# Capital Account Liberalization and Wage Inequality: Evidence from Firm Level Data

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### **IMF Working Paper**

Asia and Pacific Department

### Capital Account Liberalization and Wage Inequality: Evidence from Firm Level Data Prepared by Kodjovi M. Eklou and Shakeba Foster\*

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ABSTRACT: Firms play an important role in shaping income inequality at the aggregated country level, given that wages represent a significant proportion of household income. We investigate the distributional consequences of capital account liberalization, relying on firm level data to explore the implications for between-firms earning inequality in ASEAN5 countries over the period 1995-2019. We find that between-firms wage dispersion alone, accounts for a nontrivial proportion of the variation in the market Gini. Our empirical findings show that capital account liberalization increases between-firms wage inequality, as wages grow faster at initially high-paying firms and slow-down at firms at the lower portion of the wage distribution. These results are robust to a battery of robustness checks. Further, the directions and categories of capital account liberalization matter as results are pronounced for inflow liberalization and equity capital flows. We also show that capital account liberalization induces an increase in Profit-to-Wage ratios. Furthermore, the impact depends on country characteristics (wage setting institutions, the level of financial development and the size of the informal sector) as well as industry characteristics (export orientation and external finance dependence).

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### **WORKING PAPERS**

## Capital Account Liberalization and Wage Inequality: Evidence from Firm Level Data

Prepared by Kodjovi M. Eklou and Shakeba Foster<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The authors would like to thank Pornpinun Chantapacdepong, Alex Copestake, Davide Furceri, Tidiane Kinda, Lamin Leigh, Carlo Pizzinelli and Silvia Sgherri for helpful comments. This paper was written while Ms. Shakeba Foster was an intern in APDA3 division as part of the Fund Internship Program.

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### I. Introduction

Income inequality is a key policy issue and globalization, in particular financial globalization, has been often cited as a major contributor around the world.<sup>2</sup> Wages account for a significant proportion of household income and wage dispersion plays an important role therefore as a driver of overall income inequality and thus a key lens through which the impact of financial globalization, more specifically capital account liberalization on inequality can be assessed. In this paper, we revisit the distributional consequences of capital account liberalization using firm level data with a focus on wage inequality. We ask the following research questions: i) Does capital account liberalization induce an increase in wage inequality? ii) If yes, what are the main channels and, iii) Is there any heterogeneity across countries and industries?

Using firm level data from Orbis, we examine empirically the distributional impact of capital account liberalization in ASEAN5 countries over the period 1995-2019. Our empirical approach consists in exploiting between-firms variation in wage paid per employee to investigate the differential impact of capital account liberalization on wage inequality. Our main contributions are twofold. First, we present novel evidence on the impact of capital account liberalization at firm level, where wages, an important portion of income is generated or formed. Second, by using firm level data, we bridge both the literature on firm wage inequality and the one on capital account liberalization. Using firm level data also presents the advantage of employing a novel empirical strategy.

We find that between-firms wage dispersion alone, accounts for a nontrivial proportion of the variation in the market Gini. Our empirical findings show that capital account liberalization increases between-firms wage inequality, with wages growing faster at initially high-paying firms while slowing down at firms at the lower portion of the wage distribution. These results are robust to a battery of robustness checks. The existing literature (see for instance Li and Su, 2021; Furceri and Loungani, 2015, 2018; Jaumotte et al., 2013, Das and Mohapatra, 2003) has found that the typology as well as the direction of flows matter in shaping the impact on inequality. Consistently, we find that both the direction and categories of capital account liberalization matter with more pronounced results for inflow liberalization and equity capital flows. Capital account liberalization could lead to an increase in the profit-wage ratio and a reduction in labor share of income if they represent a credible threat to reallocate production abroad (Harrison, 2002). Previous literature has found that capital account liberalization reduces the share of labor income (Furceri and Loungani, 2018, Furceri et al, 2019). We provide firm level evidence showing that capital account liberalization induces an increase in Profit-to-Wage ratios, specifically at firms with initially high Profit-to-Wage ratios.

We also provide evidence for cross-country and industry level heterogeneity. Drawing from the literature on wage inequality showing that size of the informal sector could play an important role as high wages dispersion exists

<sup>&</sup>lt;sup>2</sup> See for instance Heimberger (2020) showing that financial globalization has a more sizeable effect on income inequality compared to trade globalization using a meta-analysis.

among informal workers (Engbom et al., 2022), that trade exposure matters (Coşar et al.2016, Krishna et al., 2011), as well as labor market institutions that may limit pass-through of firm level differences to wage such as collective bargaining coverage (Criscuolo et al., 2021), we undertake further analyses. We show that the impact of capital account liberalization on between-firms inequality is mitigated in the case of countries with a large coverage of collective bargaining, in industries with large export orientation and external finance dependence. Our findings on export orientation are consistent with the potentially equalizing effect of trade, termed the distribution effect, which concentrates workers at larger firms, reducing job turnover and wage inequality as smaller, less stable firms leave the market (Coşar et al, 2016). Further, our finding on external finance dependence suggests that firms in ASEAN5 countries could be financially constrained (see Li, 2020). However, we find that larger size of the informal sector within ASEAN5 amplifies the impact of capital account liberalization on wage inequality. We also show that financial development mitigates the impact of capital account liberalization (Furceri et al, 2019; Furceri and Loungani, 2018 and, Asteriou et al., 2014). Finally, using an event-study approach, we show that the impact of capital account liberalization on between-firms inequality is persistent.

The remainder of the paper is organized as follows. Session II presents a review of the related literature. Section III describes the data and shows some stylized facts while section IV is dedicated to the empirical analysis including the identification strategy, the results and different robustness checks. Finally, section V concludes.

