inefficiencies into an economy through distorting factor prices. Therefore, identifying and quantifying this potential type of market failure is important for both academic research and policy analysis. The three approaches discussed above are based on different statistical and economic assumptions which drive the observed rent-sharing differences across approaches.[17] As such, our analysis makes clear that the three approaches face important trade-offs. The big advantages of the productivity approach are that only standard production data are required to recover rent-sharing parameters, there is no need to measure the user cost of capital or the alternative wage, nor is it necessary to assume a constant-returns-to scale production function. Measuring the user cost of capital has proven to be difficult

[16] This ratio is lower than 0.88 for the first quartile of IC-EB-industries and higher than 1.11 for the upper quartile. The average and median values of this ratio are computed to be 1.01 and 0.97, respectively.

[17] We consider addressing/testing empirically the different sets of assumptions of the three approaches as an interesting avenue for future research but beyond the scope of this paper.

and necessitates *ad hoc* assumptions on capital markets and on how firms depreciate their assets whilst imposing constant returns to scale assumes that every increase in inputs leads to a proportional increase in output. The productivity approach comes, however, at the cost of imposing a particular bargaining scope (bargaining issues involve wage and employment) and a Cobb-Douglas production function. The labor economics approach entails the advantage of being compatible with worker-firm negotiations that differ in terms of bargaining scope and puts no restrictions on the functional form of the production function. In order to control for interemployer differences in workers' skills, the researcher has to rely on a matched worker-firm panel. In addition, one needs to choose a particular measurement of the workers' alternative wage. Similar to the productivity approach, the accounting approach has the merit of only relying on firm accounting information. Similar to the labor economics approach, the derived rent-sharing parameters are independent of the true nature of the employment function. Notable disadvantages are that the researcher has to assume a constant-returns-to-scale production function and a particular measurement of the workers' alternative wage.[18]

The main message of our results is that the use of the different approaches should depend on the data at hand and the specific research question we are trying to answer. Conditional on being interested in an average rent-sharing parameter across a specified set of producers, the productivity approach proves particularly useful (*i*) when it comes to analyzing how changes in the operating environment of firms –such as e.g. privatization and deregulation, investments in R&D and ICT, trade liberalization and fragmentation of production chains– affect the division of surplus between capital and labor, (*ii*) to assess simultaneously the impact of such shifters on both firms' price-cost mark-up and workers' rent-sharing parameters and (*iii*) to examine the extent to which product and labor market imperfections might impact aggregate TFP via generating misallocation of resources. Freeing up the data requirements, the productivity approach lends itself to a comparative analysis (at the cross-country/cross-industry/cross-firm-group level). Taking into account worker heterogeneity, the labor economics approach is well suited for (*i*) assessing the extent to which the wage-profit relation varies across groups of workers that differ in terms of e.g. gender, tenure or skill level, (*ii*) evaluating the contribution of these group differences in rent sharing to gender and other types of wage inequality and (*iii*) analyzing the effect of changes in firm-level decision variables –such as different types of innovations, exporting, product introduction– on workers' bargaining power. Leaving aside the closed-economy perspective, the labor economics approach also allows to examine the relative importance of domestic versus international rent sharing in determining workers' wage outcomes after e.g. a cross-border merger or acquisition. Without having to deal with the many challenges in econometric methods and techniques, the accounting approach provides a basic measure of rent sharing based on firm accounting information only.

So far, we have based our comparison on the IC-EB-industries with the purpose of selecting industries where rent-sharing behavior is likely to be observed. For reasons of completeness, Table B.8 in Appendix B reports the distribution of absolute extent of rent-sharing parameters and Lester's range of wages due to rent sharing across the three approaches for the two other predominant regimes (PC-MO and IC-PR).[19]

[18] Note that in the accounting approach, the constant-returns-to-scale assumption could be relaxed if the researcher is willing to measure the user cost of capital.

[19] Note that within the productivity approach, our classification procedure imposes *negative* rent-sharing parameters on PC-

When controlling for the systematic sorting of unobservably high-ability workers into high-profit firms, the median values of both rent-sharing measures based on the labor economics approach are found to be the highest for IC-EB-industries and the lowest for PC-MO-industries. The median values of both rent-sharing measures are estimated to be the highest for IC-PR-industries and the lowest for PC-MO-industries when not controlling for unobserved worker ability in the labor economics approach. Only minor differences in the distribution of both rent-sharing measures across the predominant regimes are observed when using the accounting approach.[20]

6 Conclusion

Empirical labor economists have resorted to estimating the responsiveness of workers' wages to firms' ability to pay to assess the extent to which employers share rents with their employees. This paper compares this labor economics approach with two other approaches that rely on standard micro production data only: the productivity approach for which estimates of the output elasticities of labor and materials and data on the respective revenue shares are needed and the accounting approach which boils down to directly computing the extent of rent sharing from firm accounting information.

Using an unbalanced panel of 103,995 employees working in 14,921 firms belonging to 52 manufacturing industries over the period 1984-2001 in France, we take the productivity approach as our benchmark and select the subset of industries where rent sharing behavior is most likely to be observed, i.e. industries that are characterized by imperfect competition in the product market and efficient bargaining in the labor market. For these 25 IC-EB-industries, we provide micro evidence on rent sharing from orthogonal directions by exploiting different dimensions in the data. We find a median absolute extent of rent sharing of about 0.30 using either the productivity or the accounting approach. Only using firm-level information brings this median rent-sharing parameter down to 0.16 using the labor economics approach. Controlling for unobserved worker ability, thereby considering the possibility that high-ability workers might be systematically sorted into high-profit firms, further reduces the median absolute extent of rent sharing to 0.08. Our results confirm that the three different approaches face important trade-offs in terms of statistical and economic assumptions. The main message of this article is that empirical economists interested in establishing that profits are shared should select the appropriate approach based on the particular research question and on the data at hand.

Our findings raise possible directions for future work. Both the productivity and the labor economics approach are reduced-form approaches. First, an evident continuation is to align both approaches by setting up a simultaneous equations model composed of a production function, a demand function, a pricing rule, cost share equations for variable input factors (taking into account some type of worker heterogeneity) and separate wage equations for different groups of workers. Second, similar to comparing rent-sharing estimates derived from the productivity approach and the labor economics approach, it would be interesting to examine differences between wage elasticity estimates of the labor supply to firms recovered from the productivity approach and those obtained by regressing the decision to separate from a firm on an individual worker's

MO-industries.

[20] We might tentatively conclude from this observation that the accounting approach is far less capable of detecting differences in rent-sharing behavior across regimes.

wage (wage elasticities of separations), the latter being a standard practice in the empirical labor economics literature. Third, following Fitzenberger (2014) in his comments on Alison Booth's (Booth, 2014) survey paper on "Wage determination and imperfect competition", a challenging extension of our productivity approach would be to go beyond the simple dichotomy of either consolidating market power on the supply side of labor or consolidating market power on the demand side by integrating wage determination under trade unions and wage determination under oligopsonistic competition.

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Table 1: Descriptive statistics

ESTIMATION SAMPLE (1984-2001)						
Variables	mean	sd	Q_1	Q_2	Q_3	N
Real firm output growth rate Δq_{it}	0.031	0.150	-0.052	0.027	0.112	145,979
Labor growth rate Δn_{it}	0.011	0.124	-0.041	0.000	0.061	145,979
Materials growth rate Δm_{it}	0.044	0.191	-0.057	0.041	0.144	145,979
Capital growth rate Δk_{it}	0.005	0.153	-0.070	-0.015	0.069	145,979
Labor share in nominal output $(\alpha_N)_{it}$	0.307	0.135	0.211	0.291	0.385	165,315
Labor share computed at the alternative wage $\overline{w}_{it}$ $(\overline{\alpha}_N)_{it}$	0.229	0.088	0.170	0.219	0.276	165,315
Materials share in nominal output $(\alpha_M)_{it}$	0.513	0.155	0.416	0.521	0.621	165,315
$1-(\alpha_N)_{it}-(\alpha_M)_{it}$	0.180	0.112	0.101	0.157	0.230	165,315
Profits per employee $\left(\frac{\pi}{N}\right)_{it}$	22,052	28,830	7,384	14,021	26,323	165,315
Smoothed profits per employee $\widetilde{\left(\frac{\pi}{N}\right)}_{it}$	22,142	27,040	8,535	14,662	26,184	165,315
Capital intensity $\left(\frac{K}{N}\right)_{it}$	31,382	30,439	12,493	22,505	39,095	165,315
Number of employees N_{it}	140	286	34	54	131	165,315
Firm average wage per worker w_{it}	27,837	7,808	22,238	26,950	32,437	165,315
Wage premium $w_{it}-\overline{w}_{it}$	8,321	6,364	3,807	71249	11,704	165,315
Number of employees $N_{j(i)t}$	24	43	4	10	26	648,889
Average wage per worker $w_{j(i)t}$	16,300	9,033	11,078	14,022	18,435	648,889
REGIME R = *IC-EB* (1984-2001)						
Variables	mean	sd	Q_1	Q_2	Q_3	N
Real firm output growth rate Δq_{it}	0.026	0.150	-0.058	0.022	0.108	96,508
Labor growth rate Δn_{it}	0.009	0.126	-0.042	0.000	0.060	96,508
Materials growth rate Δm_{it}	0.044	0.194	-0.061	0.039	0.145	96,508
Capital growth rate Δk_{it}	0.003	0.154	-0.072	-0.018	0.067	96,508
Labor share in nominal output $(\alpha_N)_{it}$	0.328	0.136	0.231	0.314	0.407	109,199
Labor share computed at the alternative wage $\overline{w}_{it}$ $(\overline{\alpha}_N)_{it}$	0.247	0.088	0.187	0.237	0.292	109,199
Materials share in nominal output $(\alpha_M)_{it}$	0.494	0.150	0.401	0.502	0.599	109,199
$1-(\alpha_N)_{it}-(\alpha_M)_{it}$	0.177	0.106	0.102	0.156	0.228	109,199
Profits per employee $\left(\frac{\pi}{N}\right)_{it}$	19,392	24,491	6,790	12,678	23,309	109,199
Smoothed profits per employee $\widetilde{\left(\frac{\pi}{N}\right)}_{it}$	19,734	22,939	7,958	13,415	23,512	109,199
Capital intensity $\left(\frac{K}{N}\right)_{it}$	30,371	29,734	11,997	21,582	37,902	109,199
Number of employees N_{it}	123	255	32	49	116	109,199
Firm average wage per worker w_{it}	27,381	7,612	21,944	26,667	31,907	109,199
Wage premium $w_{it}-\overline{w}_{it}$	8,103	6.283	3.662	7,023	11,372	109,199
Number of employees $N_{j(i)t}$	21	42	3	9	22	382,501
Average wage per worker $w_{j(i)t}$	15,919	8,882	10,807	13,690	18,046	382,501

Notes: $\overline{w}_{it}$ is defined as the 5^{th} percentile value of the firm wage distribution by industry and year.

$\widetilde{\left(\frac{\pi}{N}\right)}_{it}$ is defined as $\frac{1}{5}\sum_{k=t-4}^{t}\left(\frac{\pi}{N}\right)_{ik}$ if $\left(\frac{\pi}{N}\right)_{it-4}$ is not missing,

otherwise equal to $\frac{1}{4}\sum_{k=t-3}^{t}\left(\frac{\pi}{N}\right)_{ik}$.

Table 2: Productivity approach: Industry-specific relative and absolute extent of rent-sharing parameters, wage-profit elasticities and Lester's range of wages due to rent sharing in $R = IC\text{-}EB$

Ind. I	γ_I^{prod}	ϕ_I^{prod}	$\overline{\left(\varepsilon^{w}_{\frac{\pi}{N}}\right)}_I^{prod}$	$\widetilde{\left(\varepsilon^{w}_{\frac{\pi}{N}}\right)}_I^{prod}$	$\overline{L}_I^{prod}$	$\widetilde{L}_I^{prod}$
39	0.115 (0.196)	0.103 (0.158)	0.121 (0.207)	0.121 (0.207)	0.675	0.672
44	0.141 (0.138)	0.124 (0.106)	0.103 (0.101)	0.107 (0.105)	0.473	0.492
20	0.210 (0.372)	0.173 (0.254)	0.107 (0.189)	0.120 (0.212)	0.408	0.458
33	0.231 (0.129)	0.188 (0.085)	0.235 (0.131)	0.252 (0.141)	0.876	0.940
8	0.255 (0.157)	0.203 (0.099)	0.171 (0.105)	0.189 (0.116)	0.605	0.671
31	0.286 (0.115)	0.223 (0.069)	0.294 (0.118)	0.315 (0.126)	0.732	0.783
46	0.291 (0.279)	0.225 (0.168)	0.398 (0.382)	0.402 (0.386)	1.450	1.464
38	0.316 (0.354)	0.240 (0.204)	0.359 (0.403)	0.401 (0.450)	0.750	0.838
29	0.317 (0.578)	0.241 (0.333)	0.199 (0.362)	0.235 (0.428)	0.827	0.977
45	0.319 (0.220)	0.242 (0.127)	0.279 (0.193)	0.310 (0.214)	0.844	0.939
5	0.369 (0.150)	0.269 (0.080)	0.345 (0.140)	0.357 (0.145)	1.782	1.843
7	0.373 (0.278)	0.272 (0.147)	0.254 (0.189)	0.263 (0.196)	1.315	1.361
43	0.411 (0.341)	0.291 (0.171)	0.229 (0.190)	0.236 (0.196)	0.678	0.700
18	0.421 (0.519)	0.296 (0.257)	0.234 (0.288)	0.249 (0.307)	1.029	1.098
19	0.469 (0.577)	0.319 (0.267)	0.221 (0.272)	0.234 (0.288)	0.979	1.037
11	0.478 (0.231)	0.323 (0.106)	0.272 (0.131)	0.284 (0.137)	1.100	1.149
52	0.479 (0.300)	0.324 (0.137)	0.226 (0.142)	0.244 (0.153)	0.978	1.054
47	0.482 (0.220)	0.325 (0.100)	0.250 (0.114)	0.259 (0.118)	0.626	0.649
26	0.550 (0.405)	0.355 (0.169)	0.254 (0.187)	0.269 (0.199)	0.983	1.042
21	0.599 (0.292)	0.374 (0.114)	0.191 (0.093)	0.198 (0.097)	0.742	0.772
36	0.657 (0.321)	0.397 (0.117)	0.316 (0.154)	0.336 (0.164)	1.204	1.283
49	0.685 (0.140)	0.406 (0.049)	0.543 (0.111)	0.548 (0.112)	2.272	2.289
34	0.809 (0.256)	0.447 (0.078)	0.493 (0.156)	0.509 (0.161)	2.795	2.884
48	0.810 (0.147)	0.447 (0.045)	0.403 (0.073)	0.418 (0.076)	1.335	1.386
6	1.130 (0.223)	0.531 (0.049)	0.621 (0.122)	0.639 (0.126)	3.969	4.084
Ind. mean	**0.448 (0.278)**	**0.294 (0.140)**	**0.285 (0.182)**	**0.300 (0.194)**	**1.177**	**1.235**
Ind. Q_1	**0.291 (0.157)**	**0.225 (0.085)**	**0.221 (0.118)**	**0.235 (0.126)**	**0.732**	**0.772**
Ind. Q_2	**0.411 (0.256)**	**0.291 (0.117)**	**0.254 (0.154)**	**0.263 (0.161)**	**0.978**	**1.037**
Ind. Q_3	**0.550 (0.341)**	**0.355 (0.169)**	**0.345 (0.193)**	**0.357 (0.212)**	**1.315**	**1.361**

