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How does institutional risk affect the labour share of income? An analysis for the period from 1996 to 2019

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Abstract

Using a panel of 26 OECD countries from 1996 to 2019, we analyze the statistical correlation between institutional risk and the labour share. In theory, poor institutional quality increases risk, which takes the form of high unexpected costs and profit volatility. Firms react to such risk by providing workers an ”insurance wage” that is stable but lower than what marginal productivity would dictate, compensating for the possibility of profit instability. Our results suggest that institutional quality, proxied by indicators such as Rule of Law enforcement, Corruption Control, or Government Effectiveness, has a positive and significant effect on the labour share.

Keywords: Labour Share of Income; Risk; Institutions; Functional Distribution of Income; Fixed Effects

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1. Introduction.

The labour share of income, defined as the portion of total income that is allocated to the labour input, has always been a relevant topic in the context of Macroeconomics. Identifying the long-run determinants of the labour share of income and explaining cross-country differences in the functional distribution of income remain significant challenges for economists and policy-makers. Much of the recent literature on the determinants of the labour share focuses on explaining the factors driving its declining trend over the recent decades (Arpaia, Pérez, and Pichelmann 2009; Stockhammer, Onaran, and Ederer 2011; Karabarbounis and Neiman 2013). In fact, explaining the declining trend of the labour share has been particularly relevant considering that its stability throughout time had been a well established fact of economic growth since Kaldor (1957). However, we take a slightly different approach and focus instead on the factors driving cross-country differences in the labour share.

Existing research on the determinants of the labour income share has predominantly focused on factors such as technological development, bargaining power of workers, and globalization, with comparatively less attention given to the role of political institutions. The goal of this paper is to use data from OECD countries to understand to what extent country-specific political institutions may impact the labour share of income by influencing the level of risk faced by capital owners. In other words, we want to analyze if workers are being hurt as a consequence of weaker or less credible political institutions in their country, such as a weak rule of law, high levels of corruption, or poor government effectiveness. Through this analysis, we aim to contribute to the discussion on the drivers of labour share differences across countries. We adopt the concept of institutional quality as it is defined by Acemoglu, Johnson, and Robinson (2001) and discuss its potential relevance as a determinant of the functional distribution of income.

Having said this, the political/institutional nature of the risk constitutes the main innovation of the paper. While David, Rancière, and Zeke (2023) also analyzed how idiosyncratic risk affects the labour share of income, they haven't specifically looked at the level of risk embodied in a

country's political and institutional framework and how it may influence the labour share. Thus, the present paper contributes to the debate on the functional distribution of income by discussing how institutional characteristics may influence the labour share by acting as a relevant determinant of the levels of risk and instability faced by firms. The structure of the paper is the following: Section 2 will cover the existing literature on the determinants of the labour income share, providing a theoretical background to our empirical model. Moreover, it also includes a theoretical model which illustrates the dynamics between risk and the labour share. We then proceed to discuss our methodology, employed data, and econometric concerns in section 3. Section 4 describes the results of our estimation and discusses them. Finally, section 5 constitutes the conclusion, including possible directions for future research.

2. Literature review.

The determinants of the labour share of income constitute one of the main topics of research in the context of the functional distribution of income. While some economists focus on technological factors such as skill biased technological change (European Commission 2007) or the relative price of investment goods (Karabarbounis and Neiman 2013), others also highlight other factors such as the bargaining power of workers, globalization (Stockhammer 2009), or idiosyncratic risk (David, Rancière, and Zeke 2023) as important determinants of the labour income share. In this section, we discuss the existing literature on the determinants of the labour share that supports the constitution of our empirical model.

Under neoclassical growth models, the functional distribution of income is determined by factor endowments and the technological structure of the production function. Assuming that, in such models, the elasticity of substitution between capital and labour is different than 1, any change in the relative price of factors will lead to changes in the labour share of income (Dünhaupt 2013). Considering the capital-augmenting nature of most of the technological development since the 1980s, implying an elasticity of substitution between capital and labour higher than 1, we should expect the labour income share to decrease. This aligns with empirical evidence suggesting that

the increased ICT intensity of production processes has played a key role in reducing the aggregate labour income share within the EU (European Commission 2007). Similarly, Karabarbounis and Neiman (2013) have discussed the role of the relative price of investment goods, associated with technological progress, as a relevant predictor of the labour share. They estimate the elasticity of substitution between capital and labour to be higher than 1 for the covered period of time, suggesting that, as capital becomes progressively relatively cheaper due to technological development, the rate at which firms substitute labour with capital is proportionally higher than the decrease in the relative price of capital.

However, in models where perfect competition is not present, there is room for the existence of bargaining for rents between workers and capital owners. Consequently, the bargaining power of workers is able to influence the labour share of income positively since it determines the share of rent that is allocated to labour. The empirical evidence regarding this mechanism is not crystal clear, but many authors seem to find a positive association between bargaining power and the labour income share. Bengtsson (2014) finds a statistically significant positive relationship between union density and the labour share for 16 "advanced capitalist economies", while Fichtenbaum (2009) reaches the same conclusion in the context of the United States, specifically. Similarly, Guschanski and Onaran (2018) used "a vector of variables related to industrial relations and labour market institutions, such as union density, minimum wages, and social government spending" for 14 OECD countries, between 1970 and 2014. They conclude that the bargaining power of workers does impact the labour income share positively, particularly when collective bargaining coverage is high. The European Commission (2007) also finds a statistically significant positive effect of union density on the labour income share for medium and high-skilled workers, but finds the effect for low-skilled workers to be negative. In this paper, however, we do not differentiate the labour share between skilled and non-skilled workers and do not discuss that difference.

Globalization, usually measured by openness to trade, is also one factor frequently cited in the literature to explain the declining trend of the labour income share. With respect to trade theory,

there are 2 important theorems that enlighten our understanding of the dynamics between openness to trade and factor shares. On the one hand, the Heckscher-Ohlin model states that capital-abundant countries tend to export capital-intensive goods, while labour-abundant countries tend to export labour-intensive goods (Deardorff 1982). Moreover, according to the Stopler-Samuelson theorem, trade tends to increase the returns of the factor that is more intensively used in a certain good. Consequently, because countries that are abundant in a given factor will tend to export goods that are intensive in that factor, globalization and openness to trade should increase the labour share of labour-abundant countries, while decreasing the labour share of capital-abundant countries. Guscina (2006) analyzed the impact of openness to trade on the labour income share of 18 OECD member countries that were considered to be "industrial" countries during the period 1960–2000. They found evidence that increasing openness to trade has had a negative effect on the labour share of the analyzed countries. Considering the fact that these countries were classified as "industrial", meaning they were capital-abundant, these findings are in line with the predictions of Heckscher-Ohlin and Stopler-Samuelson theorems. Stockhammer (2009) also found a robust negative effect of openness to trade on the labour income share. They also resort to the Political Economy approach to trade theory (Rodrik 1998) to argue that there is some overlap between the globalization and the bargaining power effects, suggesting that openness to trade impacts the labour income share not only via the mechanisms described by the Heckscher-Ohlin and Stopler-Samuelson theorems, but also by decreasing the bargaining power of workers due to higher capital mobility.