### II. Related Literature

### Firms Wage Inequality

A growing body of literature is dedicated to understanding the role of firms in wage inequality based mainly on employer-employee linked data. Using the decomposition framework introduced by Abowd et al (1999), one strand of literature assesses the contribution of between and within-firm heterogeneity to the overall variance in wages. Card et al (2013) finds that between firm heterogeneity accounts for about a 25% of the observed increase in wage inequality in Germany. Alvarez et al (2018) finds this portion to be 40% in Brazil, Song et al (2019) derives an even larger 67% for the USA, while Criscuolo et al (2021) finds that this heterogeneity between firms explains up to 50% of the variance in wages across thirteen (13) OECD countries.

In addition to differences in inherent firm characteristics, Card et al (2013) and Song et al (2019) also find what the latter refers to as 'sorting' and 'segregation' effects, to be important. That is, more educated or skilled workers are more likely to be employed by firms paying higher wages and are also more likely to be working together – both of which result in an increase in the proportion of wage inequality determined by firms. Wage inequality is also driven by the existing labor market institutions within countries. More specifically, large informal sectors may amplify wage inequality (Engborn et al., 2022) while wider collective bargaining coverage and minimum wage requirements tend to limit growth in wage inequality (Criscuolo et al., 2021).

While the inequality impact of capital account liberalization has so far not been explored using firm level data, the effects of other forces have been investigated. Moser et al (2021) examines the impact of monetary policy in Germany. They find that as banks tightened credit supply to firms in response to negative deposit rates, within firms – higher paid workers faced larger wage cuts, while between firms – initial high wage firms reduced wages more, both aggregating to lower wage inequality. For Colombia, Coşar et al (2016) finds competing effects of trade liberalization – a sensitivity effect where openness forces a direct link of firm revenue to productivity and employment, favoring more productive firms and widening the between-firm wage gap; and a distribution effect which concentrates workers at larger firms, reducing job turnover and wage inequality as smaller, less stable firms leave the market. Krishna et al (2011) examines this same relationship for Brazil, finding no significant wage differences in exporting versus non-exporting firms, highlighting that the same forces may induce heterogenous outcomes across countries.

### Capital Account Liberalization and Inequality

A separate strand of literature explores the liberalization of capital flows as a driver of income inequality, using country and industry level data. Furceri and Loungani (2015) show that capital account liberalization, by reducing the labor share of income, induces inequality, in a panel of 149 countries. This increase persists and is larger over the medium term. Using industry level data and a difference-in-difference model for a sample of 23 advanced economies, Furceri et al (2019) extends this analysis, and find that within countries, the effect is stronger for industries with higher external financial dependence, higher labor-capital elasticity of substitution and a higher 'natural propensity' to lay-off employees in response to shocks. They note further that if liberalization induces fear of reallocation of production abroad, it may lead to an increase in the profit-wage ratio. Li and Su (2021), also applying difference-in-difference analysis, show a similar inequality increasing effect for advanced and developing economies, noting that this stems from a rise in the income share of high-income groups and a simultaneous fall in the income share of poorer groups.

Liberalization may also induce lower income inequality if flows improve financial inclusion for low-income groups (Li and Su, 2021). However, with weak financial institutions and limited access to credit, increased access to financial services following capital account liberalization may only benefit those already well-off, thereby increasing inequality (Furceri and Loungani, 2015). Similarly, if liberalization induces financial crises, the poor may be hurt disproportionately as crisis effects often persist over the long term, even if initial high earners face losses from bankruptcies and falling asset prices in the short term (Furceri and Loungani, 2015; Asteriou et al., 2014). The quality of financial institutions and level of financial depth therefore moderate the impact of capital account liberalization on income inequality (Bumann and Lensink, 2016; Dorn et al., 2018).

With regards to types of capital flows, Das and Mohapatra (2003) find, similar to Li and Su (2021), that stock market liberalization induces income inequality by increasing the income share of the upper quintile and reducing that of the middle three quintiles. This effect is present if high income groups are the owners of equity, and it

persists over the medium term. Asteriou et al (2014), Jaumotte et al (2013), and Dorn et al (2018) similarly note an inequality increasing effect of the liberalization of foreign direct investment (FDI) flows. This inequality increase occurs if flows are directed to high-skill industries, increasing the skill premium and inducing higher returns to capital (Furceri and Loungani, 2015; Li and Su, 2021; Jaumotte et al., 2013).

### III. Data and Stylized Facts

### A. Data

We use both firm level and cross-country data covering ASEAN5 economies over period 1995 - 2019. Our firm level data is sourced from the Orbis database. We use this data to estimate measures of firm size (number of employees), firm productivity (total factor productivity) and firms' profit-to-wage ratios, as well as our main outcome variable, salary per employee.<sup>3</sup> We then rank firms on a 0 - 1 scale based on the salary per employee paid at the beginning of the sample period; with firms paying initial higher salaries ranked closer to 1. We also grouped the initial salary payment into percentiles as discussed further below.

For country level variables, we use Gini indices based on both market and household disposable income, sourced from the Standardized World Income Inequality Database (SWIID). Two sets of capital account liberalization indices – KAOPEN and FKRSU – are employed.<sup>4</sup> These are based on Chinn and Ito (2008) and Fernández et al (2016), respectively.<sup>5</sup> The latter includes indices for overall capital flow restrictions, overall capital inflow and outflow restrictions as well as restrictions on inflows and outflows of specific capital components, including foreign direct investment (FDI), bond and equity flows. We transform the original indices into indices representing capital account liberalization. Chinn and Ito (2008) provide a measure of capital account liberalization, which we use as is. Our financial development index is sourced from the IMF (Sahay et al., 2015; Svirydzenka, 2016), while data on episodes of financial crises is taken from Nguyen et al (2022). We also include variables on informal sector size and collective bargaining coverage in our analysis. Informal sector data is based on Medina and Schneider (2020) while data on collective bargaining coverage is sourced from the International Labour Organization (ILO).