Notes:

$$\phi_I^{prod} = \frac{\gamma_I^{prod}}{1+\gamma_I^{prod}}, \quad \overline{\left(\varepsilon^{w}_{\frac{\pi}{N}}\right)}_I^{prod} = \gamma_I^{prod} \times \text{mean}\left(\widetilde{\left(\frac{\pi}{w \times N}\right)}_{it}\right), \quad \widetilde{\left(\varepsilon^{w}_{\frac{\pi}{N}}\right)}_I^{prod} = \gamma_I^{prod} \times e^{\left(\text{mean}\left(\ln\left(\widetilde{\frac{\pi}{w \times N}}\right)_{it}\right) + \frac{\left[\text{sd}\left(\ln\left(\widetilde{\frac{\pi}{w \times N}}\right)_{it}\right)\right]^2}{2}\right)},$$

$$\overline{L}_I^{prod} = \overline{\left(\varepsilon^{w}_{\frac{\pi}{N}}\right)}_I^{prod} \times 4 \times \frac{\text{sd}\left(\widetilde{\left(\frac{\pi}{N}\right)}_{it}\right)}{\text{mean}\left(\widetilde{\left(\frac{\pi}{N}\right)}_{it}\right)}, \quad \widetilde{L}_I^{prod} = \widetilde{\left(\varepsilon^{w}_{\frac{\pi}{N}}\right)}_I^{prod} \times 4 \times \frac{\text{sd}\left(\widetilde{\left(\frac{\pi}{N}\right)}_{it}\right)}{\text{mean}\left(\widetilde{\left(\frac{\pi}{N}\right)}_{it}\right)}.$$

Table 3: Labor economics approach: Industry-specific wage-profit elasticities, Lester's range of wages due to rent sharing and relative and absolute extent of rent-sharing parameters in $R = IC\text{-}EB$

Dep. var.	Worker wage $\ln(w_{j(i)t})$					
Ind. I	$\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)_I^{lab,ww}$	$L_I^{lab,ww}$	$\overline{\gamma}_I^{lab,ww}$	$\widetilde{\gamma}_I^{lab,ww}$	$\overline{\phi}_I^{lab,ww}$	$\widetilde{\phi}_I^{lab,ww}$
19	-0.028 (0.015)	-0.125	-0.202 (0.105)	-0.154 (0.081)	-0.253 (0.165)	-0.183 (0.113)
8	-0.034 (0.022)	-0.119	-0.170 (0.113)	-0.113 (0.075)	-0.204 (0.164)	-0.127 (0.096)
21	-0.007 (0.024)	-0.029	-0.060 (0.196)	-0.050 (0.163)	-0.064 (0.222)	-0.052 (0.180)
36	-0.009 (0.026)	-0.036	-0.054 (0.149)	-0.044 (0.122)	-0.057 (0.167)	-0.046 (0.134)
45	-0.012 (0.012)	-0.037	-0.053 (0.052)	-0.029 (0.029)	-0.056 (0.058)	-0.030 (0.030)
26	-0.001 (0.027)	-0.003	-0.006 (0.172)	-0.005 (0.142)	-0.006 (0.174)	-0.005 (0.143)
43	0.000 (0.014)	0.001	0.001 (0.045)	0.001 (0.041)	0.001 (0.045)	0.001 (0.041)
46	0.005 (0.038)	0.017	0.007 (0.058)	0.006 (0.052)	0.007 (0.057)	0.006 (0.051)
47	0.003 (0.023)	0.009	0.013 (0.085)	0.011 (0.072)	0.013 (0.083)	0.011 (0.071)
49	0.013 (0.027)	0.053	0.034 (0.073)	0.029 (0.061)	0.033 (0.068)	0.028 (0.058)
39	0.035 (0.031)	0.197	0.058 (0.050)	0.056 (0.048)	0.054 (0.045)	0.053 (0.043)
48	0.019 (0.031)	0.063	0.085 (0.136)	0.067 (0.107)	0.078 (0.116)	0.063 (0.094)
31	0.039 (0.033)	0.096	0.086 (0.072)	0.065 (0.055)	0.079 (0.061)	0.061 (0.048)
5	0.022 (0.021)	0.113	0.089 (0.085)	0.061 (0.058)	0.082 (0.072)	0.057 (0.052)
33	0.050 (0.025)	0.186	0.124 (0.062)	0.109 (0.054)	0.111 (0.049)	0.098 (0.044)
7	0.036 (0.025)	0.185	0.142 (0.097)	0.123 (0.084)	0.124 (0.075)	0.110 (0.067)
44	0.042 (0.019)	0.194	0.199 (0.089)	0.119 (0.053)	0.166 (0.062)	0.106 (0.042)
11	0.049 (0.027)	0.200	0.249 (0.135)	0.181 (0.098)	0.199 (0.087)	0.153 (0.070)
38	0.088 (0.033)	0.183	0.252 (0.094)	0.136 (0.051)	0.202 (0.060)	0.119 (0.039)
34	0.064 (0.025)	0.362	0.290 (0.113)	0.243 (0.095)	0.225 (0.068)	0.195 (0.061)
18	0.061 (0.031)	0.267	0.297 (0.149)	0.251 (0.127)	0.229 (0.089)	0.201 (0.081)
29	0.040 (0.032)	0.167	0.333 (0.267)	0.198 (0.159)	0.250 (0.150)	0.165 (0.111)
6	0.106 (0.032)	0.678	0.622 (0.190)	0.553 (0.169)	0.383 (0.072)	0.356 (0.070)
52	0.109 (0.029)	0.469	0.710 (0.191)	0.576 (0.155)	0.415 (0.065)	0.365 (0.063)
20	0.049 (0.025)	0.187	0.849 (0.440)	0.252 (0.130)	0.459 (0.129)	0.201 (0.083)
Ind. mean	**0.030 (0.026)**	**0.131**	**0.156 (0.129)**	**0.106 (0.091)**	**0.099 (0.096)**	**0.076 (0.075)**
Ind. Q_1	**0.000 (0.023)**	**0.001**	**0.001 (0.073)**	**0.001 (0.054)**	**0.001 (0.061)**	**0.001 (0.048)**
Ind. Q_2	**0.035 (0.026)**	**0.113**	**0.086 (0.105)**	**0.065 (0.081)**	**0.079 (0.072)**	**0.061 (0.067)**
Ind. Q_3	**0.049 (0.031)**	**0.194**	**0.252 (0.149)**	**0.181 (0.127)**	**0.202 (0.129)**	**0.153 (0.094)**

Table 3 - Continued: Labor economics approach: Industry-specific wage-profit elasticities, Lester's range of wages due to rent sharing and relative and absolute extent of rent-sharing parameters in $R = IC\text{-}EB$

Dep. var.	Firm wage $\ln(w_{it})$					
Ind. I	$\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I^{lab,fw}$	$L_I^{lab,fw}$	$\overline{\gamma}_I^{lab,fw}$	$\widetilde{\gamma}_I^{lab,fw}$	$\overline{\phi}_I^{lab,fw}$	$\widetilde{\phi}_I^{lab,fw}$
19	0.016 (0.070)	0.071	0.116 (0.504)	0.088 (0.385)	0.104 (0.405)	0.081 (0.325)
8	0.042 (0.040)	0.147	0.210 (0.203)	0.140 (0.135)	0.174 (0.139)	0.123 (0.104)
21	0.057 (0.067)	0.220	0.462 (0.547)	0.384 (0.455)	0.316 (0.256)	0.278 (0.237)
36	0.050 (0.050)	0.191	0.284 (0.287)	0.233 (0.235)	0.221 (0.174)	0.189 (0.155)
45	0.001 (0.052)	0.002	0.004 (0.225)	0.002 (0.123)	0.004 (0.224)	0.002 (0.123)
26	0.031 (0.050)	0.120	0.200 (0.326)	0.165 (0.269)	0.167 (0.226)	0.142 (0.198)
43	0.087 (0.037)	0.258	0.279 (0.118)	0.256 (0.109)	0.218 (0.072)	0.204 (0.069)
46	0.027 (0.061)	0.098	0.041 (0.093)	0.037 (0.084)	0.039 (0.086)	0.035 (0.078)
47	0.047 (0.033)	0.117	0.171 (0.122)	0.146 (0.104)	0.146 (0.089)	0.127 (0.079)
49	0.046 (0.028)	0.191	0.124 (0.076)	0.105 (0.065)	0.110 (0.060)	0.095 (0.053)
39	-0.023 (0.034)	-0.127	-0.037 (0.056)	-0.036 (0.054)	-0.039 (0.060)	-0.037 (0.058)
48	-0.001 (0.040)	-0.004	-0.005 (0.176)	-0.004 (0.139)	-0.005 (0.178)	-0.004 (0.140)
31	0.048 (0.064)	0.120	0.106 (0.142)	0.081 (0.108)	0.096 (0.116)	0.075 (0.092)
5	0.055 (0.037)	0.285	0.224 (0.151)	0.153 (0.103)	0.183 (0.101)	0.132 (0.078)
33	0.075 (0.035)	0.280	0.187 (0.088)	0.164 (0.077)	0.158 (0.062)	0.141 (0.057)
7	0.095 (0.031)	0.493	0.378 (0.122)	0.328 (0.106)	0.274 (0.064)	0.247 (0.060)
44	-0.021 (0.029)	-0.098	-0.101 (0.135)	-0.060 (0.081)	-0.112 (0.167)	-0.064 (0.092)
11	0.038 (0.035)	0.153	0.189 (0.176)	0.138 (0.128)	0.159 (0.125)	0.121 (0.099)
38	0.047 (0.047)	0.099	0.137 (0.134)	0.074 (0.072)	0.120 (0.104)	0.068 (0.063)
34	0.027 (0.035)	0.155	0.124 (0.158)	0.104 (0.132)	0.110 (0.125)	0.094 (0.109)
18	0.124 (0.033)	0.546	0.607 (0.160)	0.514 (0.136)	0.378 (0.062)	0.339 (0.059)
29	0.047 (0.057)	0.194	0.387 (0.472)	0.231 (0.281)	0.279 (0.245)	0.187 (0.186)
6	0.142 (0.037)	0.907	0.831 (0.215)	0.739 (0.191)	0.454 (0.064)	0.425 (0.063)
52	0.065 (0.053)	0.281	0.425 (0.348)	0.345 (0.282)	0.298 (0.171)	0.257 (0.156)
20	0.030 (0.035)	0.114	0.517 (0.608)	0.153 (0.180)	0.341 (0.264)	0.133 (0.135)
Ind. mean	**0.046 (0.044)**	**0.192**	**0.234 (0.226)**	**0.179 (0.161)**	**0.168 (0.146)**	**0.136 (0.115)**
Ind. Q_1	**0.027 (0.035)**	**0.099**	**0.116 (0.122)**	**0.081 (0.103)**	**0.104 (0.072)**	**0.075 (0.1063)**
Ind. Q_2	**0.047 (0.037)**	**0.153**	**0.189 (0.160)**	**0.146 (0.128)**	**0.159 (0.125)**	**0.127 (0.092)**
Ind. Q_3	**0.057 (0.052)**	**0.258**	**0.378 (0.287)**	**0.233 (0.191)**	**0.274 (0.178)**	**0.189 (0.140)**

Notes:

$$L_I^{lab,ww} = \left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I^{lab,ww} \times 4 \times \frac{\mathrm{sd}\left(\left(\widetilde{\frac{\pi}{N}}\right)_{it}\right)}{\mathrm{mean}\left(\left(\widetilde{\frac{\pi}{N}}\right)_{it}\right)}, \quad \overline{\gamma}_I^{lab,ww} = \left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I^{lab,ww} \times \mathrm{mean}\left(\left(\widetilde{\frac{w \times N}{\pi}}\right)_{it}\right),$$

$$\widetilde{\gamma}_I^{lab,ww} = \left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I^{lab,ww} \times e^{\left(\mathrm{mean}\left(\ln\left(\widetilde{\frac{w \times N}{\pi}}\right)_{it}\right) + \frac{\left[\mathrm{sd}\left(\ln\left(\widetilde{\frac{w \times N}{\pi}}\right)_{it}\right)\right]^2}{2}\right)}, \quad \overline{\phi}_I^{lab,ww} = \frac{\overline{\gamma}_I^{lab,ww}}{1+\overline{\gamma}_I^{lab,ww}}, \quad \widetilde{\phi}_I^{lab,ww} = \frac{\widetilde{\gamma}_I^{lab,ww}}{1+\widetilde{\gamma}_I^{lab,ww}}.$$

Similar formulas apply if the dependent variable is the firm average wage per worker.