The labour income share is also influenced by economic cycles, although there is some debate regarding whether it is procyclical or countercyclical. Real business cycle models that emphasize technology shocks usually argue in favour of the procyclicality of real wages, while Keynesian models that emphasize sticky wages or expectations usually regard real wages to be counter-cyclical (Abraham and Haltiwanger 1995). If wages are fully flexible and more reactive to business cycle fluctuations than output itself, the labour share will display a pro-cyclical behaviour, increasing during expansions and decreasing during contractions. However, if wages are sticky as a response to output fluctuations, the labour income share behaves counter-cyclically, implying it decreases

during expansions and increases during contractions. Some authors have found empirical evidence of the countercyclicality of the labour share (Elsby, Hobijn, and Şahin 2013), while others have found mixed evidence depending on whether the analysis is short-term or long-term (Stirati and Meloni 2021).

The level of education is also a relevant predictor of the labour income share. Higher levels of education are associated with higher levels of skill and productivity, directly impacting wages of skilled and non-skilled workers, as well as the distribution of both types of workers (Daudey and García-Peñalosa 2007). Guerriero and Sen (2012) found the level of education to have a significant positive effect on the labour share, while Diwan (2000) concluded the impact of the human capital on the labour share stock to be positive for rich countries but negative for poor countries.

When it comes to the literature on the determinants of the labour income share, the role of risk hasn't been as extensively analyzed as the previously covered factors. However, some authors have investigated theoretical and empirical mechanisms by which idiosyncratic risk affects the labour income share, having found interesting results. According to David, Rancière, and Zeke (2023), firms determine the wage level considering the possibility of an economic shock, such as an economic crisis or poor market performance, which can cause fluctuations in profits. As firms internalize this risk, the possibility of profit instability leads them to implicitly pay workers an "insurance wage" that does not change with these shocks, compensating for the possibility of profit fluctuations. Consequently, they argue that the labour income share tends to be lower in riskier firms. Empirically, the authors make use of this mechanism to explore the relationship between the international diversification of risk and the labour income share, arguing that international risk sharing leads to two opposing effects on the labour share: a positive effect caused by lower risk due to higher diversification (within effect) and a negative effect caused by reallocation of production towards riskier firms (reallocation effect). Although their paper is quite different from ours from an empirical perspective, their theoretical mechanism is crucial for our work. Similarly, Tella, Malgieri, and Tonetti (2024) develop a model in which "invisible" markups arise as a compensation

for risk.

Regarding the impact of specifically institutional/political risk on the labour share, there is a limited amount of research so far. He, Wang, and Yang (2018) examined the effects of an anti-corruption campaign in China on the labour income share, revealing a substantial increase, particularly among non-state-owned firms. The authors suggest that this effect could be explained by the strong hypothesis that gains from corruption are primarily captured by capital. These findings provide valuable insights into how institutional quality can influence the functional distribution of income and provide a starting point to our work.

2.1 A model for risk and the labour share.

This subsection focuses on providing a theoretical model that can better enlighten our understanding of how institutional risk may impact the labour income share. For that matter, we use the theoretical model constructed by David, Rancière, and Zeke (2023) in their paper on the impact of firm-level risk on the labour share and adapt it to the concept of institutional/political risk. The mechanisms remain essentially the same, despite some minor changes in terms of conceptual interpretation and mathematical details.

The proposed model adopts a Cobb-Douglas production function [1] and firms produce a homogeneous good in the following way:

$$Y_i = A_i K_i^{\alpha_1} L_i^{\alpha_2}, \quad \alpha_1 + \alpha_2 \leq 1 \tag{1}$$

L_i and K_i are the Labour and Capital inputs, α_1 and α_2 are the output elasticities, and A_i is total factor productivity, which is constituted by an anticipated component, $\mathbb{E}[A_i]$ and an unanticipated shock, represented by $\epsilon_i = \frac{A_i}{\mathbb{E}[A_i]}$

1. David, Rancière, and Zeke (2023) use a Cobb-Douglas production function in their paper, but prove the coherence and consistency of the theoretical results under different types of production function, such as CES

Firms choose their Capital and Labour inputs and factor payments before the realization of shocks, implying that wages reflect the possibility of productivity and profit fluctuations. That being said, firms maximize the expected discounted value of cash flows, expressed in the following maximization problem:

$$max_{L,K} \ \mathbb{E}[\Lambda(A_i K_i^{\alpha_1} L_i^{\alpha_2} - WL_i - RK_i)] \tag{2}$$

where W is the wage rate, R is the rental rate of capital, and Λ is a discount factor which measures the opportunity cost of time. As firms are assumed to be risk-averse, the discount factor incorporates perceptions of risk and is influenced by political and institutional risk. As institutional risk increases, the discount factor becomes more volatile.

If we apply the first order condition with respect to labour and isolate the wage component, we get to the following expression of the labour share of income[2]:

$$\frac{WL_i}{\mathbb{E}[Y_i]} = \frac{L_i}{\mathbb{E}[Y_i]} \times \frac{\mathbb{E}[\Lambda \alpha_2 A_i K_i^{\alpha_1} L_i^{\alpha_2 - 1}]}{\mathbb{E}[\Lambda]} \tag{3}$$

If we simplify this expression, we reach our final expression of the firm-level labour share:

$$\frac{WL_i}{\mathbb{E}[Y_i]} = \alpha_2(1 - \kappa_i), \quad \kappa_i = -Cov(\frac{\Lambda}{\mathbb{E}[\Lambda]}, \frac{A_i}{\mathbb{E}[A_i]}) \tag{4}$$

This equation postulates that the labour share of income is influenced by a risk premium, κ_i, which depends on the covariance between the discount factor and total factor productivity. The covariance term measures how sensitive total factor productivity is to the discount factor. In order to make the model more realistic, we introduce a minor modification to the original model and impose that $Cov(\frac{\Lambda}{\mathbb{E}[\Lambda]}, \frac{A_i}{\mathbb{E}[A_i]}) \leq 0$, implying that higher institutional risk always decreases the labour share. Consequently, the more negatively the discount factor co-variates with total factor productivity, the higher the institutional risk and the lower the labour income share. Given that firms are risk-averse,

2. All the details and steps regarding mathematical derivations were included in the Appendix

higher institutional risk leads to greater volatility in the discount factor, which results in a higher risk premium. If there is no institutional risk, the discount rate becomes constant, causing the covariance term to be equal to 0. Consequently, the labour income share becomes equal to α_2.