At the industry level, we include variables proxying export orientation (the share of domestic value added in foreign final demand) and external financial dependence (EFD). Export orientation data is obtained from the OECD's Trade in Value Added (TiVA) Database. Following Li (2020), external financial dependence is first calculated at the firm level, using data from Orbis, by summing firms' use of external finance over a ten-year

<sup>&</sup>lt;sup>3</sup> Our measure of productivity is the firm level Total Factor Productivity, taken from Diez et al (2021). TFP estimates are obtained through the methodology developed by Ackerberg et al (2015) and employing the gross output approach with cost of goods sold and tangible fixed assets as inputs. Further, countries are pooled within a given 2-digit NACE industry level classification. Given that Singapore is not included in the sample by Diez et al (2021), we computed the TFP series for Singapore following similar approach

<sup>&</sup>lt;sup>4</sup> We also conduct robustness tests using the Financial Account Restriction Index (FARI), which is discussed in Baba et al (2022).

<sup>&</sup>lt;sup>5</sup> We use the updated (August 2021) version of dataset which could be found here.

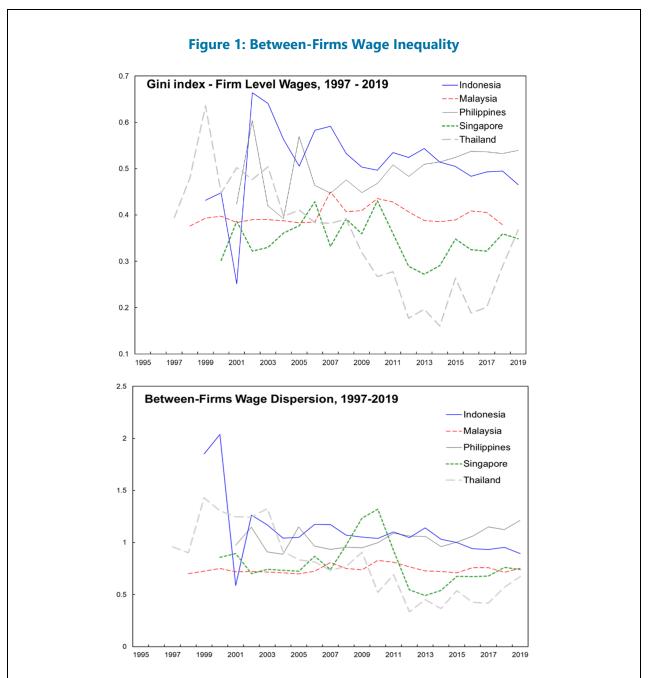
period, then dividing this by firms' total capital expenditure over the same period. Industry level EFD is then estimated as the median of firms' EFD within each industry. See Table A1 for a summary statistics and Table A2 in the Appendix for a description of all variables used in the empirical investigation.

### B. Stylized Facts on Between-Firms Wage Inequality

Figure 1 shows that between-firms inequality, as measured by the Gini index and wage dispersion, vary substantially both across time and across countries. Further, in Table 1 we run a simple fixed effect regression of the aggregate level of inequality as measured by the Gini index on between-firms wage dispersion. Our results show that between-firms wage dispersion accounts for a non-trivial 17 percent of variation in market inequality (as measured by the Gini index).<sup>6</sup> These suggest that between-firms wage inequality could have significant implications for overall income inequality in ASEAN5 countries.

	(1)	(2)
	Gini – disposable income	Gini – market income
Between-Firms Wage Dispersion	0.346***	0.475***
	(0.123)	(0.106)
Constant	41.146***	42.936***
	(0.207)	(0.178)
Observations	105	105
Within R <sup>2</sup>	0.074	0.169

<sup>&</sup>lt;sup>6</sup> We present results on wage dispersion as it is broadly used in the literature as a proxy for between-firm wage inequality (see for instance Alvarez et al, 2018 and Engbom and Moser, 2022). Results using the Gini index of wages showed a weaker explanatory power.



Note: Using firm level data on wages from Orbis, we calculate Gini index and wage dispersion as measures of between-firms wage inequality. Between-firms wage dispersion is obtained as the standard deviation of the log of wage per employee.

### IV. Investigating the Impact of Capital Account Liberalization on Between-Firms Wage Inequality

### A. Empirical Strategy

Overall earnings variance can be decomposed into two components which are i) the variance of average log earnings between firms and ii) the variance of the difference between workers' log earnings and the average log earnings at their firm (see Fortin et al, 2011, Alvarez et al, 2018 and Song et al, 2019). However, our focus in this paper is on between-firms wage inequality given the lack of employer-employee matched data. At the same time, between-firms heterogeneities have been found to account for a sizeable proportion of overall wage inequality (25 percent in Germany – Card et al., 2013; 40 percent in Brazil – Alvarez et al., 2018; about 50 percent across 13 OECD countries – Criscuolo et al., 2021 and about 67 percent in the US – Song et al, 2019).

$$\underbrace{var\left(y_{it}\right)}_{\text{overall}} = \underbrace{var\left(\overline{y}_{t}^{j}\right)}_{\text{between firms}} + \underbrace{var\left(\overline{y_{itj}|i \in j}\right)}_{\text{within firms}}$$

In our baseline empirical strategy, we exploit between-firms variation based on the following specification.