Table 4: Accounting approach: Distribution of firm-specific relative and absolute extent of rent-sharing parameters, wage-profit elasticities and Lester's range of wages due to rent sharing in $R = IC\text{-}EB$

Ind. I	γ_{it}^{acc}			ϕ_{it}^{acc}			$\overline{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{acc}$	$\widetilde{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{acc}$	$\overline{L}_I^{acc}$	$\widetilde{L}_I^{acc}$
	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3				
38	0.159	0.256	0.394	0.138	0.205	0.284	0.291	0.325	0.608	0.679
46	0.124	0.277	0.448	0.112	0.217	0.310	0.379	0.382	1.380	1.393
31	0.147	0.285	0.497	0.128	0.222	0.332	0.293	0.313	0.729	0.780
39	0.169	0.302	0.518	0.146	0.232	0.342	0.320	0.319	1.779	1.773
33	0.170	0.322	0.610	0.147	0.245	0.381	0.327	0.351	1.222	1.311
45	0.166	0.329	0.648	0.142	0.247	0.393	0.287	0.320	0.870	0.969
29	0.185	0.357	0.781	0.158	0.263	0.440	0.224	0.264	0.930	1.099
44	0.203	0.398	0.722	0.171	0.286	0.422	0.291	0.303	1.335	1.390
49	0.216	0.409	0.732	0.179	0.292	0.425	0.325	0.327	1.357	1.367
47	0.230	0.431	0.783	0.188	0.302	0.440	0.223	0.232	0.560	0.580
5	0.207	0.437	0.883	0.174	0.306	0.473	0.409	0.423	2.113	2.185
7	0.228	0.462	0.916	0.190	0.321	0.484	0.315	0.326	1.629	1.686
43	0.223	0.463	0.824	0.183	0.318	0.454	0.258	0.266	0.763	0.788
20	0.233	0.517	1.064	0.191	0.345	0.518	0.263	0.295	1.005	1.127
11	0.277	0.532	0.966	0.220	0.350	0.496	0.302	0.316	1.225	1.279
34	0.285	0.558	1.037	0.224	0.361	0.512	0.340	0.351	1.927	1.989
18	0.286	0.564	1.144	0.225	0.363	0.536	0.313	0.334	1.378	1.470
48	0.292	0.567	1.035	0.228	0.364	0.511	0.282	0.293	0.935	0.970
8	0.272	0.567	1.158	0.216	0.364	0.541	0.380	0.421	1.344	1.490
52	0.286	0.602	1.292	0.223	0.378	0.566	0.284	0.306	1.228	1.323
26	0.243	0.605	1.256	0.199	0.380	0.562	0.280	0.296	1.081	1.146
6	0.331	0.668	1.264	0.254	0.405	0.565	0.367	0.377	2.345	2.413
36	0.368	0.688	1.303	0.272	0.413	0.575	0.330	0.352	1.260	1.343
19	0.398	0.765	1.599	0.286	0.436	0.618	0.360	0.381	1.597	1.691
21	0.411	0.858	1.709	0.296	0.465	0.638	0.273	0.285	1.063	1.107
Ind. mean	**0.244**	**0.489**	**0.943**	**0.196**	**0.323**	**0.473**	**0.309**	**0.326**	**1.267**	**1.334**
Ind. Q_1	**0.190**	**0.367**	**0.725**	**0.161**	**0.269**	**0.423**	**0.283**	**0.298**	**0.952**	**1.101**
Ind. Q_2	**0.232**	**0.476**	**0.930**	**0.191**	**0.322**	**0.479**	**0.305**	**0.323**	**1.244**	**1.329**
Ind. Q_3	**0.285**	**0.567**	**1.154**	**0.224**	**0.364**	**0.540**	**0.330**	**0.351**	**1.379**	**1.485**

Notes: $\gamma_{it}^{acc} = \frac{(w_{it}-\overline{w}_{it})\times N_{it}}{R_{it}-w_{it}N_{it}-j_{it}M_{it}}$, $\phi_{it}^{acc} = \frac{\gamma_{it}^{acc}}{1+\gamma_{it}^{acc}}$,

$$\overline{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{acc} = \text{median}(\gamma_{it}^{acc}) \times \text{mean}\left(\left(\widetilde{\frac{\pi}{w\times N}}\right)_{it}\right), \quad \widetilde{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{acc} = \text{median}(\gamma_{it}^{acc}) \times e^{\left(\text{mean}\left(\ln\left(\widetilde{\frac{\pi}{w\times N}}\right)_{it}\right)+\frac{\left[\text{sd}\left(\ln\left(\widetilde{\frac{\pi}{w\times N}}\right)_{it}\right)\right]^2}{2}\right)},$$

$$\overline{L}_I^{acc} = \overline{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{acc} \times 4 \times \frac{\text{sd}\left(\left(\widetilde{\frac{\pi}{N}}\right)_{it}\right)}{\text{mean}\left(\left(\widetilde{\frac{\pi}{N}}\right)_{it}\right)}, \quad \widetilde{L}_I^{acc} = \widetilde{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{acc} \times 4 \times \frac{\text{sd}\left(\left(\widetilde{\frac{\pi}{N}}\right)_{it}\right)}{\text{mean}\left(\left(\widetilde{\frac{\pi}{N}}\right)_{it}\right)}.$$

Table 5: Comparison of the distribution of relative and absolute extent of rent-sharing parameters, wage-profit elasticities and Lester's range of wages due to rent sharing across the three approaches in $R = IC\text{-}EB$

	mean	Q_1	Q_2	Q_3
Relative extent of rent sharing				
Productivity: γ_I^{prod}	0.448	0.291	0.411	0.550
Labor economics: $\overline{\gamma}_I^{lab,ww}$	0.156	0.001	0.086	0.252
Labor economics: $\widetilde{\gamma}_I^{lab,ww}$	0.106	0.001	0.065	0.181
Labor economics: $\overline{\gamma}_I^{lab,fw}$	0.234	0.116	0.189	0.378
Labor economics: $\widetilde{\gamma}_I^{lab,fw}$	0.179	0.081	0.146	0.233
Accounting: median of γ_{it}^{acc}	0.489	0.367	0.463	0.567
Absolute extent of rent sharing				
Productivity: ϕ_I^{prod}	0.293	0.225	0.291	0.355
Labor economics: $\overline{\phi}_I^{lab,ww}$	0.099	0.001	0.079	0.201
Labor economics: $\widetilde{\phi}_I^{lab,ww}$	0.076	0.001	0.061	0.153
Labor economics: $\overline{\phi}_I^{lab,fw}$	0.168	0.103	0.159	0.274
Labor economics: $\widetilde{\phi}_I^{lab,fw}$	0.136	0.075	0.127	0.189
Accounting: median of ϕ_{it}^{acc}	0.323	0.263	0.320	0.364
Wage-profit elasticity				
Productivity: $\overline{\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)}_I^{prod}$	0.293	0.229	0.282	0.346
Productivity: $\widetilde{\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)}_I^{prod}$	0.313	0.251	0.305	0.363
Labor economics: $\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I^{lab,ww}$	0.030	0.000	0.035	0.049
Labor economics: $\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I^{lab,fw}$	0.046	0.027	0.046	0.057
Accounting: $\overline{\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)}_I^{acc}$	0.209	0.282	0.302	0.330
Accounting: $\widetilde{\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)}_I^{acc}$	0.326	0.296	0.320	0.351
Lester's range of wages due to rent sharing				
Productivity: $\overline{L}_I^{prod}$	1.333	0.807	1.104	1.464
Productivity: $\widetilde{L}_I^{prod}$	1.422	0.864	1.192	1.556
Labor economics: $L_I^{lab,ww}$	0.131	0.001	0.113	0.193
Labor economics: $L_I^{lab,fw}$	0.192	0.099	0.152	0.258
Accounting: $\overline{L}_I^{acc}$	1.266	0.935	1.228	1.380
Accounting: $\widetilde{L}_I^{acc}$	1.334	1.099	1.323	1.490

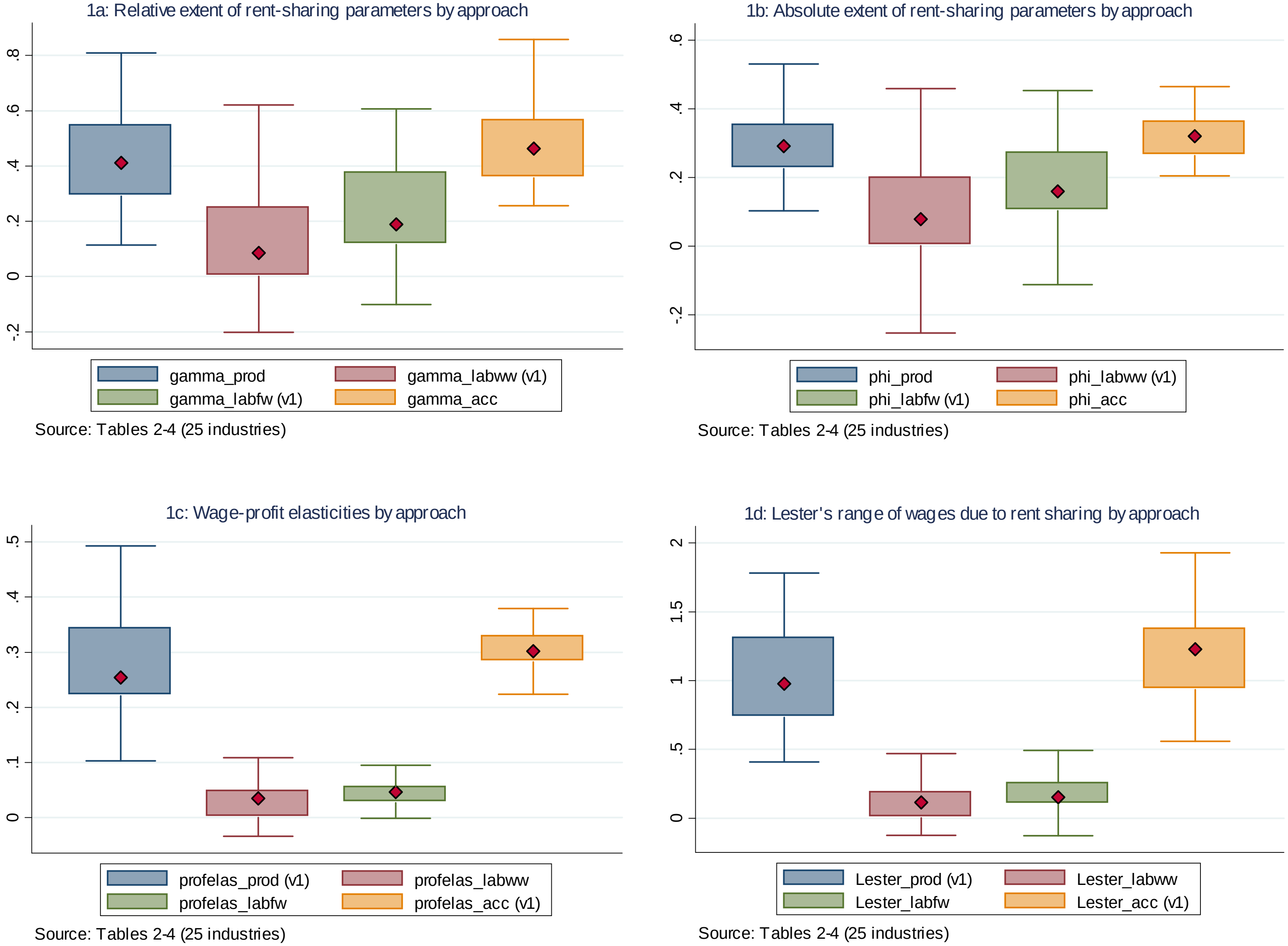
Note: See Tables 2-4 for the formulas.