The reasoning behind this mechanism is the following: risk associated with the quality of institutions takes the form of unexpected costs or negative productivity shocks, which ultimately introduce the possibility of profit fluctuations. Since firms choose the wage level before these shocks and bear all the risk, they pay workers a stable "insurance wage" that compensates for the possibility of profit fluctuations. The risk premium, κ_i, reflects the cost of insurance and leads firms to adopt a wage level that is lower than the marginal productivity of labour. This justifies our previous imposition that the discount factor and total factor productivity always covariate non-positively.

Since institutional risk is determined by a country's institutions, we assume that all firms operating in the same country face the same amount of institutional risk. This implies that the country-level labour share should be equal to $\alpha_2(1-\kappa_c)$, where κ_c is the country-specific risk. However, as different countries possess different political institutions, computing the aggregate labour share requires considering not only output differences between countries, but also institutional risk differences.

Departing from the expression of the firm-level labour share, we get to the aggregate labour share by adjusting it to an output-weighted average of the risk premium, κ_i:

$$\frac{WL}{\mathbb{E}[Y]} = \alpha_2(1 - \sum_{i=1} \frac{\mathbb{E}[Y_i]}{\mathbb{E}[Y]}\kappa_i) \tag{5}$$

Having said this, this model shows how risk created by political institutions can negatively affect the labour income share by introducing the possibility of profit volatility. As a consequence, firms hire less labour and pay a lower wage than what the marginal productivity of labour would demand in the absence of risk. This "invisible" markup, as described in the model constructed by Tella, Malgieri, and Tonetti (2024) but also present in this one, decreases the labour share of income.

3. Methodology.

The main objective of this research is to construct an analysis on the determinants of the labour income share, with a particular focus on testing to what extent the quality of political institutions may impact the functional distribution of income. For this matter, we use a panel of 26 OECD countries, covering the period from 1996 to 2019.

3.1 Econometric Specifications.

Our econometric specifications are constructed in the following way: We have a baseline model with six explanatory variables that control for the main determinants of the labour income share other than institutional risk, to which we add variables that reflect political/institutional risk. The idea is to build on the already existing econometric models on the determinants of the labour income share and test if risk caused by political/institutional frameworks could constitute an additional predictor of the labour income share. That being said, our empirical specifications should be reflected in the following equation:

$$LS_{it} = \beta_0 + \overline{\beta_1 \mathbf{X}} + \beta_2 PoliticalRisk + u_t + \alpha_i + \varepsilon_{it} \tag{6}$$

Where LS_{it} is the adjusted labour income share, $\overline{\mathbf{X}}$ is a set of control variables that account for other determinants of the labour share, and $PoliticalRisk$ is our political risk variable. u_t and α_i represent time and country fixed effects, respectively. In section 3.2, we explain the choice and construction of these variables in more detail. That is particularly important for the political risk variables, as it allows us to clarify the concept of political/institutional risk that we are using.

We use panel data methods in our analysis, following the literature on the determinants of the labour share. Panel data methods allow to address both the cross-country and the temporal dynamics of the labour share, making them particularly suited for an analysis with these characteristics

(Guerriero and Sen 2012).

3.2 Data

Following Gollin (2002), we compute the adjusted labour income share by including the income of self-employed workers. This is particularly relevant when measuring the labour share of poor countries, where self-employment accounts for large fractions of the workforce. The adjusted labour share data is collected from AMECO database [3]. It is constructed as the compensation per employee (wages plus the employer's social contributions) over the GDP at current factor cost per unit of employment and includes the income of self-employed workers. Moreover, we follow Karabarbounis and Neiman (2013) and use the labour share in logs to ease interpretation.

The choice of the explanatory variables included in the model took into consideration the existing literature on the determinants of the labour income share and, therefore, tried to control for the main factors that, besides risk, are thought to influence the functional distribution of income. The output gap is included as a way to control for the cyclical nature of the labour share. The output gap data was taken from AMECO's database and computed as the difference between actual GDP and the potential GDP, as a percentage of potential GDP. Because AMECO's data on the output gap excluded five countries that are covered in our analysis, the output gap data for those countries was taken from OECD database [4].

As a proxy for technological development, we follow Karabarbounis and Neiman (2013), including the relative price of investment goods. The rationale is that decreases in the relative price of investment goods are associated with advances in information technology and the computer age, making this a good proxy for technological development. The variable is constructed in the following way, as described in Karabarbounis and Neiman (2013): We first resort to the Penn World Table to obtain the ratio between the relative price of investment of each country and the relative

3. Since this work was started in July 2024, we used data from the Spring 2024 forecast (15-05-2024)

4. The OECD database only has output gap data starting in 2001. This is why we chose AMECO's database for every country except Iceland, Turkey, Japan, Switzerland, and Norway, for which we used the OECD database

price of investment in the United States. We then adjust this ratio by multiplying it by the ratio between the investment price deflator and the personal consumption expenditure deflator for the United States, obtained from the Bureau of Economic Analysis database. This allows the relative price of investment of each country to be expressed in domestic prices. Moreover, we follow a similar approach to the European Commission (2007) and Stockhammer (2009) and include the capital-labour ratio from the Penn World Table in addition to our proxy for technological progress. Stockhammer (2009) points out that, according to Keynesian theory, the capital-labour ratio "embodies" technological progress, more than being caused by it. He uses this to justify the inclusion of both the capital-labour ratio and another variable that can more directly proxy technology, such as the relative price of investment goods. Both the capital-labour ratio and the relative price of investment goods are expressed in logs.

Concerning the bargaining power of workers, we include the adjusted collective bargaining coverage from the OECD database. This includes data on union membership, collective bargaining coverage, minimum wages, social pacts, and work councils. In this database, the adjusted collective bargaining coverage is defined as the number of workers at the national level to whom a collective agreement applies as a proportion of all wage earners with the right to bargaining. Although some authors use the union coverage from this database (Schneider 2011), we opt for the collective bargaining coverage as it also encompasses non-unionized workers who are nevertheless covered by collective agreements, as recognized by Guschanski and Onaran (2018).