$$Y_{fict} = \beta_1 (KAL \ index_{ct} \times Rank \ of \ Y_{fc}) + \gamma X_{fict} + \theta KAL \ index_{ct} + \alpha_t + \alpha_f + \alpha_c + \varepsilon_{fict}$$
 (1)

Where  $Y_{fict}$  is the logarithm of wage per employee of firm f of industry i and from country c at year t, KAL index is the capital account liberalization index, Rank of  $Y_{fc}$  is the firm's rank based on its initial (that is at the beginning of the sample) level of wage per employee – with firms paying higher wages ranked higher,  $X_{fict}$  is a set of controls including firm-specific controls such as firm size and TFP.  $\alpha_f$ ,  $\alpha_c$ ,  $\alpha_t$  are firm, country, and year fixed effects respectively. Our coefficient of interest is  $\beta_1$  and captures the differential effect of capital account liberalization depending on their wage payment rank. We test whether  $\beta_1 > 0$  meaning that following capital account liberalizations wages tend to increase more rapidly in initially high paying firms thus increasing between-firms wage inequality or rather  $\beta_1 < 0$  which means a reduction in between-wage inequality.

### **B.** Baseline Results

Table 2 shows our baseline results using both the Chinn-Ito index of capital account liberalization and the (transformed) overall index of capital account liberalization index (Fernández et al, 2016) - henceforth FKRSU index. Our findings suggest that capital account liberalizations increase between-firms wage inequality in our

sample.<sup>7</sup> More specifically, the estimated coefficient in column (4) implies that a one standard deviation increase in capital account openness leads to about a 25 percent wage differential between the top-ranking firm and lowest ranking firm in the sample. This finding is robust across specifications and is consistent with previous literature (see for instance Furceri et al, 2019 and, Li and Su, 2021).<sup>8</sup>

### C. Robustness Tests

Next, we run a first set of robustness tests changing the measurement of the capital account liberalization into a dummy taking the value of 1 in years with a positive change in the capital account liberalization index (Table 3), using the distribution of wage paid to test the impact of capital account liberalization on the top 20 percent vs the bottom 20 percent (Table 4) and using an alternative specification accounting for a potential persistence in the dependent variable – the log salary per employee, which we estimate by GMM (Blundell and Bond, 1998) in Table 5. We also use a specification with country-year fixed effects (Table 6). Overall, the various tests show that our baseline results are robust. More specifically, Table 4 shows that our baseline results are driven by firms at the very top of the salary or wage pay distribution. It shows that while the salary per employees grows faster at the top 20 percent of the distribution, it decreases at the bottom 20 percent following capital account liberalization. Finally, in Table 3, using a dummy as a proxy for capital account liberalization episodes or reforms, consistently with the rest of the literature (see for instance Furceri and Loungani, 2015 and Bumann and Lensik, 2016), we find similar results to the baseline when using the indices.

We undertake further robustness tests using the newly constructed index of capital account restriction – the FARI index (Baba et al, forthcoming). For instance, the Chinn-Ito index uses the first principal component of the IMF Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) variables pertaining to regulatory controls over current or capital account transactions, the existence of multiple exchange rates, and the requirements of surrendering export proceeds. The Chinn-Ito index for a given country-year may therefore vary with the sample used for the principal component analysis, while the FARI index will not suffer from this issue, which facilitates the stability of the estimates over time. Note however that both indices are highly correlated (coefficient of correlation of about 0.83). As with the FKRSU index, we transform the original indices into indices representing capital account liberalization. Results using the FARI are presented in Table 7 and are in line with our baseline estimates – increases in capital account openness are associated with increased between-firms wage inequality.

<sup>&</sup>lt;sup>7</sup> Exclusion of Singapore – an advanced economy and potential outlier – from the sample, do not change these results. The results also remain the same when real wages (deflated by PPP) are used as our outcome variable.

<sup>8</sup> It is also worth noting that while firm size might impact wage inequality outcomes, there is little correlation between firm size and wage per capita in our sample. There is also no evidence that high-wage firms tend to hire more workers following capital account liberalization.

### D. Channels

We also undertake a series of additional analyses to investigate the different channels identified in the literature as well as potential heterogeneities. These include exploring heterogeneities across the direction of flows (inflows vs outflows), across typology of flows, different across countries (financial development, wage setting institutions and the size of the informal sector), and across industries (external financial dependence and export orientation).

Table 8 and Table 9 show respectively results differentiating between inflow and outflow liberalization, and equity vs bonds flows. The results show that the liberalization of both inflows and outflows are followed by an increase in between-firms wage inequality with larger effects of the former. Further, we find that while both equity flows and bonds inflows liberalization increase between-firm wage inequality, the impact is larger for equity flows. These results are consistent with previous findings (Das and Mohapatra 2003; Li and Su, 2021). Further, the literature (see for instance Jaumotte et al., 2013; Furceri and Loungani, 2015 and, Li and Su, 2021) has put an emphasis on the impact of FDI flows in widening inequality especially if directed to high skill industries. In Table 10 columns (1-3), we explore the impact of FDI inflow liberalization and found that they do increase between-firms wage inequality. Further in columns (4-6) we show that FDI inflow liberalization increase wage more rapidly in firms with initially high TFP. This in turn suggests that consistently with previous findings, FDI inflows increase between-firm wage inequality when directed to high-skill industries, increasing the skill premium and inducing higher returns to capital.

Next, we test the role of financial crises and financial development in shaping the impact of capital flow liberalization on between-firms wage inequality in Table 11 and Table 12 respectively. We do not find any statistically significant role for financial crises in shaping the impact of capital account liberalization on wage inequality. This mostly reflects the scarcity of such events in our sample as most of the banking crises seen in the region were around the Asian financial crisis (1997-2001). Table 12 shows also that financial development dampens the impact of the liberalization of capital flows on wage inequality in the region. This result is robust across specifications and consistent with previous findings (Bumann and Lensink, 2016; Dorn et al., 2018).