Table 6: Correlation of industry-specific relative and absolute extent of rent-sharing parameters, wage-profit elasticities and Lester's range of wages due to rent sharing between the three approaches in $R = IC\text{-}EB$

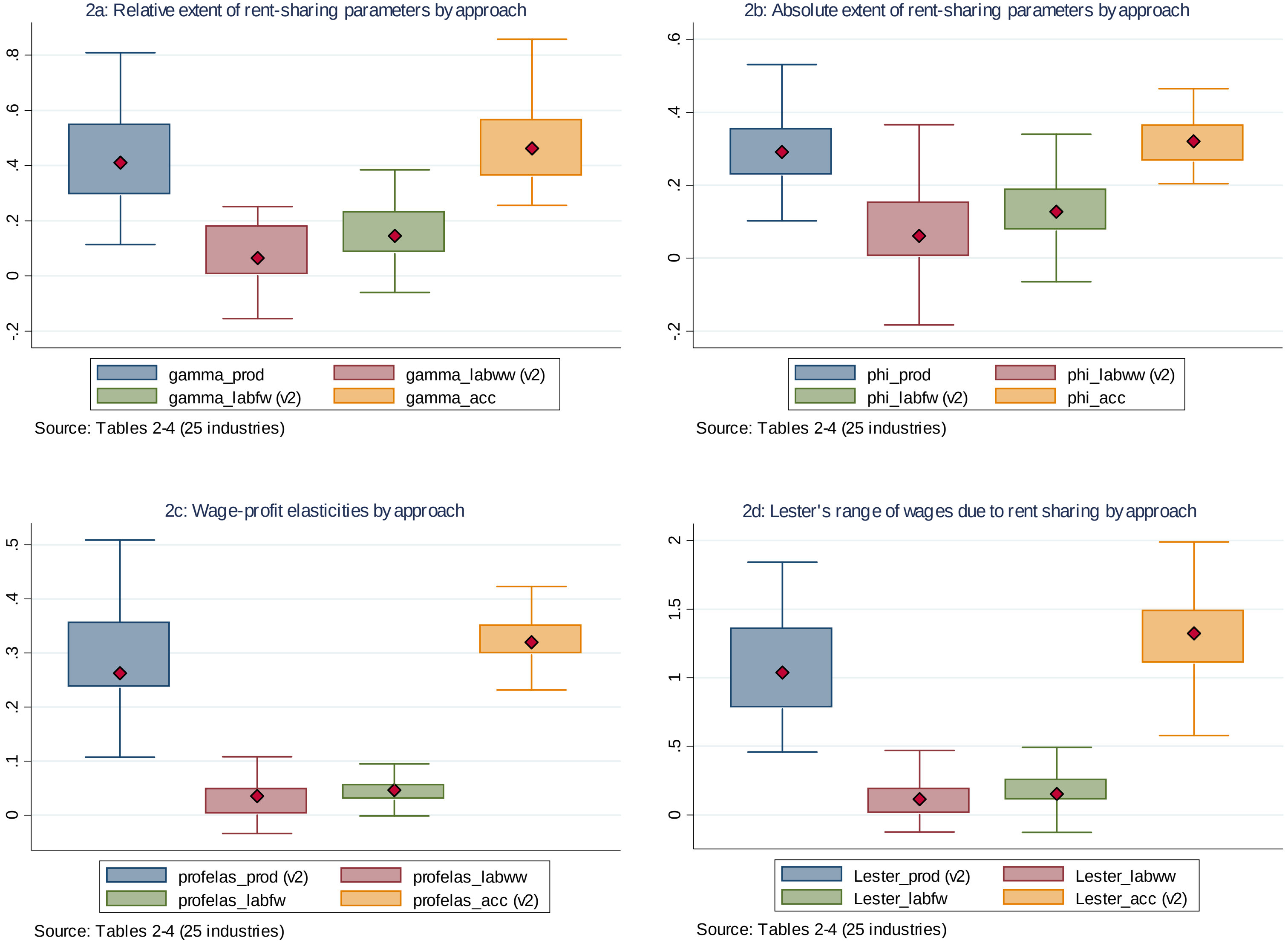
Rel. extent of rent sharing	γ_I^{prod}	$\overline{\gamma}_I^{lab,ww}$	$\widetilde{\gamma}_I^{lab,ww}$	$\overline{\gamma}_I^{lab,fw}$	$\widetilde{\gamma}_I^{lab,fw}$	Median of γ_{it}^{acc}
Prod.: γ_I^{prod}	1.000 [1.000]					
Labor ec.: $\overline{\gamma}_I^{lab,ww}$	-0.074 [0.302]	1.000 [1.000]				
Labor ec.: $\widetilde{\gamma}_I^{lab,ww}$	0.002 [0.250]	0.990***[0.942***]	1.000 [1.000]			
Labor ec.: $\overline{\gamma}_I^{lab,fw}$	0.258 [0.253*]	0.350*[0.278*]	0.341*[0.308**]	1.000 [1.000]		
Labor ec.: $\widetilde{\gamma}_I^{lab,fw}$	0.375*[0.200**]	0.215 [0.240]	0.228 [0.281*]	0.941***[0.944***]	1.000 [1.000]	
Account.: med. of γ_{it}^{acc}	0.644***[0.594*]	-0.185 [0.013]	-0.135 [0.055]	0.541***[0.553*]	0.511***[0.544**]	1.000 [1.000]
Abs. extent of rent sharing	ϕ_I^{prod}	$\overline{\phi}_I^{lab,ww}$	$\widetilde{\phi}_I^{lab,ww}$	$\overline{\phi}_I^{lab,fw}$	$\widetilde{\phi}_I^{lab,fw}$	ϕ_{it}^{acc}
Prod.: ϕ_I^{prod}	1.000 [1.000]					
Labor ec.: $\overline{\phi}_I^{lab,ww}$	-0.074 [0.198]	1.000 [1.000]				
Labor ec.: $\widetilde{\phi}_I^{lab,ww}$	0.002 [0.199]	0.991***[0.984***]	1.000 [1.000]			
Labor ec.: $\overline{\phi}_I^{lab,fw}$	0.258 [0.266**]	0.350*[0.410*]	0.341*[0.460*]	1.000 [1.000]		
Labor ec.: $\widetilde{\phi}_I^{lab,fw}$	0.375*[0.222**]	0.215 [0.380]	0.228 [0.433]	0.941***[0.951***]	1.000 [1.000]	
Account.: med. of ϕ_{it}^{acc}	0.643***[0.701**]	-0.178 [0.101]	-0.128 [0.122]	0.512***[0.570**]	0.542***[0.575**]	1.000 [1.000]
Wage-profit elasticity	$\overline{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{prod}$	$\widetilde{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{prod}$	$\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)_I^{lab,ww}$	$\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)_I^{lab,fw}$	$\overline{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{acc}$	$\widetilde{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{acc}$
Prod.: $\overline{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{prod}$	1.000 [1.000]					
Prod.: $\widetilde{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{prod}$	0.985***[0.999***]	1.000 [1.000]				
Labor ec.: $\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)_I^{lab,ww}$	0.191 [0.289]	0.224 [0.284]	1.000 [1.000]			
Labor ec.: $\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)_I^{lab,fw}$	0.104 [0.061]	0.128 [0.054]	0.305 [0.450]	1.000 [1.000]		
Account.: $\overline{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{acc}$	0.281 [-0.093]	0.262 [-0.102]	-0.014 [0.012]	0.028 [0.151]	1.000 [1.000]	
Account.: $\widetilde{\left(\varepsilon_{\frac{w}{\frac{\pi}{N}}}\right)}_I^{acc}$	0.267 [-0.116]	0.271 [-0.119]	-0.031 [0.009]	0.093 [0.186]	0.968***[0.953***]	1.000 [1.000]
Lester's range of wages	$\overline{L}_I^{prod}$	$\widetilde{L}_I^{prod}$	$L_I^{lab,ww}$	$L_I^{lab,fw}$	$\overline{L}_I^{acc}$	$\widetilde{L}_I^{acc}$
Prod.: $\overline{L}_I^{prod}$	1.000 [1.000]					
Prod.: $\widetilde{L}_I^{prod}$	0.999***[0.999***]	1.000 [1.000]				
Labor ec.: $L_I^{lab,ww}$	0.201 [0.310**]	0.192 [0.313**]	1.000 [1.000]			
Labor ec.: $L_I^{lab,fw}$	0.421**[0.032*]	0.415**[0.031*]	0.304 [0.354]	1.000 [1.000]		
Account.: $\overline{L}_I^{acc}$	0.528***[0.051***]	0.523***[0.033***]	0.327 [0.189*]	0.278 [0.154**]	1.000 [1.000]	
Account.: $\widetilde{L}_I^{acc}$	0.448**[0.070***]	0.444**[0.055***]	0.315 [0.184**]	0.268 [0.163**]	0.990***[0.989***]	1.000 [1.000]

Notes: See Tables 2-4 for the formulas. Rank correlation is reported. A robust correlation is reported in square brackets.
***Significant at 1%, **significant at 5%, *significant at 10%.

Graph 1: Relative and absolute extent of rent sharing parameters, wage-profit elasticities and Lester's range of wages due to rent sharing by approach in $R = IC\text{-}EB$ - variant 1



Graph 2: Relative and absolute extent of rent sharing parameters, wage-profit elasticities and Lester's range of wages due to rent sharing by approach in $R = IC\text{-}EB$ - variant 2



Appendix A: Classification procedure

Classification procedure : Hypothesis test	Null hypothesis not rejected
H_{10}: $\left(\mu_I - 1 = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - 1\right) \leq 0.10$ and H_{20}: $\left(\psi_I = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - \frac{(\varepsilon_N^Q)_I}{(\alpha_N)_I}\right) \leq \lvert 0.10 \rvert$	$R = PC\text{-}PR$
H_{10}: $\left(\mu_I - 1 = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - 1\right) > 0.10$ and H_{20}: $\left(\psi_I = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - \frac{(\varepsilon_N^Q)_I}{(\alpha_N)_I}\right) \leq \lvert 0.10 \rvert$	$R = IC\text{-}PR$
H_{10}: $\left(\mu_I - 1 = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - 1\right) \leq 0.10$ and H_{20}: $\left(\psi_I = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - \frac{(\varepsilon_N^Q)_I}{(\alpha_N)_I}\right) > 0.10$	$R = PC\text{-}EB$
H_{10}: $\left(\mu_I - 1 = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - 1\right) > 0.10$ and H_{20}: $\left(\psi_I = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - \frac{(\varepsilon_N^Q)_I}{(\alpha_N)_I}\right) > 0.10$	$R = IC\text{-}EB$
H_{10}: $\left(\mu_I - 1 = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - 1\right) \leq 0.10$ and H_{20}: $\left(\psi_I = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - \frac{(\varepsilon_N^Q)_I}{(\alpha_N)_I}\right) \leq -0.10$	$R = PC\text{-}MO$
H_{10}: $\left(\mu_I - 1 = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - 1\right) > 0.10$ and H_{20}: $\left(\psi_I = \frac{(\varepsilon_M^Q)_I}{(\alpha_M)_I} - \frac{(\varepsilon_N^Q)_I}{(\alpha_N)_I}\right) \leq -0.10$	$R = IC\text{-}MO$

Appendix B : Statistical annex

Table B.1: Panel structure of firm data: Number of participations

	TOTAL SAMPLE (1981-2001)				**ESTIMATION SAMPLE (1984-2001)**				**REGIME *R* = *IC-EB* (1981-2001)**				**REGIME *R* = *IC-EB* (1984-2001)**			
# of participations[a)]	**# obs**	%	**# firms**	%	**# obs**	%	**# firms**	%	**# obs**	%	**# firms**	%	**# obs**	%	**# firms**	%
1													5	0.00	5	0.05
2					10	0.01	5	0.03					12	0.01	6	0.06
3					234	0.14	78	0.52					171	0.16	57	0.58
4	744	0.43	186	1.25	1,136	0.69	284	1.90	442	0.39	111	1.13	732	0.67	183	1.86
5	1,900	1.11	380	2.55	2,425	1.47	485	3.25	1,241	1.10	249	2.53	1,585	1.45	317	3.22
6	6,984	4.07	1,164	7,80	7,308	4.42	1,218	8.16	4,522	4.00	754	7.66	4,656	4.26	776	7.88
7	8,197	4.78	1,171	7.85	826	5.00	1,180	7.91	5,314	4.70	762	7.74	5,390	4.94	770	7.82
8	9,672	5.64	1,209	8.10	9,424	5.70	1,178	7.89	6,381	5.65	801	8.13	6,256	5.73	782	7.94
9	11,403	6.65	1,267	8.49	11,367	6.88	1,263	8.46	7,507	6.64	837	8.50	7,425	6.80	825	8.38
10	12,210	7.12	1,221	8.18	1,213	7.34	1,213	8.13	8,350	7.39	837	8.50	8,370	7.66	837	8.50
11	12,419	7.24	1,129	7.57	12,793	7.74	1,163	7.79	8,052	7.12	732	7.43	8,162	7.47	742	7.53
12	13,416	7.82	1,118	7.49	13,428	8.12	1,119	7.50	9,055	8.01	755	7.67	9,096	8.33	758	7.70
13	13,897	8.10	1,069	7.16	14,053	8.50	1,081	7.24	9,295	8.22	715	7.26	9,321	8.54	717	7.28
14	14,210	8.28	1,015	6.80	14,154	8.56	1,011	6.78	9,255	8.19	662	6.72	9,100	8.33	650	6.60
15	14,175	8.26	945	6.33	14,085	8.52	939	6.29	9,381	8.30	627	6.37	9,390	8.60	626	6.36
16	31,296	18.24	1,956	13.11	31,648	19.14	1,978	13.26	21,752	19.25	1,360	13.81	21,760	19.93	1360	13.81
17	3,502	2.04	206	1.38	3,536	2.14	208	1.39	1,955	1.73	115	1.17	1,972	1.81	116	1.18
18	3,294	1.92	183	1.23	9,324	5.64	518	3.47	2,016	1.78	112	1.14	5,796	5.31	322	3.27
19	3,477	2.03	183	1.23					2,166	1.92	114	1.16				
20	2,980	1.74	149	1.00					1,720	1.52	86	0.87				
21	7,770	4.53	370	2.48					4,620	4.09	220	2.23				
Total	171,546	100.0	14,921	100.0	165,315	100.0	14,921	100.0	113,024	100.0	9,849	100.0	109,199	100.0	9,849	100.0

Note: a) Median number of observations per firm in all samples: 11.