As a measure of globalization and openness, we adopt an approach commonly used in the literature (Stockhammer 2009; Guscina 2006) and compute openness to trade as the sum of exports and imports as a percentage of GDP. Since trade openness as a proportion of GDP may be influenced by the size of a country's economy, we control for this effect by regressing it on GDP and taking the residuals. The data for this measure was taken from the World Bank national accounts database and is expressed in logs for ease of interpretation.

Regarding education, we utilise average schooling years in the total population aged 25 or over, taken from the Dataset on Educational Attainment in the World[5] (Barro and Lee 2010).

3.2.1 The choice of institutional risk variables.

We use World Bank's World Governance Indicators as proxies of institutional/political risk[6]. These indicators measure different dimensions of the quality of political institutions and the degree of economic agents' confidence in them, which are then reflected in a number which can range from -2.5 (weak governance) to 2.5 (strong governance). A higher Index value corresponds to higher institutional quality and, consequently, lower risk. The included indicators were the following: Rule of Law, Control of Corruption, Government Effectiveness, Regulatory Quality, Political Stability and Violence, and Voice and Accountability [7].

The World Governance Indicators are defined by the World Bank in the following way: The Rule of Law Index measures the quality of contract enforcement, property rights, the police, and the courts, capturing the extent to which agents have confidence in societal rules. The Control of Corruption reflects perceptions of the extent to which public power is captured by elites and private interests. Regulatory Quality reflects the government's ability to formulate and implement policies that promote private sector development, while Government Effectiveness focuses on the degree of credibility and commitment to public policy. Moreover, Political Stability and Violence predicts the likelihood of political instability and political violence. Finally, Voice and Accountability reflects perceptions of political freedom and freedom of expression.

Having said this, countries with a low Rule of Law Index are often characterized by inefficient and costly courts, high crime rates, and lack of collectively recognized governance structures. In

5. Since this dataset only measures the average schooling years every 5 years, we did data imputation, assuming that each value would apply to the following 4 years as well

6. This dataset contains missing observations for the years 1997, 1999, and 2001. Unlike with Education, only three years were missing and the impact on the results was concluded to be small, so no imputation was performed

7. Some alternative proxies to institutional risk, such as Ease of Doing Business Index or the International Country Risk Guide, were considered but were ultimately discarded due to the low number of observations and inaccessibility of the data, respectively.

such institutional environments, firms are highly exposed to risk, including high litigation costs, property damage, and challenges in contract enforcement. These institutional deficiencies take the form of high unanticipated costs, leading to more pronounced profit volatility. As described by David, Rancière, and Zeke (2023), capital owners often react to risk by paying workers a stable insurance wage that compensates for the risk that a weak rule of law represents. This insurance wage compensates for profit volatility, but is lower than what the marginal productivity would dictate, causing the labour share to be lower as well.

Similarly, corruption often manifests itself to firms in the form of unanticipated costs as a way to unlock bureaucratic processes, or to buy connections to political power. Therefore, an institutional environment with high corruption is often one characterized by opacity of information, unstable connections to political power, and high uncertainty. Fisman (2001) provides a clear example of this instability in Suharto's regime in Indonesia, demonstrating that firms which were perceived to be connected to the regime suffered significant declines in share value every time Suharto's health was threatened. Consequently, it is expectable that firms under an institutional environment with high corruption face considerable productivity and profit volatility, particularly the ones that depend on unstable political connections. As firms react to such volatility by paying workers a stable but lower insurance wage, the labour share tends to be lower under institutional frameworks with low control of corruption.

The Government Effectiveness Index reflects the quality of policy implementation and the credibility of the government's commitment to such policies, thereby influencing the degree of policy predictability. Similarly, the Regulatory Quality Index measures perceptions of the government's capability of implementing policies and regulations that promote private sector development. Both indicators constitute solid proxies for the government's ability to implement policy effectively and credibly. Higher policy credibility reduces regulatory uncertainty, allowing firms to more confidently predict regulations and costs. As a result, profit volatility is lower, causing the risk premium on wages to decrease and the labour share to be higher.

The Stability and Absence of Violence Index reflects the likelihood of political violence and terrorism. Violence and instability may constitute a threat to property rights, which could represent a source of volatility for firms' profits. Thus, we would expect high levels of stability and absence of violence to be positively associated with the labour share.

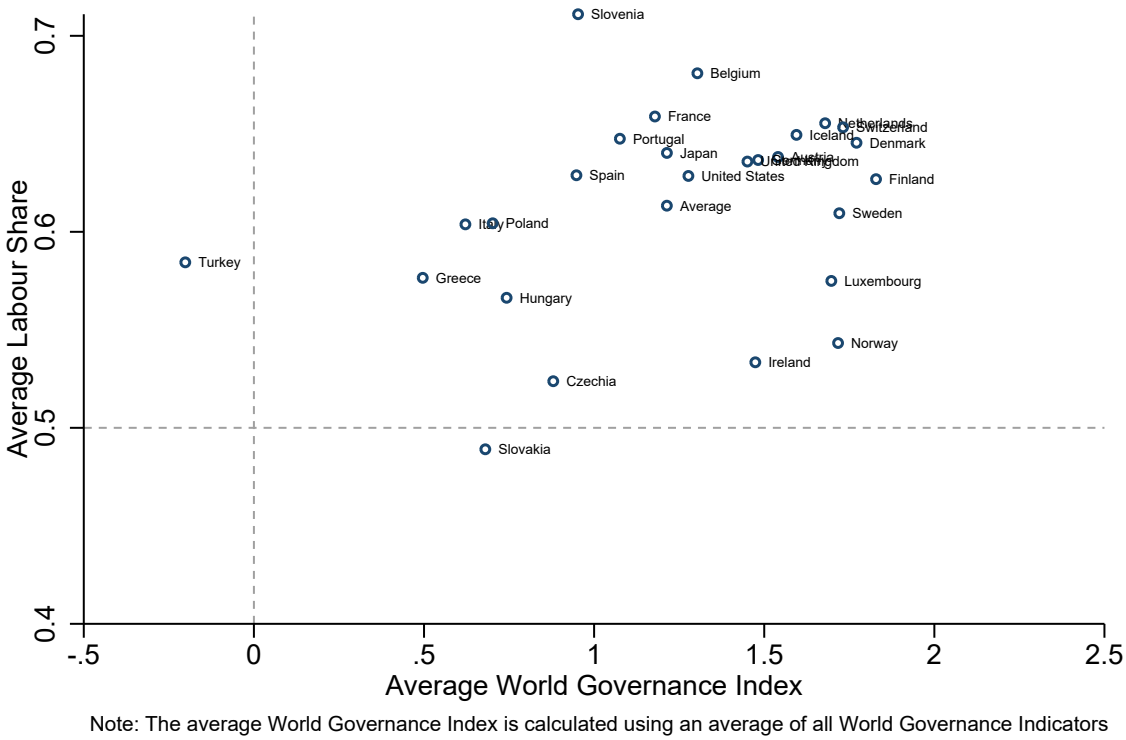
The Voice and Accountability Index reflects perceptions on democratic participation, freedom of expression, freedom of association, and a free media. Unlike with the previous institutional variables, it isn't obvious how an environment with greater political freedom may impact the risk and uncertainty faced by firms. Nevertheless, we decided to keep the variable, as it is correlated with other institutional quality indicators and is useful for robustness tests.