In Table 13, following the related literature, we explore the role of other country and industry characteristics as sources of heterogeneities in our baseline findings. The results show that the initially discussed impact of capital account liberalization on wage inequality is i) amplified in countries with a large informal sector (columns 1-3), and ii) mitigated in countries with a large share of employees covered by collective bargaining agreement (columns 4-6), in industries with high external finance dependence (columns 7-8) and with high export dependence (columns 9-11). These results are mostly consistent with previous findings showing that higher dispersion in wages exists among informal sector workers (Engbom et al, 2022), labor market institutions such as a strong collective bargaining coverage by restraining the bargaining power of firms reduce pass-through of firm level differences to wage, hence limiting the growth in wage inequality (Criscuolo et al., 2021), trade openness could reduce wage inequality through a distributional effect by concentrating workers at larger firms as less stable firms exit the market (Coşar et al, 2016). Our result on external finance dependence diverges from

Furceri et al (2019) and may reflect the fact that ASEAN5 firms are financially constrained (see Li, 2020) as the liberalization of capital flows could then provide access to foreign capital.

Finally, we explore the distributional consequences of capital account liberalizations by exploring the impact on the profit to wage ratio of firms. Table 14 and Table 15 show the profit to wage ratio increases especially in firms with initially high profit-to wage ratio, amplifying initial between-firms wage inequality.

### E. An Event Study Approach

We now investigate further the dynamic pattern of the effect of capital account liberalization using an event study approach. The event study approach allows us to identify a treatment effect of capital account liberalization. We define an event as the largest change in the index of capital account openness within country. This approach has two main advantages. First, it allows us to test whether there is any pre-existing trend that could lead to a spurious difference-in-differences estimates. Second, it shows the dynamic pattern of the treatment effect allowing us to distinguish short-run and medium-long run effects. Indeed, in the previous section our specification assumed that the impact of capital account liberalization would be in the short term.

We estimate therefore the following equation:

$$Y_{fict} = \beta_{1t} (E_{ct} \times Rank \ of \ Y_{fc}) + \gamma E_{ct} + \alpha_t + \alpha_f + \alpha_c + \varepsilon_{fict}$$
 (2)

Where  $E_{ct}$  is a vector of dummy variables equal to 1 within the 2-year period before or after the capital account liberalization event and  $\gamma$  is a vector of coefficients corresponding to each 2-year period while other variables retain the same definition. In this empirical specification, the identification comes from comparing the average log salary per employee to the omitted 1–2 years before the event. Given our definition of an event, we identify the largest effect of capital account liberalization on between-firms wage inequality.

Figure 2 shows that the effect of capital account liberalization on between-firms wages inequality is persistent. This finding corroborates our empirical specification and results in our baseline investigations as it shows both an impact in the short-term and in the medium-term. Further this is consistent with previous findings (see for instance Furceri and Loungani, 2018 and Furceri et al, 2019). We are therefore confident that we estimate a plausibly causal effect of capital account liberalization.

Figure 2: Capital Flow Liberalization and Impact on Between Firm Wage Inequality Overall Capital Account Liberalization Capital Inflow Liberalization ဖ 4 Ŋ Ŋ 0 Ņ ဖ ဖ [-3-4] [+0-1] [+4-5] [-3-4] [+0-1] [+2-3][+2-3][+4-5] Capital Account Liberalization Event Window Capital Account Liberalization Event Window

Note: This Figure describes the dynamic effect of capital account liberalization on between firm wage inequality. It shows the treatment effect of an event defined as the largest change in the index of capital account openness within country on between-firms wage inequality  $(\beta_{1t})$ . The Capital Account Liberalization Event window is a vector of indicator dummies for being within a 2-year period before (-) or after (+) the capital account liberalization event. The identification comes from omitting the 1-2 years before the event. The Figure displays coefficients (in dots). The vertical lines around the dots represent 90% confidence interval.

### V. Conclusion

This paper uses firm level data to explore the distributional consequences of capital account liberalization. We exploit between-firms variation in wage paid per employee to investigate the differential impact of capital account liberalization on wage inequality in ASEAN5 countries over the period 1995-2019.

We find that between-firms wage dispersion alone, accounts for a nontrivial proportion of the variation in the market Gini. Our empirical findings show that capital account liberalization increases between-firms wage inequality, as wages grow faster at initially high-paying firms and slow-down at firms at the lower portion of the wage distribution. These results are robust to a battery of robustness checks. Further, the directions and categories of capital account liberalization matter as results are pronounced for inflow liberalization and equity capital flows. We also show that capital account liberalization induces an increase in Profit-to-Wage ratios. Furthermore, the impact depends on country characteristics (wage setting institutions, the level of financial development and the size of the informal sector) as well as industry characteristics (export orientation and external finance dependence). Finally, we also show that the capital account liberalizations could have persistent effect on wage inequality.

This paper is the first, to the best of our knowledge, to provide evidence on the distributional consequences of capital account liberalizations using firm level data. While our focus is on between-firms wage inequality in this paper, there is scope in future research to investigate the impact of capital account liberalization on wage inequality as employer-employees data become available, to understand within-firm wage inequality dynamics. Our results suggest policy actions that could be taken to mitigate the distributional consequences of financial globalization. For instance, policies that protect workers through increased collective bargaining coverage, promote financial development, promote trade liberalization, and reduce the size of the informal sector would contribute to more inclusion in ASEAN5 countries with liberalized current accounts.