Table B.2: Industry repartition in estimation sample

Ind. I	Code	Name	# firms (# obs)	% firms	# workers (# obs)	% workers	Regime R
1	B01	Meat preparations	461 (4,956)	3.09	3,286 (18,339)	3.16	*PC-MO*
2	B02	Milk products	150 (1,764)	1.01	1,556 (9,458)	1.50	*PC-MO*
3	B03	Beverages	155 (1,663)	1.04	1,422 (7,163)	1.37	*PC-MO*
4	B04	Food production for animals	182 (2,043)	1.22	1,024 (5,671)	0.98	*PC-MO*
5	B05-B06	Other food products	767 (8,346)	5.14	5,095 (29,986)	4.90	*IC-EB*
6	C11	Clothing and skin goods	790 (7,665)	5.29	4,245 (23,999)	4.08	*IC-EB*
7	C12	Leather goods and footwear	312 (3,422)	2.09	1,876 (12,555)	1.80	*IC-EB*
8	C20	Publishing, (re)printing	1,037 (10,936)	6.95	5,367 (31,459)	5.16	*IC-EB*
9	C31	Pharmaceutical products	189 (1,990)	1.27	2,725 (15,391)	2.62	*IC-MO*
10	C32	Soap, perfume and maintenance products	172 (1,865)	1.15	1,976 (10,861)	1.90	*IC-PR*
11	C41	Furniture	505 (5,658)	3.38	3,173 (20,979)	3.05	*IC-EB*
12	C42	Jewelry and musical instruments	69 (816)	0.46	429 (3,001)	0.41	*IC-PR*
13	C43	Sport articles, games and other products	216 (2,379)	1.45	1,342 (8,388)	1.29	*IC-PR*
14	C44	Domestic applicances	50 (619)	0.34	1,042 (7,813)	1.00	*IC-PR*
15	C45-C46	Reception, recording, reproduction. photographic equipment, optical instruments, watches	129 (1,376)	0.86	1,149 (7,168)	1.10	*IC-PR*
16	D01	Motor vehicles	182 (2,023)	1.22	1,461 (9,003)	1.40	*IC-MO*
17	D02	Transport equipment	170 (2,078)	1.14	2,926 (18,740)	2.81	*IC-PR*
18	E11-E12, E14	Shipbuilding, construction of railway rolling stock, bicycles, motorcycles, transport equipment n.e.c.	96 (996)	0.64	808 (5,099)	0.78	*IC-EB*
19	E13	Aircraft and spacecraft	63 (658)	0.42	1,923 (11,917)	1.85	*IC-EB*
20	E21	Metal products for construction	216 (2,360)	1.45	1,040 (6,425)	0.10	*IC-EB*
21	E22	Ferruginous and steam boilers	398 (4,365)	2.67	1,965 (12,118)	1.89	*IC-EB*
22	E23	Mechanical equipment	235 (2,783)	1.57	2,427 (17,332)	2.33	*IC-PR*
23	E24	Machinery for general usage	379 (3,962)	2.54	3,003 (18,532)	2.89	*PC-MO*
24	E25	Agricultural machinery	118 (1,288)	0.79	618 (3,705)	0.59	*PC-MO*
25	E26	Machine tools	84 (932)	0.56	539 (3,466)	0.52	*IC-PR*
26	E27-E28	Other special purpose machinery	361 (3,990)	2.42	2,027 (13,832)	1.95	*IC-EB*
27	E31-E32	Office machinery and computers, engines, generators and transformers	96 (840)	0.64	804 (4,299)	0.77	*PC-MO*
28	E33	Television and radio transmitters	66 (547)	0.44	348 (1,468)	0.33	*PC-MO*
29	F34	Medical and surgical equipment and orthopaedic appliances	96 (941)	0.64	489 (2,629)	0.47	*IC-EB*
30	E35	Instruments and appliances for measuring and checking	153 (1,357)	1.03	715 (3,582)	0.69	*PC-MO*
31	F11-F12	Mining of metal ores, other mining n.e.c.	237 (2,883)	1.59	973 (6,024)	0.94	*IC-EB*
32	F13	Glass products	141 (1,611)	0.94	1,896 (13,058)	1.82	*PC-EB*
33	F14	Earthenware products and construction material	528 (6,109)	3.54	3,586 (22,679)	3.45	*IC-EB*
34	F21	Spinning and weaving	374 (4,014)	2.51	2,748 (16,415)	2.64	*IC-EB*
35	F22	Textile products	301 (3,434)	2.02	1,816 (11,636)	1.75	*IC-PR*
36	F23	Knitted and crocheted fabrics	126 (1,313)	0.84	1,341 (8,391)	1.29	*IC-EB*
37	F31	Wooden products	591 (6,882)	3.96	2,222 (14,274)	2.14	*PC-MO*
38	F32	Pulp, paper and paperboard	82 (935)	0.55	1,007 (6,979)	0.97	*IC-EB*
39	F33	Articles of paper and paperboard	362 (4,358)	2.43	2,633 (18,624)	2.53	*IC-EB*
40	F41	Inorganic basic chemicals	64 (726)	0.43	695 (3,894)	0.67	*PC-MO*
41	F42	Organic basic chemicals	92 (1,010)	0.62	990 (6,379)	0.95	*PC-MO*
42	F43	Parachemical products	237 (2,730)	1.59	2,210 (13,253)	0.21	*PC-MO*
43	F45	Rubber products	123 (1,488)	0.82	1,403 (9,866)	1.35	*IC-EB*
44	F46	Plastic products	877 (10,010)	5.88	4,899 (32,192)	4.71	*IC-EB*
45	F51	Basic iron and steel	102 (1,243)	0.68	1,806 (12,327)	1.74	*IC-EB*
46	F52	Production of non-ferrous metals	67 (738)	0.45	923 (5,649)	0.89	*IC-EB*
47	F53	Ironware	188 (2,253)	1.26	1,394 (10,165)	1.34	*IC-EB*
48	F54	Industrial service to metal products	1,301 (14,949)	8.72	4,620 (9,970)	0.44	*IC-EB*
49	F55	Metal fabrication	663 (8,024)	4.44	3,748 (26,112)	3.60	*IC-EB*
50	F56	Recycling	84 (908)	0.56	294 (1,643)	0.28	*PC-PR*
51	F61	Electrical equipment	325 (3,534)	2.18	4,839 (28,871)	4.65	*PC-PR*
52	F62	Electronics	159 (1,545)	1.07	1,152 (6,110)	1.11	*IC-EB*
Total			14,921 (165,315)	100.0	103,995 (648,889)	100.0	

Table B.3: Industry classification

# ind. prop. of ind. (%) prop. of firms (%) prop. of emp. (%)	**LABOR MARKET SETTING**			
PRODUCT MARKET SETTING	**Perfect competition or right-to-manage bargaining (*PR*)**	**Efficient bargaining (*EB*)**	**Monopsony (*MO*)**	
Perfect competition (*PC*)	2 3.8 2.7 5.2	1 1.9 0.9 1.7	13 25.0 18.4 18.3	16 30.7 22.0 25.2
Imperfect competition (*IC*)	9 17.3 9.5 12.6	25 48.1 65.9 57.6	2 3.8 2.5 4.5	36 69.2 77.9 74.7
	11 21.1 12.2 17.8	26 50.0 66.8 59.3	15 28.8 20.9 22.8	52 100 100 100

Table B.4: Panel structure of matched worker-firm data: Number of participations

	ESTIMATION SAMPLE (1984-2001)				**REGIME R = *IC-EB* (1984-2001)**			
# of participations[a)]	**# obs**	%	**# workers**	%	**# obs**	%	**# workers**	%
2	28,720	4.43	15,203	14.62	15,872	4.15	8,393	13.92
3	37,845	5.83	13,374	12.86	20,447	5.35	7,243	12.01
4	51,734	7.97	13,606	13.08	29,114	7.61	7,687	12.75
5	42,736	6.59	9,045	8.70	24,721	6.46	5,236	8.68
6	60,092	9.26	10,477	10.07	36,747	9.61	6,406	10.62
7	47,907	7.38	7,164	6.89	27,911	7.30	4,187	6.94
8	46,969	7.24	6,145	5.91	28,760	7.52	3,775	6.26
9	49,047	7.56	5,687	5.47	29,444	7.70	3,417	5.67
10	49,602	7.64	5,149	4.95	29,104	7.61	3,016	5.00
11	53,540	8.25	5,021	4.83	33,995	8.89	3,188	5.29
12	30,471	4.70	2,634	2.53	18,869	4.93	1,629	2.70
13	31,753	4.89	2,534	2.44	18,055	4.72	1,445	2.40
14	30,413	4.69	2,242	2.16	17,638	4.61	1,302	2.16
15	40,260	6.20	2,759	2.65	24,335	6.36	1,673	2.77
16	17,895	2.76	1,148	1.10	8,969	2.34	577	0.96
17	29,905	4.61	1,807	1.74	18,520	4.84	1,120	1.86
Total	648,889	100.0	103,995	100.0	382,501	100.0	60,294	100.0

Note: a) Median number of observations per worker in both samples: 5.

Table B.5: Productivity approach: Industry-specific input shares $(\alpha_J)_I$ $(J = N, M, K)$, output elasticities $\left(\widehat{\varepsilon}_J^Q\right)_I$, scale elasticity $\widehat{\lambda}_I$, joint market imperfections parameter $\widehat{\psi}_I$, and corresponding price-cost mark-up $\widehat{\mu}_I$ and absolute extent of rent sharing $\widehat{\phi}_I$ or labor supply elasticity $\left(\widehat{\varepsilon}_w^N\right)_I$ by regime

Regime R = *IC-EB* [48% of industries, 66% of firms, 58% of employment]

Ind. I	$(\alpha_N)_I$	$(\alpha_M)_I$	$(\alpha_K)_I$	$(\widehat{\varepsilon}_N^Q)_I$	$(\widehat{\varepsilon}_M^Q)_I$	$(\widehat{\varepsilon}_K^Q)_I$	$\widehat{\lambda}_I$	$\widehat{\psi}_I$	$\widehat{\mu}_I$	$\widehat{\gamma}_I^{prod}$	$\widehat{\phi}_I^{prod}$	*Sargan*	*Hansen*	*Dif-Hansen (lev)*	*Dif-Hansen (L2-dif)*	*Dif-Hansen (L3-dif)*	*m1*	*m2*
39	0.249	0.538	0.212	0.251 (0.035)	0.602 (0.035)	0.109 (0.063)	0.962 (0.011)	0.109 (0.192)	1.118 (0.066)	0.115 (0.196)	0.103 (0.158)	0.000	0.057	0.108	0.580	0.571	-3.87	-6.84
44	0.269	0.558	0.174	0.280 (0.021)	0.639 (0.020)	0.070 (0.035)	0.989 (0.009)	0.104 (0.105)	1.146 (0.037)	0.141 (0.138)	0.124 (0.106)	0.000	0.025	0.540	0.130	0.430	-1.53	-12.23
20	0.276	0.593	0.131	0.281 (0.045)	0.670 (0.039)	0.005 (0.069)	0.955 (0.020)	0.112 (0.204)	1.129 (0.066)	0.210 (0.372)	0.173 (0.254)	0.000	0.877	1.000	0.852	0.655	-1.27	-7.11
33	0.290	0.485	0.225	0.294 (0.028)	0.600 (0.024)	0.082 (0.045)	0.975 (0.014)	0.222 (0.131)	1.236 (0.050)	0.231 (0.129)	0.188 (0.085)	0.000	0.065	0.543	0.378	0.600	-1.05	-9.40
8	0.336	0.483	0.181	0.344 (0.023)	0.571 (0.020)	0.075 (0.040)	0.989 (0.009)	0.162 (0.105)	1.183 (0.042)	0.255 (0.157)	0.203 (0.099)	0.000	0.038	0.306	0.348	0.200	-2.08	-12.95
31	0.267	0.502	0.231	0.254 (0.025)	0.634 (0.028)	0.119 (0.047)	1.007 (0.010)	0.313 (0.137)	1.264 (0.056)	0.286 (0.115)	0.223 (0.069)	0.000	0.714	0.830	0.992	0.997	-0.52	-7.38
46	0.191	0.612	0.197	0.154 (0.058)	0.707 (0.045)	0.098 (0.080)	0.959 (0.033)	0.346 (0.345)	1.154 (0.073)	0.291 (0.279)	0.225 (0.168)	0.000	1.000	1.000	1.000	1.000	-0.12	-3.61
38	0.204	0.599	0.197	0.179 (0.077)	0.758 (0.056)	0.042 (0.125)	0.979 (0.023)	0.387 (0.460)	1.265 (0.093)	0.316 (0.354)	0.240 (0.204)	0.000	1.000	1.000	1.000	1.000	-1.23	-3.53
29	0.395	0.370	0.235	0.476 (0.143)	0.550 (0.080)	0.030 (0.200)	1.055 (0.052)	0.280 (0.548)	1.485 (0.215)	0.317 (0.578)	0.241 (0.333)	0.000	0.996	1.000	1.000	1.000	0.59	-3.25
45	0.230	0.598	0.172	0.200 (0.040)	0.683 (0.044)	0.070 (0.052)	0.953 (0.017)	0.272 (0.196)	1.142 (0.074)	0.319 (0.220)	0.242 (0.127)	0.000	1.000	1.000	1.000	1.000	0.67	-4.65
5	0.282	0.535	0.184	0.246 (0.025)	0.615 (0.023)	0.139 (0.042)	1.000 (0.013)	0.277 (0.120)	1.150 (0.043)	0.369 (0.150)	0.269 (0.080)	0.000	0.242	0.854	0.677	0.644	-1.57	-9.05
7	0.337	0.487	0.177	0.313 (0.040)	0.562 (0.039)	0.085 (0.071)	0.960 (0.015)	0.226 (0.182)	1.155 (0.080)	0.373 (0.278)	0.272 (0.147)	0.000	0.208	0.496	0.840	0.745	-0.54	-6.93
43	0.331	0.491	0.178	0.311 (0.058)	0.591 (0.052)	0.078 (0.082)	0.980 (0.022)	0.266 (0.237)	1.205 (0.106)	0.411 (0.341)	0.291 (0.171)	0.000	1.000	1.000	1.000	1.000	-1.47	-4.67
18	0.323	0.521	0.156	0.294 (0.064)	0.596 (0.071)	0.063 (0.119)	0.953 (0.021)	0.232 (0.310)	1.143 (0.137)	0.421 (0.519)	0.296 (0.257)	0.000	1.000	1.000	1.000	1.000	0.54	-4.42
19	0.384	0.456	0.161	0.395 (0.099)	0.583 (0.052)	0.010 (0.127)	0.988 (0.027)	0.251 (0.324)	1.279 (0.114)	0.469 (0.577)	0.319 (0.267)	0.000	1.000	1.000	1.000	1.000	-2.18	-3.66
11	0.309	0.532	0.159	0.296 (0.037)	0.675 (0.030)	0.010 (0.059)	0.980 (0.012)	0.311 (0.162)	1.268 (0.057)	0.478 (0.231)	0.323 (0.106)	0.000	0.045	0.052	0.073	0.402	-2.67	-10.28
52	0.364	0.473	0.163	0.334 (0.049)	0.553 (0.028)	0.101 (0.054)	0.988 (0.024)	0.252 (0.165)	1.169 (0.059)	0.479 (0.300)	0.324 (0.137)	0.000	0.923	0.898	0.929	0.991	-1.96	-3.80
47	0.337	0.500	0.163	0.330 (0.037)	0.639 (0.025)	0.005 (0.053)	0.975 (0.011)	0.298 (0.145)	1.278 (0.049)	0.482 (0.220)	0.325 (0.100)	0.000	0.430	0.651	0.284	0.874	-1.34	-7.41
26	0.360	0.489	0.151	0.327 (0.052)	0.577 (0.042)	0.082 (0.088)	0.985 (0.017)	0.273 (0.219)	1.180 (0.086)	0.550 (0.405)	0.355 (0.169)	0.000	0.118	0.098	0.048	0.323	0.05	-9.01
21	0.401	0.479	0.120	0.404 (0.031)	0.589 (0.023)	0.020 (0.048)	1.013 (0.013)	0.220 (0.115)	1.229 (0.047)	0.599 (0.292)	0.374 (0.114)	0.000	0.135	0.316	0.194	0.378	-0.66	-8.99
36	0.367	0.486	0.148	0.305 (0.039)	0.549 (0.040)	0.099 (0.068)	0.953 (0.019)	0.300 (0.164)	1.131 (0.082)	0.657 (0.321)	0.397 (0.117)	0.000	1.000	1.000	1.000	1.000	-2.03	-5.08
49	0.326	0.460	0.213	0.255 (0.033)	0.649 (0.029)	0.072 (0.056)	0.976 (0.013)	0.631 (0.153)	1.410 (0.063)	0.685 (0.140)	0.406 (0.049)	0.000	0.115	0.222	0.497	0.786	-2.25	-12.52
34	0.318	0.527	0.156	0.242 (0.042)	0.665 (0.028)	0.023 (0.065)	0.931 (0.013)	0.502 (0.177)	1.264 (0.054)	0.809 (0.256)	0.447 (0.078)	0.000	0.199	0.528	0.811	0.986	-2.62	-7.11
48	0.376	0.454	0.170	0.310 (0.025)	0.592 (0.018)	0.055 (0.039)	0.957 (0.009)	0.478 (0.100)	1.304 (0.040)	0.810 (0.147)	0.447 (0.045)	0.000	0.000	0.028	0.329	0.080	-3.17	-18.03
6	0.442	0.399	0.159	0.332 (0.039)	0.505 (0.019)	0.100 (0.045)	0.936 (0.018)	0.515 (0.114)	1.265 (0.047)	1.130 (0.223)	0.531 (0.049)	0.000	0.001	0.034	0.415	0.698	-3.06	-10.12