When doing our empirical estimations, we tested whether including two or more World Governance Indicators in the same model specification would change their coefficients and significance, having found that some of them do lose significance in the presence of others. Considering that the six variables measure correlated dimensions of institutional quality, the existence of multicollinearity between them is not surprising. As a consequence, we use the principal component analysis to synthesize the indicators that were individually significant into a single variable by making a linear combination of the original variables adjusted to their weight in the common variance. The resulting principal component becomes a proxy for the collective influence of the original variables.

As a way to diversify the nature of our institutional risk variables, we also include the Yield Curve from AMECO, computed as the difference between long-term and short-term interest rates on government bonds. By reflecting the extent to which economic agents trust the government's commitment to honoring its debt obligations, the Yield Curve serves as a good proxy for the general degree of institutional credibility. A high Yield Curve signals a greater risk on public debt and, thus, may signal not only economic risk, but also weaker institutional commitment to policy and reduced government effectiveness.

3.2.2 A preliminary visual inspection.

Figure 1 plots the average World Governance Index and the average labour income share of the 26 OECD countries that were included in our analysis. The positive relationship displayed in Figure 1 forms the basis of our hypothesis that lower institutional risk is correlated with a higher labour share, which we aim to test in this paper.



Note: The average World Governance Index is calculated using an average of all World Governance Indicators

Figure 1: Labour Share and World Governance Indicators (Country averages, 1996-2019 period)

3.3 Main Econometric concerns.

We performed unit root tests and found evidence that every variable included in the model is stationary. However, we found evidence of cross-sectional dependence on the adjusted labour income share. Cross-sectional dependence is present when observations across different countries seem to be correlated due to common shocks or unobserved factors that simultaneously affect

multiple units. This is not surprising given its characteristics and the fact that cross-sectional dependence in the labour share has already been documented by authors such as Hogrefe and Kappler (2013). Consequently, we used Driscoll-Kraay standard errors, which are not only robust to cross-sectional dependence, but also to heteroskedasticity and autocorrelation.

We adopt the time and country fixed effects estimator as our preferred estimator. The main advantage of using the fixed effects estimator is its ability to account for country-specific characteristics in the data (country fixed effects), reducing ommited variable bias. Moreover, it also controls for the correlation between our explanatory variables and the existing unobserved country characteristics. We conducted a Wald test for the joint significance of the year dummy variables, concluding time fixed effects to be jointly significant at 1% level. This result indicates that time fixed effects should be included to control for unobserved factors that vary over time but are common across countries.

When it comes to panel data analyses on the drivers of the labour income share, autocorrelation in the residuals often represents a significant econometric challenge. Stockhammer (2009) heavily criticized the validity of the results obtained by the European Commission (2007) and the International Monetary Fund (2007) due to econometric issues related to autocorrelation and ommition of time fixed effects. Despite their relevance in the literature, both papers were criticized for exhibiting significantly high autocorrelation in the residuals, an issue that was left unaddressed throughout their analyses. The omission of relevant time fixed effects exacerbates this problem and was also pointed as an additional econometric flaw. Since we found evidence of autocorrelation, both time fixed effects and autocorrelation-robust standard errors were included in our model specifications. Thus, we can be confident that their standard errors are consistent, ensuring valid statistical inference.

4. Results and discussion.

The regression results for the empirical model, according to equation (6) are depicted in Table 1. Moreover, Table 2 was included in the Appendix to illustrate the model's behaviour when alternative combinations of institutional risk variables are included simultaneously. As it was mentioned in

the methodology section, we used a fixed effects estimator with Driscoll-Kray HAC robust standard errors. We start with a baseline model (1) and then proceed to introduce our variables that proxy for institutional risk.

4.1 Baseline

As a baseline case, we consider an estimation without institutional variables as a way to discuss how our empirical results compare to the existing literature on the determinants of the labour income share not directly related to risk. Results are displayed in specification (1) of Table 1.

The output gap is not significant in specification (1), which could be reflecting the mixed evidence in the literature regarding the cyclicality of the labour share. Similarly, our proxy for education fails to be significant. While a positive coefficient aligns with the findings of Guerriero and Sen (2012), who use a similar methodology, the lack of statistical significance is at odds with their evidence.

The capital-labour ratio exhibits a negative and statistically significant coefficient in specification (1). Notably, this result is robust across other specifications in Table 1, providing evidence that a higher capital intensity is associated with a lower labour share. This is coherent with the hypothesis that modern technological development is fundamentally capital-augmenting and is alligned with the findings of Stockhammer (2009). In fact, according to neoclassical models, a negative coefficient suggests that the elasticity of substitution between capital and labour is greater than 1. This relationship suggests that such technological development is associated with an increase in the capital-labour ratio at a higher proportion than the increase the relative payments to labour. Consequently, there is a negative relationship between the capital-labour ratio and the labour share, which is consistent with our empirical results.

The fact that the estimate for the relative price of investment goods is positive makes logical sense considering the work of Karabarbounis and Neiman (2013), which describes a positive relationship between the relative price of investment goods and the labour income share.