### **Tables**

Table 2: Baseline Results – Capital Account Liberalization and Wage Inequality

		Chin	n-Ito			FKRSU	(overall)	
Dep Var: log of salary per employee	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
KA Openness # Initial salary rank	2.140***	1.647***	1.712***	0.910***	8.324***	7.516***	6.810***	9.306***
	(0.212)	(0.199)	(0.172)	(0.282)	(0.745)	(0.723)	(0.655)	(0.881)
KA Openness	-2.835***	-2.579***	-1.679***	-1.141***	-8.283***	-7.960***	-5.176***	-6.068***
	(0.142)	(0.131)	(0.126)	(0.182)	(0.494)	(0.478)	(0.456)	(0.589)
Firm Size		-0.411*** (0.021)	-0.445*** (0.018)	-0.630*** (0.035)		-0.417*** (0.021)	-0.451*** (0.018)	-0.624*** (0.035)
Firm productivity				0.194*** (0.033)				0.186*** (0.033)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	Yes	Yes	No	No	Yes	Yes
N	27678	27678	27678	11170	27678	27678	27678	11170

Note: Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. Firm size = log of number of employees. Firm productivity = log of total factor productivity (TFP). Robust standard errors in parentheses \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 3: Capital Account Liberalization and Wage Inequality – Reform dummies

	Chir	nn-Ito	FKRSU	(Overall)	FKRSU	(Inflows)	FKRSU	(Outflows)
Dep Var: log of salary per employee	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
KA reform # Initial salary rank	-0.027	-0.014	0.200***	0.183***	0.156***	0.171***	0.360	0.450
	(0.080)	(0.066)	(0.044)	(0.035)	(0.048)	(0.040)	(0.459)	(0.332)
KA reform	0.123**	0.119**	-0.219***	-0.118***	-0.228***	-0.191***	-0.395	-0.663***
	(0.053)	(0.048)	(0.029)	(0.028)	(0.032)	(0.031)	(0.296)	(0.219)
Firm size		-0.489***		-0.488***		-0.489***		-0.489***
		(0.024)		(0.024)		(0.024)		(0.024)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	No	Yes	No	Yes	No	Yes
N	19784	19784	19784	19784	19784	19784	19784	19784

Note: KA reform = binary variable equal to 1 in years where there is an increase in the respective capital account liberalization index. Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. Firm productivity = log of total factor productivity (TFP) Robust standard errors in parentheses

p < 0.10, p < 0.05, p < 0.01

Table 4: Capital Account Liberalization and Wage Inequality – Initial Salary Distribution

	Chin	n-Ito	FKRSU	(Overall)	FKRSU (Inflows)		
Dep Var: log of salary per employee	(1)	(2)	(3)	(4)	(5)	(6)	
KA openness # <b>Top 20%</b>	0.680***	0.434***	1.945***	1.194***	1.334***	0.805***	
	(0.097)	(0.082)	(0.369)	(0.324)	(0.245)	(0.210)	
KA openness # <b>Bottom 20%</b>	-1.212***	-1.110***	-6.339***	-5.654***	-3.872***	-3.395***	
	(0.192)	(0.152)	(0.656)	(0.579)	(0.472)	(0.399)	
KA openness	-1.647***	-0.678***	-3.152***	-0.823***	-1.832***	-1.332***	
	(0.054)	(0.064)	(0.214)	(0.192)	(0.148)	(0.154)	
Firm size		-0.446***		-0.449***		-0.451***	
		(0.018)		(0.018)		(0.018)	
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	No	Yes	No	Yes	No	Yes	
N	27868	27868	27868	27868	27868	27868	

**Note:** Top 20% and Bottom 20% are binary variables =1 if firms are in the top or bottom quintile, respectively, of the salary per employee distribution at the beginning of the sample period. Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. Firm size = log of number of employees. Robust standard errors in parentheses.

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 5: Capital Account Liberalization and Wage Inequality – GMM Estimates

		Initial Salary Rank		Top/Botto	om Quintile
Dep. Var. log of salary per employee	(1)	(2)	(3)	(4)	(5)
Log of salary per employee (lagged)	0.620***	0.543***	0.328***	0.618***	0.406***
	(0.041)	(0.043)	(0.055)	(0.041)	(0.045)
KA Openness	-1.684***	-2.092***	-2.221***	-0.971***	-1.182***
	(0.273)	(0.264)	(0.267)	(0.143)	(0.187)
KA Openness # Initial salary rank	1.367***	1.704***	2.007***		
•	(0.321)	(0.315)	(0.308)		
KA Openness # <b>Top 20%</b>				0.507***	0.599***
				(0.156)	(0.154)
KA openness # Bottom 20%				-0.753***	-1.421***
				(0.275)	(0.287)
Firm Size		0.001	-0.136***		
		(0.041)	(0.047)		
Firm FE	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	Yes	No	Yes
Weak ID (F statistic)	102.92	62.69	39.56	82.24	123.14
Ň	12513	12513	12512	12515	12512

Note: Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. Firm size = log of number of employees. Firm productivity = log of total factor productivity (TFP). Robust standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 6: Capital Account Liberalization and Wage Inequality – Country-year effects

		Chin	n-Ito		FKRSU (overall)				
Dep Var: log of salary per employee	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
KA Openness # Initial salary rank	2.140***	1.647***	1.652***	1.016***	8.324***	7.516***	6.104***	9.045***	
	(0.212)	(0.199)	(0.160)	(0.268)	(0.745)	(0.723)	(0.588)	(0.844)	
KA Openness	-2.835***	-2.579***			-8.283***	-7.960***			
	(0.142)	(0.131)			(0.494)	(0.478)			
Firm Size		-0.411*** (0.021)	-0.447*** (0.018)	-0.633*** (0.035)		-0.417*** (0.021)	-0.449*** (0.018)	-0.628*** (0.034)	
Firm productivity				0.237*** (0.042)				0.225*** (0.040)	
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Country FE	Yes	Yes	No	No	Yes	Yes	No	No	
Country-Year FE	No	No	Yes	Yes	No	No	Yes	Yes	
N	27678	27678	27678	11170	27678	27678	27678	11170	