Table B.5 - Continued: Productivity approach: Industry-specific input shares $(\alpha_J)_I$ $(J = N, M, K)$, output elasticities $\left(\widehat{\varepsilon}_J^Q\right)_I$, scale elasticity $\widehat{\lambda}_I$, joint market imperfections parameter $\widehat{\psi}_I$, and corresponding price-cost mark-up $\widehat{\mu}_I$ and absolute extent of rent sharing $\widehat{\phi}_I$ or labor supply elasticity $\left(\widehat{\varepsilon}_w^N\right)_I$ by regime

Regime R = *PC-MO* [25% of industries, 18% of firms, 18% of employment]

Ind. I	$(\alpha_N)_I$	$(\alpha_M)_I$	$(\alpha_K)_I$	$(\widehat{\varepsilon}_N^Q)_I$	$(\widehat{\varepsilon}_M^Q)_I$	$(\widehat{\varepsilon}_K^Q)_I$	$\widehat{\lambda}_I$	$\widehat{\psi}_I$	$\widehat{\mu}_I$	$\widehat{\beta}_I$	$(\widehat{\varepsilon}_w^N)_I$	*Sargan*	*Hansen*	*Dif-Hansen (lev)*	*Dif-Hansen (L2-dif)*	*Dif-Hansen (L3-dif)*	*m1*	*m2*
28	0.352	0.405	0.242	0.698 (0.109)	0.345 (0.044)	0.002 (0.097)	1.045 (0.069)	-1.129 (0.361)	0.850 (0.109)	0.430 (0.100)	0.754 (0.309)	0.000	1.000	1.000	1.000	1.000	-2.24	-2.06
30	0.338	0.437	0.225	0.531 (0.105)	0.399 (0.065)	0.095 (0.125)	1.025 (0.056)	-0.659 (0.396)	0.912 (0.148)	0.581 (0.176)	1.385 (1.002)	0.000	0.341	0.449	0.350	0.695	-4.57	-1.48
24	0.267	0.574	0.159	0.370 (0.086)	0.510 (0.054)	0.069 (0.128)	0.949 (0.025)	-0.495 (0.400)	0.888 (0.094)	0.642 (0.207)	1.792 (1.613)	0.000	1.000	1.000	1.000	1.000	-3.54	0.11
1	0.206	0.626	0.168	0.316 (0.032)	0.619 (0.029)	0.041 (0.055)	0.976 (0.014)	-0.549 (0.188)	0.989 (0.046)	0.643 (0.087)	1.802 (0.684)	0.000	0.243	0.616	0.611	0.492	-7.69	-1.94
3	0.178	0.600	0.222	0.292 (0.044)	0.634 (0.031)	0.088 (0.061)	1.014 (0.021)	-0.579 (0.278)	1.058 (0.054)	0.646 (0.118)	1.829 (0.942)	0.000	0.978	1.000	1.000	1.000	-4.49	-2.18
40	0.196	0.565	0.239	0.312 (0.146)	0.593 (0.091)	0.089 (0.214)	0.994 (0.057)	-0.546 (0.882)	1.050 (0.160)	0.658 (0.394)	1.923 (3.369)	0.000	1.000	1.000	1.000	1.000	-2.91	-1.68
23	0.305	0.529	0.166	0.470 (0.045)	0.539 (0.034)	-0.028 (0.074)	0.980 (0.014)	-0.522 (0.203)	1.019 (0.064)	0.661 (0.100)	1.953 (0.873)	0.000	0.327	0.668	0.929	0.970	-7.42	-0.66
42	0.236	0.562	0.202	0.360 (0.042)	0.589 (0.040)	0.058 (0.072)	1.008 (0.017)	-0.477 (0.231)	1.048 (0.070)	0.687 (0.116)	2.196 (1.186)	0.000	0.304	0.926	0.400	0.518	-5.75	-2.77
41	0.194	0.631	0.175	0.285 (0.072)	0.690 (0.035)	0.054 (0.091)	1.029 (0.022)	-0.378 (0.411)	1.093 (0.055)	0.743 (0.215)	2.888 (3.244)	0.000	1.000	1.000	1.000	1.000	-3.70	-2.03
27	0.318	0.474	0.208	0.419 (0.053)	0.467 (0.044)	0.056 (0.082)	0.941 (0.046)	-0.330 (0.229)	0.985 (0.093)	0.749 (0.144)	2.983 (2.292)	0.000	1.000	1.000	1.000	1.000	-2.54	0.51
4	0.119	0.692	0.189	0.170 (0.034)	0.748 (0.037)	0.049 (0.052)	0.967 (0.022)	-0.355 (0.304)	1.081 (0.054)	0.753 (0.163)	3.042 (2.663)	0.000	0.595	0.986	0.988	0.880	-1.24	-2.58
37	0.259	0.545	0.196	0.344 (0.038)	0.595 (0.030)	0.059 (0.061)	0.998 (0.014)	-0.236 (0.191)	1.092 (0.055)	0.822 (0.124)	4.620 (3.920)	0.000	0.215	0.490	0.302	0.126	-10.05	-0.63
2	0.142	0.708	0.150	0.177 (0.036)	0.752 (0.025)	0.046 (0.053)	0.975 (0.016)	-0.184 (0.277)	1.062 (0.035)	0.853 (0.193)	5.789 (8.890)	0.000	0.991	1.000	1.000	1.000	-3.64	-0.92

Regime R = *IC-PR* [17% of industries, 9% of firms, 13% of employment]

Ind. I	$(\alpha_N)_I$	$(\alpha_M)_I$	$(\alpha_K)_I$	$(\widehat{\varepsilon}_N^Q)_I$	$(\widehat{\varepsilon}_M^Q)_I$	$(\widehat{\varepsilon}_K^Q)_I$	$\widehat{\lambda}_I$	$\widehat{\psi}_I$	$\widehat{\mu}_I$	*Sargan*	*Hansen*	*Dif-Hansen (lev)*	*Dif-Hansen (L2-dif)*	*Dif-Hansen (L3-dif)*	*m1*	*m2*
25	0.326	0.518	0.157	0.349 (0.090)	0.570 (0.052)	0.080 (0.110)	0.999 (0.045)	0.029 (0.342)	1.100 (0.101)	0.000	1.000	1.000	1.000	1.000	-5.01	-0.39
35	0.331	0.504	0.166	0.354 (0.038)	0.559 (0.035)	0.057 (0.065)	0.969 (0.018)	0.040 (0.166)	1.109 (0.069)	0.000	0.596	0.642	0.772	0.559	-7.09	-1.53
22	0.328	0.493	0.179	0.385 (0.054)	0.557 (0.043)	0.015 (0.086)	0.958 (0.017)	-0.046 (0.231)	1.130 (0.088)	0.000	0.306	0.145	0.304	0.344	-7.98	0.52
13	0.320	0.477	0.202	0.378 (0.054)	0.544 (0.040)	0.033 (0.078)	0.955 (0.021)	-0.039 (0.227)	1.140 (0.084)	0.000	0.472	0.600	0.568	0.876	-6.94	1.57
12	0.347	0.479	0.174	0.392 (0.061)	0.559 (0.053)	0.048 (0.090)	0.999 (0.030)	0.040 (0.246)	1.168 (0.110)	0.000	1.000	1.000	1.000	1.000	-4.90	0.00
17	0.256	0.553	0.191	0.299 (0.041)	0.648 (0.037)	0.030 (0.071)	0.977 (0.015)	0.000 (0.213)	1.170 (0.066)	0.000	0.800	0.996	1.000	1.000	-5.58	-1.37
10	0.252	0.552	0.196	0.297 (0.050)	0.672 (0.039)	0.018 (0.078)	0.987 (0.015)	0.039 (0.251)	1.217 (0.071)	0.000	0.760	0.980	0.959	0.888	-5.08	-1.11
15	0.341	0.491	0.168	0.409 (0.045)	0.599 (0.036)	-0.032 (0.062)	0.975 (0.023)	0.022 (0.178)	1.221 (0.073)	0.000	1.000	1.000	1.000	1.000	-4.89	-0.99
14	0.266	0.538	0.196	0.317 (0.110)	0.683 (0.070)	-0.032 (0.142)	0.998 (0.039)	0.079 (0.490)	1.270 (0.130)	0.000	1.000	1.000	1.000	1.000	-2.52	-1.45

Table B.5 - Continued: Productivity approach: Industry-specific input shares $(\alpha_J)_I$ $(J = N, M, K)$, output elasticities $\left(\widehat{\varepsilon}_J^Q\right)_I$, scale elasticity $\widehat{\lambda}_I$, joint market imperfections parameter $\widehat{\psi}_I$, and corresponding price-cost mark-up $\widehat{\mu}_I$ and absolute extent of rent sharing $\widehat{\phi}_I$ or labor supply elasticity $\left(\widehat{\varepsilon}_w^N\right)_I$ by regime

Regime R = *PC-PR* [4% of industries, 3% of firms, 5% of employment]

Ind. I	$(\alpha_N)_I$	$(\alpha_M)_I$	$(\alpha_K)_I$	$(\widehat{\varepsilon}_N^Q)_I$	$(\widehat{\varepsilon}_M^Q)_I$	$(\widehat{\varepsilon}_K^Q)_I$	$\widehat{\lambda}_I$	$\widehat{\psi}_I$	$\widehat{\mu}_I$	*Sargan*	*Hansen*	*Dif-Hansen (lev)*	*Dif-Hansen (L2-dif)*	*Dif-Hansen (L3-dif)*	*m1*	*m2*
50	0.233	0.502	0.265	0.210 (0.064	0.489 (0.062)	0.159 (0.097)	0.857 (0.052)	0.074 (0.324)	0.974 (0.124)	0.000	1.000	1.000	1.000	1.000	-2.50	-2.87
51	0.307	0.521	0.172	0.331 (0.044)	0.524 (0.040)	0.122 (0.071)	0.976 (0.018)	-0.075 (0.200)	1.004 (0.077)	0.000	0.194	0.724	0.824	0.642	-4.94	-1.88

Regime R = *IC-MO* [4% of industries, 2% of firms, 4% of employment]

Ind. I	$(\alpha_N)_I$	$(\alpha_M)_I$	$(\alpha_K)_I$	$(\widehat{\varepsilon}_N^Q)_I$	$(\widehat{\varepsilon}_M^Q)_I$	$(\widehat{\varepsilon}_K^Q)_I$	$\widehat{\lambda}_I$	$\widehat{\psi}_I$	$\widehat{\mu}_I$	$\widehat{\beta}_I$	$(\widehat{\varepsilon}_w^N)_I$	*Sargan*	*Hansen*	*Dif-Hansen (lev)*	*Dif-Hansen (L2-dif)*	*Dif-Hansen (L3-dif)*	*m1*	*m2*
16	0.262	0.574	0.164	0.353 (0.066)	0.633 (0.045)	0.014 (0.103)	1.001 (0.019)	-0.245 (0.320)	1.103 (0.078)	0.818 (0.204)	4.508 (6.186)	0.000	0.834	0.750	0.397	0.635	-6.07	0.85
9	0.237	0.558	0.205	0.352 (0.040)	0.707 (0.026)	-0.042 (0.058)	1.017 (0.014)	-0.217 (0.200)	1.267 (0.046)	0.854 (0.118)	5.827 (5.523)	0.000	0.357	0.108	0.267	0.516	-4.96	-0.63

Regime R = *PC-EB* [2% of industries, 1% of firms, 2% of employment]

Ind. I	$(\alpha_N)_I$	$(\alpha_M)_I$	$(\alpha_K)_I$	$(\widehat{\varepsilon}_N^Q)_I$	$(\widehat{\varepsilon}_M^Q)_I$	$(\widehat{\varepsilon}_K^Q)_I$	$\widehat{\lambda}_I$	$\widehat{\psi}_I$	$\widehat{\mu}_I$	$\widehat{\gamma}_I$	$\widehat{\phi}_I$	*Sargan*	*Hansen*	*Dif-Hansen (lev)*	*Dif-Hansen (L2-dif)*	*Dif-Hansen (L3-dif)*	*m1*	*m2*
32	0.308	0.488	0.205	0.246 (0.050)	0.475 (0.037)	0.208 (0.044)	0.929 (0.026)	0.177 (0.174)	0.975 (0.076)	0.272 (0.260)	0.214 (0.161)	0.000	0.990	1.000	1.000	1.000	-3.65	-2.24

Notes: Robust standard errors in parentheses. Time dummies are included but not reported. *Sargan, Hansen, Dif-Hansen*: tests of overidentifying restrictions, asymptotically distributed as χ^2_{df}. p-values are reported. *Dif-Hansen (lev)* tests the validity of the 1-year lag of the first-differenced inputs as instruments in the levels equation while *Dif-Hansen (L2-dif)/(L3-dif)* test the validity of the 2-/3-year lags of the inputs as instruments in the first-differenced equation. *m1* and *m2*: tests for first-order and second-order serial correlation in the first-differenced residuals, asymptotically distributed as *N(0,1)*. Industries within R = *PC-PR* and R = *IC-PR* are ranked according to $\widehat{\mu}_I$, industries within R = *IC-EB* are ranked according to $\widehat{\gamma}_I$ and industries within R = *PC-MO* and R = *IC-MO* are ranked according to $(\widehat{\varepsilon}_w^N)_I$.