Table 1: Regressions of the labour share on explanatory variables

Explanatory Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OutputGap	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001*	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education	0.002	0.003	0.004*	0.004*	0.003	0.004*	0.004	0.003	0.003
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
CapitalLabourRatio	-0.275***	-0.220***	-0.250***	-0.259***	-0.238***	-0.257***	-0.219**	-0.220***	-0.271**
	(0.067)	(0.075)	(0.073)	(0.067)	(0.074)	(0.077)	(0.078)	(0.074)	(0.114)
RelPriceofInvestment	0.050	0.049	0.041	0.041	0.042	0.052	0.060	0.041	0.037
	(0.037)	(0.038)	(0.037)	(0.040)	(0.041)	(0.038)	(0.043)	(0.042)	(0.025)
TradeOpenness	-0.060**	-0.085***	-0.066**	-0.080***	-0.065***	-0.069**	-0.064**	-0.072***	-0.070***
	(0.018)	(0.024)	(0.024)	(0.025)	(0.022)	(0.026)	(0.026)	(0.023)	(0.016)
BargainingPower	0.019*	0.004	0.017*	0.015	0.013	0.015	0.013	0.011	0.005
	(0.010)	(0.010)	(0.009)	(0.010)	(0.009)	(0.010)	(0.010)	(0.009)	(0.008)
RuleofLaw		0.038***							
		(0.009)							
CorruptionControl			0.018***						
			(0.006)						
GovernmentEffectiveness				0.019***					
				(0.004)					
RegulatoryQuality					0.022**				
					(0.009)				
StabilityNoViolence						-0.000			
						(0.005)			
Voice							0.025**		
							(0.012)		
PrincipalComponent								0.011***	
								(0.002)	
YieldCurve									-0.001*
									(0.001)
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	1.190***	0.829**	1.030**	1.078***	0.969**	1.078**	0.823*	0.898**	1.209*
	(0.335)	(0.388)	(0.370)	(0.334)	(0.378)	(0.390)	(0.410)	(0.376)	(0.626)
R^2**(within)**	0.272	0.305	0.273	0.276	0.282	0.253	0.267	0.303	0.307
Observations	422	383	383	383	383	383	383	383	386
Number of countries	26	26	26	26	26	26	26	26	26

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

However, the relative price of investment goods doesn't show statistical significance in any specification. Considering the high significance of the capital-labour ratio in most of specifications, it could be the case that for this sample its coefficient is absorbing all the effect coming from technological development, leaving the relative price of investment insignificant. Nevertheless, we decided to keep the variable, following the approach of the previously mentioned literature, which highlighted the importance of having two different proxies for technological progress.

Openness to trade also displays a negative and statistically significant coefficient that is robust across specifications. A 1% increase in the amount of trade relative to GDP is associated with a decrease in the labour share that ranges from 0.06% to 0.08%. These results are not only consistent with the findings of Guscina (2006) and Stockhammer (2009), but also coherent with the Heckscher-Ohlin theorem's proposition that openness to trade would decrease the labour share in capital-abundant countries, as is the case for most countries in our sample.

The coefficient of collective bargaining coverage is statistically significant in specification (1) and displays a positive coefficient. This is consistent with the hypothesis that higher bargaining power translates into a higher labour share, considering theoretical models in which there is bargaining for rents between employers and employees (Blanchard and Giavazzi 2003). However, the coefficient loses significance in most specifications, indicating limited robustness. This demands a cautious interpretation of the results, in line with the mixed evidence found by the European Commission (2007).

4.2 Accounting for the institutional risk variables

In specifications (2) through (9) of Table 1, we extend the baseline model by incorporating our institutional risk variables in each specification.

Specification (2) reveals that the Rule of Law Index displays a positive and statistically significant coefficient at the 1% level, implying that a one point increase in the Rule of Law Index is associated with a 3.8% increase in the labour income share, on average. This coefficient is stable and maintains statistical significance even when all other institutional risk variables are included in the same specification, as shown by Table 2, indicating high robustness. Having said this, it is unsurprising that our empirical results suggest that a stronger rule of law is associated with a higher labour share, aligning with the predictions of our theoretical model. A stronger rule of law yields stronger property rights and lower litigation costs, decreasing instability in productivity and profits and reducing the risk premium in wages.

The coefficient for the Corruption Control Index in specification (3) is also positive and statistically significant at the 1% level, suggesting that a one point increase in the Corruption Control Index is associated with a 1.8% increase in the labour income share, on average. This is consistent with the findings by He, Wang, and Yang (2018) concerning the effect of an anti-corruption campaign on the labour share in China. However, the Corruption Control Index loses significance once the Rule of Law Index is included in the model as well, as shown in Table 2. This suggests that the influence of corruption on the labour share is likely being captured by the Rule of Law Index.

Moreover, the coefficient on the Government Effectiveness Index in specification (4) indicates that a unit increase is associated with a 1.9% increase in the labour share, at the 1% significance level. In parallel, the Regulatory Quality Index coefficient in specification (5) reveals that a unit increase is associated with a 2.2% increase in the labour share, significant at the 5% level. Table 2 indicates some robustness for the two variables, as they remain statistically significant in specifications (3) and (4) when other World Governance Indicators, such as Rule of Law or Corruption Control, are included in the model as well. On the other hand, specification (6) indicates that the coefficient for Political Stability is not significant.

The Voice and Accountability Index coefficient is positive and statistically significant at the 5% level, indicating that a one unit increase is associated with 2.5% increase in the labour share. Considering the strong positive correlation between political accountability and other variables such as rule of law and corruption control, it wouldn't be surprising if the Voice and Accountability Index was instead capturing the effects of other institutional variables. In Table 2 (specifications (1) and (2)), we included both the Rule of Law index and the Voice and Accountability Index in the same specification. The results show that the Voice and Accountability coefficient becomes non significant and closer to 0, providing some evidence for our previous hypothesis.

Since there is evidence of multicollinearity between the variables, the principal component analysis is the most efficient way to aggregate and interpret an overall measure of institutional quality that includes every World Governance indicator. The coefficient for the principal component is positive and statistically significant at the 1% level, implying that a one-unit improvement in overall institutional quality (as captured by the principal component) is associated with a 1.1% increase in the labour share. This is in line with the predictions of out theoretical model.

Lastly, the Yield Curve exhibits a negative and statistically significant coefficient at the 10% level. This result indicates that a 1 percentage point increase in the Yield Curve is associated, on average, with a 0.1% decline in the labour share. Given that interest rates on public debt are fundamentally a measure of risk, the fact that the Yield Curve shows a negative coefficient goes along with our hypothesis that higher levels of risk are associated with a lower labour share. Nevertheless, the fact that the coefficient is only significant at the 10% level indicates the need of a particularly careful interpretation, as the Yield Curve also reflects other factors not directly related to the quality of institutions. The results presented in Table 2 also indicate that the Yield Curve coefficient loses significance when the Rule of Law Index or the Corruption Control Index are included, suggesting limited robustness and reinforcing the need of a cautious interpretation.

5. Conclusion.

Using panel data on 26 OECD countries over the period between 1996 and 2019, we discuss the relationship between risk and the labour share in the context of uncertainty and instability caused by weak institutional frameworks.