**Note:** Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. Firm size = log of number of employees. Firm productivity = log of total factor productivity (TFP). Robust standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 7: Capital Account Liberalization (FARI Index) and Wage Inequality

		FARI (	(overall)			FARI	(inflow)			FARI (	outflow)	
Dep Var: log of salary per employee	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
KA Openness # Initial salary rank	4.907***	4.751***	3.654***	9.417***	4.834***	4.680***	3.807***	7.306***	0.369	0.387	0.157	0.986
	(0.659)	(0.632)	(0.513)	(0.972)	(0.542)	(0.512)	(0.445)	(0.688)	(0.396)	(0.379)	(0.308)	(0.729)
KA Openness	-3.843***	-3.519***	-5.524***	-9.170***	-4.216***	-4.091***	-4.727***	-6.593***	0.093	0.304	-1.546***	-1.414***
ореннево	(0.459)	(0.436)	(0.429)	(0.797)	(0.365)	(0.342)	(0.390)	(0.483)	(0.270)	(0.257)	(0.225)	(0.495)
Firm Size		-0.418*** (0.021)	-0.448*** (0.018)	-0.616*** (0.035)		-0.419*** (0.021)	-0.456*** (0.018)	-0.615*** (0.035)		-0.426*** (0.022)	-0.451*** (0.018)	-0.633*** (0.035)
Firm productivity				0.195***				0.191***				0.191***
1				(0.034)				(0.034)				(0.033)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes
N	27660	27660	27660	11170	27660	27660	27660	11170	27660	27660	27660	11170

**Note:** Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. Firm size = log of number of employees. Firm productivity = log of total factor productivity (TFP). Robust standard errors in parentheses \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 8: Capital Account Liberalization and Wage Inequality – Inflows and Outflows

		FKRSU	(inflow)			FKRSU	(outflow)	
Dep Var: log of salary per employee	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
KA Openness # Initial salary rank	5.919***	5.514***	4.497***	6.353***	3.365***	2.864***	2.840***	5.612***
	(0.522)	(0.494)	(0.435)	(0.604)	(0.549)	(0.529)	(0.448)	(0.923)
KA Openness	-5.391***	-5.178***	-4.172***	-3.648***	-3.910***	-3.774***	-1.464***	-4.788***
	(0.352)	(0.331)	(0.334)	(0.380)	(0.366)	(0.350)	(0.293)	(0.657)
Firm Size		-0.414*** (0.021)	-0.451*** (0.018)	-0.619*** (0.035)		-0.423*** (0.021)	-0.455*** (0.018)	-0.636*** (0.035)
Firm productivity				0.182*** (0.032)				0.193*** (0.033)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	Yes	Yes	No	No	Yes	Yes
N	27678	27678	27678	11170	27678	27678	27678	11170

**Note:** Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. Firm size = log of number of employees. Firm productivity = log of total factor productivity (TFP). Robust standard errors in parentheses \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 9: Capital Account Liberalization and Wage Inequality – Equity and Bonds

	O	rerall Equity Flo	ows	Ov	rerall Bond Flows	3		Bond Inflows	
Dep Var: log of salary per employee	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
KA Openness # Initial salary rank	5.389***	5.141***	4.637***	0.446*	0.068	0.291	0.675***	0.522***	0.573***
	(0.358)	(0.333)	(0.329)	(0.239)	(0.198)	(0.190)	(0.133)	(0.112)	(0.108)
KA Openness	-5.351***	-4.259***	-3.908***	0.129	-1.256***	-1.440***	-0.473***	-1.109***	-1.146***
•	(0.242)	(0.232)	(0.230)	(0.159)	(0.189)	(0.185)	(0.089)	(0.108)	(0.106)
Firm Size			-0.434***			-0.464***			-0.461***
			(0.018)			(0.018)			(0.018)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
N	27678	27678	27678	27675	27675	27675	27675	27675	27675

**Note**: Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. Firm size =  $\log$  of number of employees. Robust standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 10: Capital Account Liberalization and Wage Inequality – FDI Inflows and TFP

		FDI Inflows			F	DI Inflows & T	FP
Dep Var: log of salary per employee	(1)	(2)	(3)		(4)	(5)	(6)
KA Openness # Initial salary rank	0.360*	0.391**	0.235*	KA Openness # Initial salary rank # High initial TFP	0.699*	0.408	0.504*
	(0.193)	(0.173)	(0.138)		(0.422)	(0.345)	(0.293)
				KA Openness # Initial salary rank	0.052 (0.190)	0.031 (0.185)	-0.003 (0.171)
				KA Openness # High initial TFP	-0.612** (0.273)	-0.420* (0.219)	-0.420** (0.186)
KA Openness	-0.528*** (0.128)	-0.088 (0.116)	0.013 (0.091)	KA Openness	-0.239** (0.107)	-0.233** (0.108)	0.239** (0.101)
Firm Size			-0.457*** (0.018)	Firm Size		-0.406*** (0.027)	-0.470*** (0.023)
Firm FE	Yes	Yes	Yes		Yes	Yes	Yes
Country FE	Yes	Yes	Yes		Yes	Yes	Yes
Year FE	No	Yes	Yes		No	No	Yes
N	27678	27678	27678		16067	16067	16067