Table B.6: Labor economics approach: Industry-specific wage-profit elasticities and responsiveness of wages to the alternative wage or capital intensity in $R = IC\text{-}EB$

Dep. var.	Worker wage $\ln\left(w_{j(i)t}\right)$									
Ind. I	$\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_{I}^{lab,ww}$	$\left(\frac{\partial \ln w_{j(i)t}}{\partial \ln \overline{w}_{it}}\right)_{I}$	$\left(\frac{\partial \ln w_{j(i)t}}{\partial \ln\left(\frac{K}{L}\right)_{it}}\right)_{I}$	*Sargan*	*Hansen*	*Dif-Hansen (lev)*	*Dif-Hansen (L2-dif)*	*Dif-Hansen (L3-dif)*	*m1*	*m2*
19	-0.028 (0.015)	0.417 (0.060)	0.095 (0.023)	0.000	0.000	0.000	0.000	0.000	-4.24	-2.88
8	-0.034 (0.022)	0.125 (0.036)	-0.007 (0.033)	0.000	0.000	0.000	0.000	0.001	-7.85	0.82
21	-0.007 (0.024)	0.204 (0.044)	-0.012 (0.026)	0.000	0.000	0.284	0.004	0.000	-7.57	-1.26
36	-0.009 (0.026)	0.090 (0.058)	0.084 (0.042)	0.000	0.414	0.331	0.701	0.498	-5.72	-1.59
45	-0.012 (0.012)	0.157 (0.047)	0.053 (0.013)	0.000	0.000	0.000	0.001	0.000	-4.62	-0.83
26	-0.001 (0.027)	0.274 (0.044)	0.020 (0.031)	0.000	0.000	0.000	0.001	0.004	-5.84	-1.14
43	0.000 (0.014)	0.207 (0.051)	0.035 (0.021)	0.000	0.000	0.018	0.066	0.000	-4.85	-2.32
46	0.005 (0.038)	0.288 (0.054)	0.127 (0.033)	0.000	0.000	0.003	0.130	0.255	-6.11	0.96
47	0.003 (0.023)	0.178 (0.065)	0.091 (0.027)	0.000	0.000	0.100	0.000	0.000	-5.96	-1.65
49	0.013 (0.027)	0.249 (0.042)	0.013 (0.037)	0.000	0.000	0.032	0.046	0.159	-11.66	-1.18
39	0.035 (0.031)	0.108 (0.042)	0.127 (0.032)	0.000	0.000	0.000	0.107	0.001	-5.30	-1.53
48	0.019 (0.031)	0.479 (0.052)	0.079 (0.028)	0.000	0.000	0.074	0.000	0.004	-10.65	-3.81
31	0.039 (0.033)	0.065 (0.047)	0.053 (0.042)	0.000	0.001	0.141	0.410	0.244	-2.70	-1.10
5	0.022 (0.021)	0.130 (0.043)	0.106 (0.031)	0.000	0.000	0.000	0.041	0.028	-8.33	-3.31
33	0.050 (0.025)	0.155 (0.032)	0.043 (0.034)	0.000	0.000	0.000	0.040	0.000	-6.90	0.62
7	0.036 (0.025)	0.112 (0.038)	0.054 (0.031)	0.000	0.012	0.086	0.688	0.455	-7.76	-2.06
44	0.042 (0.019)	0.087 (0.045)	0.080 (0.025)	0.000	0.000	0.008	0.008	0.001	-7.94	-2.53
11	0.049 (0.027)	0.142 (0.041)	0.160 (0.030)	0.000	0.000	0.000	0.009	0.063	-5.63	-2.29
38	0.088 (0.033)	0.254 (0.055)	0.118 (0.027)	0.000	0.168	0.607	0.480	0.932	-5.38	-2.18
34	0.064 (0.025)	0.123 (0.038)	0.042 (0.028)	0.000	0.000	0.044	0.478	0.605	-7.87	-3.07
18	0.061 (0.031)	0.146 (0.061)	0.132 (0.057)	0.000	0.000	0.314	0.000	0.000	-4.09	-1.21
29	0.040 (0.032)	0.170 (0.059)	-0.007 (0.054)	0.000	0.006	0.097	0.007	0.003	-2.42	-1.09
6	0.106 (0.032)	0.179 (0.043)	0.016 (0.040)	0.000	0.005	0.189	0.030	0.002	-9.14	-4.28
52	0.109 (0.029)	0.123 (0.067)	-0.013 (0.041)	0.000	0.007	0.002	0.224	0.430	-3.85	0.20
20	0.049 (0.025)	0.109 (0.040)	0.001 (0.047)	0.000	0.004	0.807	0.414	0.151	-3.90	-0.04

Table B.6 - Continued: Labor economics approach: Industry-specific wage-profit elasticities and responsiveness of wages to the alternative wage or capital intensity in $R = IC\text{-}EB$

Dep. var.	Firm wage $\ln(w_{it})$									
Ind. I	$\left(\varepsilon_{\frac{\pi}{N}}^{w}\right)_I^{lab,ww}$	$\left(\frac{\partial \ln w_{j(i)t}}{\partial \ln \overline{w}_{it}}\right)_I$	$\left(\frac{\partial \ln w_{j(i)t}}{\partial \ln\left(\frac{K}{L}\right)_{it}}\right)_I$	*Sargan*	*Hansen*	*Dif-Hansen (lev)*	*Dif-Hansen (L2-dif)*	*Dif-Hansen (L3-dif)*	*m1*	*m2*
19	0.016 (0.070)	0.080 (0.090)	0.224 (0.063)	0.000	0.275	0.632	0.278	0.401	-2.91	-0.58
8	0.042 (0.040)	-0.020 (0.040)	-0.184 (0.048)	0.000	0.102	0.106	0.901	0.874	-10.45	-1.87
21	0.057 (0.067)	0.025 (0.073)	-0.060 (0.045)	0.000	0.258	0.048	0.291	0.497	-6.17	-1.29
36	0.050 (0.050)	-0.007 (0.050)	0.204 (0.063)	0.000	0.483	0.381	0.750	0.775	-3.46	0.72
45	0.001 (0.052)	0.052 (0.075)	0.077 (0.053)	0.000	0.852	0.526	0.897	0.877	-3.98	0.29
26	0.031 (0.050)	0.153 (0.041)	0.094 (0.061)	0.000	0.764	0.888	0.385	0.736	-6.48	-0.95
43	0.087 (0.037)	-0.053 (0.078)	0.047 (0.076)	0.000	0.619	0.454	0.560	0.640	-4.80	-1.30
46	0.027 (0.061)	0.109 (0.120)	0.181 (0.072)	0.000	0.545	0.609	0.571	0.662	-2.33	1.34
47	0.047 (0.033)	-0.026 (0.076)	0.082 (0.055)	0.000	0.549	0.433	0.116	0.131	-5.41	-2.24
49	0.046 (0.028)	0.010 (0.051)	0.117 (0.040)	0.000	0.349	0.857	0.412	0.726	-9.34	-1.10
39	-0.023 (0.034)	-0.063 (0.062)	0.145 (0.034)	0.000	0.493	0.690	0.219	0.181	-6.73	-1.12
48	-0.001 (0.040)	0.192 (0.041)	0.050 (0.034)	0.000	0.726	0.668	0.740	0.836	-14.49	-3.70
31	0.048 (0.064)	-0.045 (0.071)	0.087 (0.047)	0.000	0.002	0.028	0.119	0.014	-3.66	-0.29
5	0.055 (0.037)	-0.012 (0.038)	0.125 (0.042)	0.000	0.154	0.680	0.083	0.265	-10.57	-2.99
33	0.075 (0.035)	-0.031 (0.067)	0.048 (0.049)	0.000	0.001	0.007	0.339	0.068	-6.43	-0.25
7	0.095 (0.031)	0.070 (0.070)	0.100 (0.035)	0.000	0.274	0.354	0.207	0.234	-6.35	0.35
44	-0.021 (0.029)	0.029 (0.054)	0.213 (0.042)	0.000	0.027	0.022	0.668	0.458	-10.49	-1.30
11	0.038 (0.035)	0.070 (0.058)	0.064 (0.043)	0.000	0.328	0.241	0.896	0.539	-8.62	-0.26
38	0.047 (0.047)	0.007 (0.086)	0.139 (0.045)	0.000	0.416	0.621	0.391	0.281	-2.77	-0.37
34	0.027 (0.035)	0.084 (0.045)	0.020 (0.035)	0.000	0.529	0.395	0.894	0.658	-6.90	-0.57
18	0.124 (0.033)	-0.060 (0.082)	0.020 (0.055)	0.000	0.751	0.886	0.658	0.889	-3.15	-0.53
29	0.047 (0.057)	0.064 (0.087)	-0.014 (0.074)	0.000	0.520	0.807	0.813	0.870	-3.73	0.51
6	0.142 (0.037)	0.106 (0.062)	0.082 (0.056)	0.000	0.586	0.734	0.523	0.688	-6.77	-0.41
52	0.065 (0.053)	0.050 (0.099)	0.101 (0.050)	0.000	0.065	0.642	0.084	0.119	-4.43	-2.40
20	0.030 (0.035)	0.168 (0.071)	0.072 (0.049)	0.000	0.479	0.427	0.350	0.719	-5.63	-0.99

Notes: Robust standard errors in parentheses. Time dummies are included but not reported. *Sargan, Hansen, Dif-Hansen*: tests of overidentifying restrictions, asymptotically distributed as χ^2_{df}. *p*-values are reported. *Dif-Hansen (lev)* tests the validity of the 1-year lag of the first-differenced smoothed profits-per-employee variable as instruments in the levels equation while *Dif-Hansen (L2-dif)/(L3-dif)* test the validity of the 2-/3-year lags of the smoothed profits-per-employee variable as instruments in the first-differenced equation. *m1* and *m2*: tests for first-order and second-order serial correlation in the first-differenced residuals, asymptotically distributed as *N(0,1)*.