Our empirical findings suggest that the quality of political institutions does play a role in the functional distribution of income. Specifically, we find that the Rule of Law and Corruption Control indexes are positively associated with the labour income share. Although the coefficients on the institutional risk variables suggest that their influence is relatively modest compared to other determinants, our work provides some empirical evidence to our hypothesis that institutional quality might positively impact the labour income share by decreasing the level of risk and instability faced by capital owners.

Summing up, we find evidence that robust political institutions positively influence the functional distribution of income in favour of workers. An institutional environment that promotes a strong rule of law, high control of corruption and credible government policy decreases the cost of risk insurance embedded in wages, thereby contributing to an increase in the labour share.

Due to the greater availability of data, our work focuses exclusively on OECD countries. Given that OECD countries already tend to exhibit relatively higher levels of institutional quality, this restriction reduces a lot of institutional risk variability which might be relevant for a more comprehensive analysis. That being said, extending this research to include a broader sample of countries, particularly non-OECD countries, might capture more heterogeneity in institutional risk and therefore provide a more realistic understanding of its role in the functional distribution of income.

References

Abraham, Katharine G., and John C. Haltiwanger. 1995. "Real Wages and the Business Cycle." *Journal of Economic Literature* 33 (3): 1215–1264.

Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review* 91 (5): 1369–1401.

Arpaia, Alfonso, Ernesto Pérez, and Karl Pichelmann. 2009. "Understanding Labour Income Share Dynamics in Europe." *European Economy - Economic Papers,* no. 379.

Barro, Robert J., and Jong-Wha Lee. 2010. *A New Data Set of Educational Attainment in the World, 1950-2010.* Working Paper 15902. National Bureau of Economic Research.

Bengtsson, Erik. 2014. "Do unions redistribute income from capital to labour? Union density and wage shares since 1960." *Industrial Relations Journal* 45 (5): 389–408.

Blanchard, Olivier, and Francesco Giavazzi. 2003. "Macroeconomic Effects of Regulation and Deregulation in Goods and Labour Markets." *The Quarterly Journal of Economics* 118 (3): 879–907.

Daudey, Emilie, and Cecilia García-Peñalosa. 2007. "The Personal and the Factor Distributions of Income in a Cross-Section of Countries." *Journal of Development Studies* 43 (5): 812–829.

David, Joel M., Romain Rancière, and David Zeke. 2023. "International Diversification, Reallocation, and the Labor Share." *American Economic Review* 113 (4): 1023–1060.

Deardorff, Alan V. 1982. "The General Validity of the Heckscher-Ohlin Theorem." *American Economic Review* 72 (4): 683–694.

Diwan, Ishac. 2000. *Labor Shares and Globalization.* Working Paper 11. Accessed via World Bank Working Paper Series. World Bank.

Dünhaupt, Petra. 2013. "Functional Income Distribution – Theory and Empirical Evidence." *International Labour Organization (ILO) Working Papers.*

Elsby, Michael W., Bart Hobijn, and Ayşegül Şahin. 2013. "The Decline of the U.S. Labor Share." *Brookings Papers on Economic Activity* 2013 (2): 1–63.

European Commission. 2007. "The Labour Income Share in the EU." Chap. 5 in *Employment in Europe*. European Commission.

Fichtenbaum, Rudy. 2009. "The Impact of Unions on Labor's Share of Income: A Time-Series Analysis." *Review of Political Economy* 21 (1): 99–117.

Fisman, Raymond. 2001. "Estimating the Value of Political Connections." *American Economic Review* 91 (4): 1095–1102.

Gollin, Douglas. 2002. "Getting Income Shares Right." *Journal of Political Economy* 110 (2): 458–474.

Guerriero, Marta, and Kunal Sen. 2012. "What Determines the Share of Labour in National Income? A Cross-Country Analysis." *IZA Journal of Labor Policy* 1 (1): 1–28.

Guschanski, Alexander, and Ozlem Onaran. 2018. "The Decline in the Wage Share: Falling Bargaining Power of Labour or Technological Progress? Industry-Level Evidence from the OECD." *International Review of Applied Economics* 32 (1): 38–60.

Guscina, Anastasia. 2006. *Effects of Globalization on Labor's Share in National Income.* Working Paper WP/06/294. Washington, DC: International Monetary Fund.

He, Fei, Jian Wang, and Jianhua Yang. 2018. "How does anti-corruption campaign affect the labour income share in China?" *Applied Economics Letters* 26 (12): 985–989.

Hogrefe, Jan, and Marcus Kappler. 2013. "The labour share of income: heterogeneous causes for parallel movements." *Journal of Economic Policy Reform* 16 (1): 24–42.

International Monetary Fund. 2007. "The Globalization of Labor." Chap. 5 in *World Economic Outlook.* Washington, DC: International Monetary Fund.

Kaldor, Nicholas. 1957. "A Model of Economic Growth." *The Economic Journal* 67 (268): 591–624.

Karabarbounis, Loukas, and Brent Neiman. 2013. "The Global Decline of the Labor Share." *The Quarterly Journal of Economics* 129 (1): 61–103.

Rodrik, Dani. 1998. *Has Globalization Gone Too Far?* Washington, DC: Institute for International Economics.

Schneider, Martin. 2011. "Bargaining, Openness, and the Labor Share." *International Economics and Economic Policy* 8 (1): 1–28.

Stirati, Antonella, and Walter Paternesi Meloni. 2021. "Unemployment and the wage share: a long-run exploration for major mature economies." *Structural Change and Economic Dynamics* 56:330–352.

Stockhammer, Engelbert. 2009. *Determinants of Functional Income Distribution in OECD Countries.* IMK Study 5/2009. Düsseldorf, Germany: Macroeconomic Policy Institute (IMK).

Stockhammer, Engelbert, Özlem Onaran, and Stefan Ederer. 2011. "Functional Income Distribution and Aggregate Demand in the Euro Area." *Cambridge Journal of Economics* 35 (3): 637–661.

Tella, Sebastian Di, Cedomir Malgieri, and Christopher Tonetti. 2024. "Risk Markups." Working Paper.

Appendix 1: Model derivations.