Table B.7: Labor economics and accounting approach: Robustness of absolute extent of rent-sharing parameters and Lester's range of wages due to rent sharing with respect to measurement of the alternative wage or excluding capital intensity in $R = IC\text{-}EB$

Absolute extent of rent sharing	mean	Q_1	Q_2	Q_3
LABOR ECONOMICS APPROACH				
Baseline estimates				
Labor economics: $\overline{\phi}^{lab,ww}_{I}$	0.099	0.001	0.079	0.201
Labor economics: $\tilde{\phi}^{lab,ww}_{I}$	0.076	0.001	0.061	0.153
Labor economics: $\overline{\phi}^{lab,fw}_{I}$	0.168	0.103	0.159	0.274
Labor economics: $\tilde{\phi}^{lab,fw}_{I}$	0.136	0.075	0.127	0.189
Different measures of alternative wage				
Labor economics: $\overline{\phi}^{lab,ww}_{p_1,I}$	0.070	0.001	0.106	0.203
Labor economics: $\overline{\phi}^{lab,ww}_{p_{10},I}$	0.093	-0.022	0.036	0.184
Labor economics: $\tilde{\phi}^{lab,ww}_{p_1,I}$	0.080	0.047	0.069	0.099
Labor economics: $\tilde{\phi}^{lab,ww}_{p_{10},I}$	0.071	-0.018	0.028	0.119
Labor economics: $\overline{\phi}^{lab,fw}_{p_1,I}$	0.167	0.096	0.162	0.269
Labor economics: $\overline{\phi}^{lab,fw}_{p_{10},I}$	0.169	0.103	0.155	0.267
Labor economics: $\tilde{\phi}^{lab,fw}_{p_1,I}$	0.135	0.065	0.129	0.193
Labor economics: $\tilde{\phi}^{lab,fw}_{p_{10},I}$	0.137	0.076	0.126	0.199
Excluding capital intensity				
Labor economics: $\overline{\phi}^{lab,ww}_{excl(K/L),I}$	0.133	0.010	0.144	0.237
Labor economics: $\tilde{\phi}^{lab,ww}_{excl(K/L),I}$	0.104	0.009	0.127	0.157
Labor economics: $\overline{\phi}^{lab,fw}_{excl(K/L),I}$	0.253	0.165	0.230	0353
Labor economics: $\tilde{\phi}^{lab,fw}_{excl(K/L),I}$	0.206	0.125	0.181	0.287
ACCOUNTING APPROACH				
Baseline computation				
Accounting: median of ϕ^{acc}_{it}	0.323	0.263	0.320	0.364
Different measures of alternative wage				
Accounting: median of $\phi^{acc}_{p_{1(fw)},it}$	0.402	0.328	0.422	0.450
Accounting: median of $\phi^{acc}_{p_{10(fw)},it}$	0.276	0.228	0.265	0.327
Accounting: median of $\phi^{acc}_{p_{1(ww)},it}$	0.541	0.490	0.559	0.602
Accounting: median of $\phi^{acc}_{p_{5(ww)},it}$	0.528	0.469	0.551	0.591
Accounting: median of $\phi^{acc}_{p_{10(ww)},it}$	0.519	0.463	0.540	0.580

Table B.7 - Continued: Labor economics and accounting approach: Robustness of absolute extent of rent-sharing parameters and Lester's range of wages due to rent sharing with respect to measurement of the alternative wage or excluding capital intensity in $R = IC\text{-}EB$

Lester's range of wages due to rent sharing	mean	Q_1	Q_2	Q_3
LABOR ECONOMICS APPROACH				
Baseline estimates				
Labor economics: $L_I^{lab,ww}$	0.131	0.001	0.113	0.193
Labor economics: $L_I^{lab,fw}$	0.192	0.099	0.152	0.258
Different measures of alternative wage				
Labor economics: $L_{p_1,I}^{lab,ww}$	0.131	0.001	0.158	0.205
Labor economics: $L_{p_{10},I}^{lab,ww}$	0.114	-0.021	0.086	0.176
Labor economics: $L_{p_1,I}^{lab,fw}$	0.192	0.114	0.147	0.240
Labor economics: $L_{p_{10},I}^{lab,fw}$	0.193	0.111	0.178	0.250
Excluding capital intensity				
Labor economics: $L_{excl(K/L),I}^{lab,ww}$	0.184	0.023	0.162	0.279
Labor economics: $L_{excl(K/L),I}^{lab,fw}$	0.342	0.198	0.278	0.471
ACCOUNTING APPROACH				
Baseline computation				
Accounting: $\overline{L}_I^{acc}$	1.266	0.935	1.228	1.380
Accounting: $\widetilde{L}_I^{acc}$	1.334	1.099	1.323	1.490
Different measures of alternative wage				
Accounting: $\overline{L}_{p_{1(fw)},I}^{acc}$	1.812	1.347	1.793	1.992
Accounting: $\overline{L}_{p_{10(fw)},I}^{acc}$	0.989	0.765	1.004	1.182
Accounting: $\overline{L}_{p_{1(ww)},I}^{acc}$	3.200	2.544	3.083	3.689
Accounting: $\overline{L}_{p_{5(ww)},I}^{acc}$	3.044	2.300	2.962	3.357
Accounting: $\overline{L}_{p_{10(ww)},I}^{acc}$	2.922	2.248	2.840	3.162
Accounting: $\widetilde{L}_{p_{1(fw)},I}^{acc}$	1.901	1.507	1.872	2.112
Accounting: $\widetilde{L}_{p_{10(fw)},I}^{acc}$	1.042	0.848	1.045	1.199
Accounting: $\widetilde{L}_{p_{1(ww)},I}^{acc}$	3.372	2.831	3.280	3.934
Accounting: $\widetilde{L}_{p_{5(ww)},I}^{acc}$	3.207	2.718	3.161	3.555
Accounting: $\widetilde{L}_{p_{10(ww)},I}^{acc}$	3.079	2.619	3.010	3.349

Table B.8: Comparison of the distribution of absolute extent of rent-sharing parameters and Lester's range of wages due to rent sharing across the three approaches in regime $R \in \Re = \{IC\text{-}EB, PC\text{-}MO, IC\text{-}PR\}$

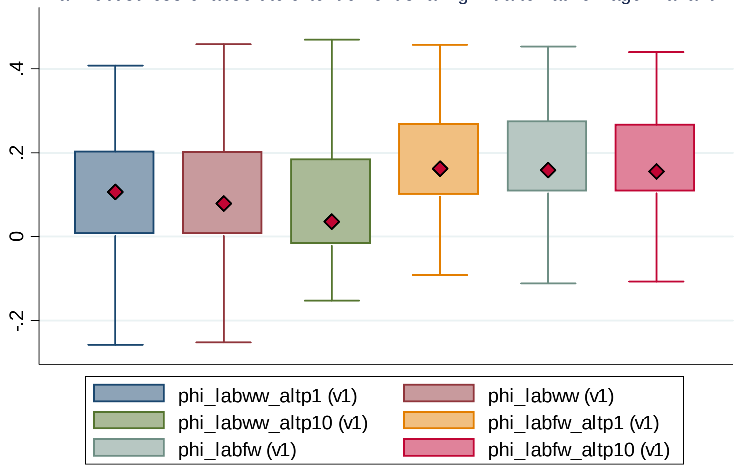
Absolute extent of rent sharing	mean	Q_1	Q_2	Q_3
Regime R = IC-EB (25 ind.)				
Productivity: ϕ_I^{prod}	0.293	0.225	0.291	0.355
Labor economics: $\overline{\phi}_I^{lab,ww}$	0.099	0.001	0.079	0.201
Labor economics: $\widetilde{\phi}_I^{lab,ww}$	0.076	0.001	0.061	0.153
Labor economics: $\overline{\phi}_I^{lab,fw}$	0.168	0.103	0.159	0.274
Labor economics: $\widetilde{\phi}_I^{lab,fw}$	0.136	0.075	0.127	0.189
Accounting: median of ϕ_{it}^{acc}	0.323	0.263	0.320	0.364
Regime R = PC-MO (13 ind.)				
Productivity: ϕ_I^{prod}	-1.811	-1.137	-0.739	-0.260
Labor economics: $\overline{\phi}_I^{lab,ww}$	-0.007	-0.027	0.014	0.073
Labor economics: $\widetilde{\phi}_I^{lab,ww}$	0.010	-0.018	0.010	0.053
Labor economics: $\overline{\phi}_I^{lab,fw}$	0.152	0.028	0.111	0.317
Labor economics: $\widetilde{\phi}_I^{lab,fw}$	0.091	0.025	0.104	0.181
Accounting: median of ϕ_{it}^{acc}	0.253	0.206	0.247	0.294
Regime R = IC-PR (9 ind.)				
Productivity: ϕ_I^{prod}	0.022	0.000	0.040	0.063
Labor economics: $\overline{\phi}_I^{lab,ww}$	-0.152	-0.075	0.031	0.158
Labor economics: $\widetilde{\phi}_I^{lab,ww}$	-0.102	-0.068	0.023	0.122
Labor economics: $\overline{\phi}_I^{lab,fw}$	0.275	0.139	0.211	0.310
Labor economics: $\widetilde{\phi}_I^{lab,fw}$	0.211	0.134	0.195	0.250
Accounting: median of ϕ_{it}^{acc}	0.321	0.314	0.325	0.345

Table B.8 - Continued: Comparison of the distribution of absolute extent of rent-sharing parameters and Lester's range of wages due to rent sharing across the three approaches in regime $R \in \Re = \{IC\text{-}EB, PC\text{-}MO, IC\text{-}PR\}$

Lester's range of wages due to rent sharing	mean	Q_1	Q_2	Q_3
Regime $R = IC\text{-}EB$ (25 ind.)				
Productivity: $\overline{L}_I^{prod}$	1.333	0.807	1.104	1.464
Productivity: $\widetilde{L}_I^{prod}$	1.422	0.864	1.192	1.556
Labor economics: $L_I^{lab,ww}$	0.131	0.001	0.113	0.193
Labor economics: $L_I^{lab,fw}$	0.192	0.099	0.152	0.258
Accounting: $\overline{L}_I^{acc}$	1.266	0.935	1.228	1.380
Accounting: $\widetilde{L}_I^{acc}$	1.334	1.099	1.323	1.490
Regime $R = PC\text{-}MO$ (13 ind.)				
Productivity: $\overline{L}_I^{prod}$	-2.199	-2.920	-2.217	-1.397
Productivity: $\widetilde{L}_I^{prod}$	-2.385	-3.096	-2.207	-1.584
Labor economics: $L_I^{lab,ww}$	0.040	-0.047	0.025	0.159
Labor economics: $L_I^{lab,fw}$	0.144	0.050	0.144	0.359
Accounting: $\overline{L}_I^{acc}$	1.270	0.965	1.171	1.525
Accounting: $\widetilde{L}_I^{acc}$	1.350	1.067	1.265	1.562
Regime $R = IC\text{-}PR$ (9 ind.)				
Productivity: $\overline{L}_I^{prod}$	0.057	0.001	0.135	0.160
Productivity: $\widetilde{L}_I^{prod}$	0.061	0.001	0.142	0.168
Labor economics: $L_I^{lab,ww}$	-0.026	-0.082	0.032	0.219
Labor economics: $L_I^{lab,fw}$	0.358	0.201	0.268	0.567
Accounting: $\overline{L}_I^{acc}$	1.331	1.164	1.316	1.683
Accounting: $\widetilde{L}_I^{acc}$	1.401	1.197	1.354	1.847

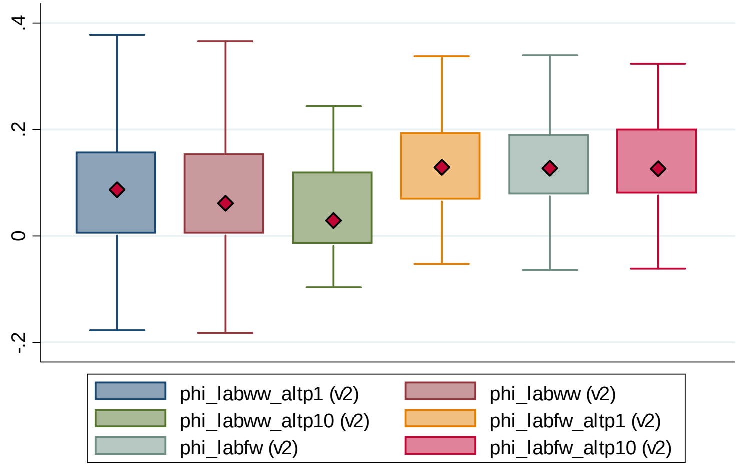
Graph B.1: Labor economics approach: Robustness of absolute extent of rent-sharing parameters with respect to measurement of the alternative wage or excluding capital intensity in $R = IC\text{-}EB$

B.1a: Robustness of absolute extent of rent sharing wrt alternative wage - variant 1



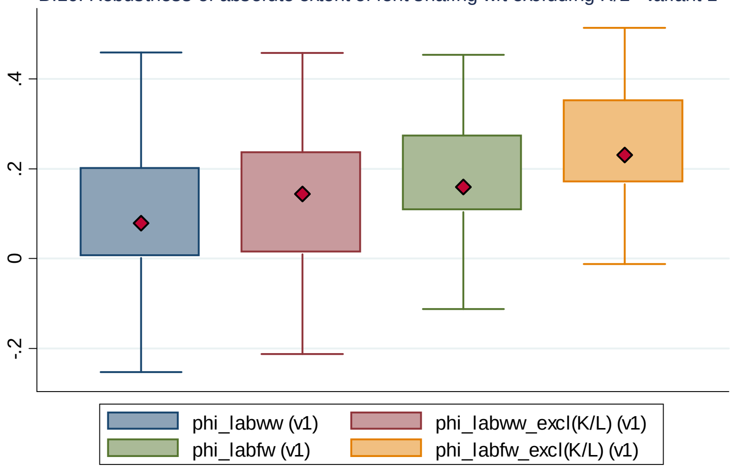
Source: Table B.7 (25 industries)

B.1b: Robustness of absolute extent of rent sharing wrt alternative wage - variant 2



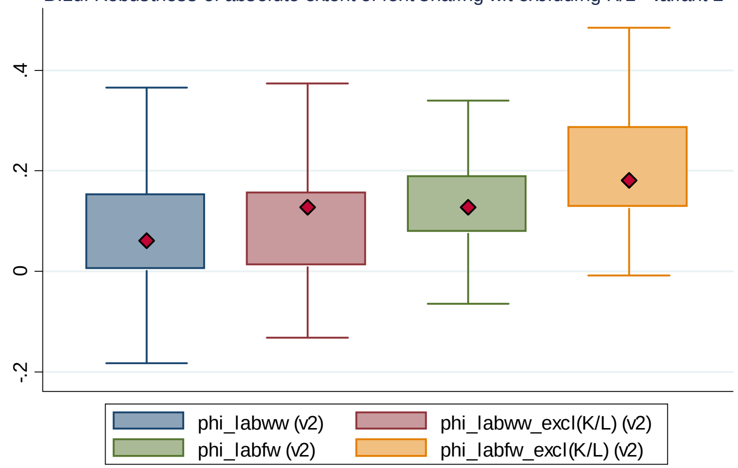
Source: Table B.7 (25 industries)

B.1c: Robustness of absolute extent of rent sharing wrt excluding K/L - variant 1



Source: Table B.7 (25 industries)

B.1d: Robustness of absolute extent of rent sharing wrt excluding K/L - variant 2



Source: Table B.7 (25 industries)

Graph B.2: Labor economics approach: Robustness of Lester's range of wages due to rent sharing with respect to measurement of the alternative wage or excluding capital intensity in $R = IC\text{-}EB$

Source: Table B.7 (25 industries)

Source: Table B.7 (25 industries)

Graph B.3: Accounting approach: Robustness of absolute extent of rent-sharing parameters and Lester's range of wages due to rent sharing with respect to measurement of the alternative wage in $R = IC\text{-}EB$