Here, we describe our model derivation step by step:

$$max_{L,K} \ \mathbb{E}[\Lambda(A_i K_i^{\alpha_1} L_i^{\alpha_2} - WL_i - RK_i)] \tag{7}$$

Taking the first order condition, we get:

$$\mathbb{E}[\Lambda(A_i \alpha_2 K_i^{\alpha_1} L_i^{\alpha_2 - 1} - W)] = 0 \tag{8}$$

$$\mathbb{E}[\Lambda(A_i \alpha_2 K_i^{\alpha_1} L_i^{\alpha_2 - 1}] = \mathbb{E}[\Lambda W] \tag{9}$$

$$W = \frac{\mathbb{E}[\Lambda(A_i \alpha_2 K_i^{\alpha_1} L_i^{\alpha_2 - 1}]}{\mathbb{E}[\Lambda]} \tag{10}$$

$$\frac{WL_i}{\mathbb{E}[Y_i]} = \frac{L_i}{\mathbb{E}[Y_i]} \times \frac{\mathbb{E}[\Lambda(A_i \alpha_2 K_i^{\alpha_1} L_i^{\alpha_2 - 1}]}{\mathbb{E}[\Lambda]} \tag{11}$$

The left-hand side of equation (12) describes an expression of the labour income share. From here, we simplify the right-hand side of the equation in order to reach our final expression.

$$\frac{WL_i}{\mathbb{E}[Y_i]} = \frac{\mathbb{E}[\Lambda(A_i \alpha_2 K_i^{\alpha_1} L_i^{\alpha_2}]}{\mathbb{E}[\Lambda]\mathbb{E}[(A_i K_i^{\alpha_1} L_i^{\alpha_2}]} = \alpha_2 \frac{\mathbb{E}[\Lambda A_i]}{\mathbb{E}[\Lambda]\mathbb{E}[A_i]} \tag{12}$$

Using the properties of the covariance, we can write:

$$\frac{WL_i}{\mathbb{E}[Y_i]} = \alpha_2 \frac{(\mathbb{E}[\Lambda]\mathbb{E}[A_i] + Cov(\Lambda, A_i))}{\mathbb{E}[\Lambda]\mathbb{E}[A_i]} = \alpha_2 \frac{(1 + Cov(\Lambda, A_i))}{\mathbb{E}[\Lambda]\mathbb{E}[A_i]} \tag{13}$$

We then normalize the covariance using the following process:

$$Cov(\frac{\Lambda}{\mathbb{E}[\Lambda]}, \frac{A_i}{\mathbb{E}[A_i]}) = \mathbb{E}[\frac{\Lambda}{\mathbb{E}[\Lambda]} \times \frac{A_i}{\mathbb{E}[A_i]}] - \mathbb{E}[\frac{\Lambda}{\mathbb{E}[\Lambda]}]\mathbb{E}[\frac{A_i}{\mathbb{E}[A_i]}] \tag{14}$$

Considering that

$$\mathbb{E}[\frac{\Lambda}{\mathbb{E}[\Lambda]}] = 1 \quad , \quad \mathbb{E}[\frac{A_i}{\mathbb{E}[A_i]}] = 1 \tag{15}$$

The previous equation simplifies to:

$$Cov(\frac{\Lambda}{\mathbb{E}[\Lambda]}, \frac{A_i}{\mathbb{E}[A_i]}) = \mathbb{E}[\frac{\Lambda}{\mathbb{E}[\Lambda]} \times \frac{A_i}{\mathbb{E}[A_i]}] - 1 \tag{16}$$

$$1 + Cov(\frac{\Lambda}{\mathbb{E}[\Lambda]}, \frac{A_i}{\mathbb{E}[A_i]}) = \mathbb{E}[\frac{\Lambda}{\mathbb{E}[\Lambda]} \times \frac{A_i}{\mathbb{E}[A_i]}] \tag{17}$$

If we combine equation (18) with equation (13), we reach our final labour income share expression:

$$\frac{WL_i}{\mathbb{E}[Y_i]} = \alpha_2(1 + Cov(\frac{\Lambda}{\mathbb{E}[\Lambda]}, \frac{A_i}{\mathbb{E}[A_i]})) \tag{18}$$

$$\frac{WL_i}{\mathbb{E}[Y_i]} = \alpha_2(1 - \kappa_i) \quad , \quad \kappa_i = -Cov(\frac{\Lambda}{\mathbb{E}[\Lambda]}, \frac{A_i}{\mathbb{E}[A_i]}) \tag{19}$$

The labour income share is determined by α_2 and by a risk premium captured by κ_i

Appendix 2: Table 2.

Table 2: Inclusion of more than one institutional risk variable

Explanatory Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OutputGap	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003
	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)
CapitalLabourRatio	-0.233***	-0.219***	-0.238***	-0.225***	-0.270**	-0.278**	-0.228***	-0.258**
	(0.072)	(0.072)	(0.075)	(0.074)	(0.110)	(0.111)	(0.071)	(0.108)
RelPriceofInvestment	0.048	0.049	0.038	0.044	0.017	0.019	0.037	0.014
	(0.044)	(0.042)	(0.039)	(0.038)	(0.030)	(0.028)	(0.042)	(0.036)
TradeOpenness	-0.075**	-0.085***	-0.064***	-0.087***	-0.085***	-0.070***	-0.084***	-0.082***
	(0.026)	(0.028)	(0.022)	(0.024)	(0.020)	(0.020)	(0.023)	(0.023)
BargainingPower	0.014	0.004	0.014	0.006	-0.007	0.005	0.006	-0.006
	(0.010)	(0.028)	(0.009)	(0.011)	(0.010)	(0.008)	(0.011)	(0.010)
RuleofLaw		0.038**		0.033***	0.038***		0.030*	0.028*
		(0.014)		(0.010)	(0.012)		(0.015)	(0.015)
CorruptionControl			0.011*			0.017**	0.003	0.001
			(0.005)			(0.008)	(0.008)	(0.010)
GovernmentEffectiveness	0.016***			0.008*			0.006	0.007
	(0.004)			(0.004)			(0.004)	(0.005)
RegulatoryQuality			0.017*				0.010	0.006
			(0.009)				(0.012)	(0.011)
StabilityNoViolence								-0.002
								(0.006)
Voice	0.017	0.001					-0.006	0.011
	(0.012)	(0.016)					(0.020)	(0.017)
YieldCurve					(0.001)	-0.001		-0.000
					(0.001)	(0.001)		(0.001)
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.901**	0.820**	0.964**	0.860**	1.177*	1.236*	0.917**	1.104*
	(0.375)	(0.381)	(0.382)	(0.377)	(0.616)	(0.612)	(0.378)	(0.606)
R^2**(within)**	0.282	0.305	0.288	0.309	0.354	0.318	0.317	0.362
Observations	383	383	383	383	383	383	383	355
Number of countries	26	26	26	26	26	26	26	26

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1