**Note**: Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. High initial TFP is a binary variable = 1 if firms have TPF above the median at the beginning of the sample period. Firm size = log of number of employees. Robust standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 11: Capital Account Liberalization and Wage Inequality – Financial Crises

		Chinn-Ito	
Dep Var: log of salary per employee	(1)	(2)	(3)
KA Openness # Initial salary rank # Crises	0.317	-0.024	-0.021
	(0.420)	(0.407)	(0.377)
KA Openness # Initial salary rank	2.123***	1.640***	1.696***
	(0.212)	(0.198)	(0.173)
KA Openness # Crises	0.977	1.831**	4.946***
•	(0.746)	(0.742)	(1.280)
KA Openness	-2.776***	-2.527***	-1.670***
-	(0.141)	(0.131)	(0.126)
Crises	-1.193***	-1.535***	-3.305***
	(0.420)	(0.419)	(0.884)
Firm size		-0.412***	-0.446***
		(0.021)	(0.018)
Firm FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Year FE	No	No	Yes
N	27678	27678	27678

Note: Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. Crises = binary variable, equal to 1 in years where there is a financial crisis. Firm size = log of number of employees. Robust standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Table 12: Capital Account Liberalization and Wage Inequality – Financial Development

	Chinn-Ito			F	KRSU (Overa	.11)	FKRSU (Inflows)			FKRSU (Outflows)		
Dep Var: log of salary per employee	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
KA Openness # Initial salary rank #High FD	-4.353***	-3.865***	-3.785***	-7.006***	-6.542***	-6.534***	-5.805***	-5.227***	-5.346***	-5.805***	-5.227***	-5.346***
O	(0.460)	(0.460)	(0.443)	(0.994)	(1.001)	(0.984)	(0.785)	(0.790)	(0.768)	(0.785)	(0.790)	(0.768)
KA Openness # Initial salary rank	4.285***	3.550***	3.572***	11.160***	10.127***	9.520***	8.108***	7.439***	6.842***	8.108***	7.439***	6.842***
·	(0.336)	(0.322)	(0.300)	(0.935)	(0.917)	(0.877)	(0.675)	(0.651)	(0.609)	(0.675)	(0.651)	(0.609)
KA Openness # High FD	3.992***	3.656***	2.623***	6.340***	5.811***	4.858***	6.529***	6.142***	2.536***	6.529***	6.142***	2.536***
0	(0.278)	(0.273)	(0.262)	(0.667)	(0.655)	(0.739)	(0.515)	(0.503)	(0.529)	(0.515)	(0.503)	(0.529)
KA Openness	-4.785***	-4.360***	-2.922***	-10.873***	-10.232***	-6.745***	-8.156***	-7.744***	-4.709***	-8.156***	-7.744***	-4.709***
	(0.215)	(0.201)	(0.191)	(0.624)	(0.594)	(0.609)	(0.455)	(0.422)	(0.412)	(0.455)	(0.422)	(0.412)
High FD	0.355***	0.445***	0.589***	0.010	0.159	0.320*	-0.407***	-0.313**	0.838***	-0.407***	-0.313**	0.838***
	(0.102)	(0.102)	(0.098)	(0.146)	(0.140)	(0.170)	(0.132)	(0.127)	(0.137)	(0.132)	(0.127)	(0.137)
Firm size		-0.406***	-0.438***		-0.418***	-0.449***		-0.413***	-0.448***		-0.413***	-0.448***
		(0.021)	(0.018)		(0.020)	(0.018)		(0.020)	(0.018)		(0.020)	(0.018)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	Yes	No	No	Yes	No	No	Yes	No	No	Yes
N	27678	27678	27678	27678	27678	27678	27678	27678	27678	27678	27678	27678

**Note**: Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. High FD = binary variable, equal to 1 in years where the level if financial development is higher than the sample median. Firm size = log of number of employees. Robust standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 13: Capital Account Liberalization and Wage Inequality – Heterogeneity across countries and industries

	Infor	mal Sector Siz	ze	Collective B	argaining Cov	erage	External Financial (EFD)	Dependence	Export Dependence: Share of domestic VA in foreign final demand		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Dep Var: log of salary per employee	Chinn- Ito	FKRSU (Overall)	FKRSU (Inflows)	Chinn-Ito	FKRSU (Overall)	FKRSU (Inflows)	Chinn-Ito	FKRSU (Overall)	Chinn-Ito	FKRSU (Overall)	FKRSU (Inflows)
KA Openness # Initial salary rank # CCj	0.098***	0.715***	0.487***	-4.481***	-32.471***	-20.779***	-0.023**	-0.036**	-0.347***	-0.677***	-0.525***
•	(0.029)	(0.088)	(0.077)	(0.809)	(3.837)	(2.423)	(0.012)	(0.016)	(0.119)	(0.155)	(0.161)
KA Openness # Initial salary rank	-2.349***	-16.543***	11.973***	5.683***	34.805***	22.631***	1.599***	7.423***	1.873***	7.216***	4.692***
•	(0.863)	(2.323)	(2.282)	(0.793)	(3.805)	(2.398)	(0.208)	(0.735)	(0.180)	(0.660)	(0.437)
KA Openness # CCj	-0.043**	-0.621***	-0.421***	2.929***	26.805***	15.964***	0.016**	0.033***	0.132	0.215*	0.108
	(0.019)	(0.058)	(0.049)	(0.537)	(2.375)	(1.507)	(0.008)	(0.011)	(0.090)	(0.114)	(0.120)
Initial salary rank # CCj	0.177***	-0.047*	0.035				0.006	0.007			
	(0.016)	(0.028)	(0.025)				(0.005)	(0.005)			
KA Openness	0.390	14.614***	10.525***	-4.211***	-28.020***	-17.625***	-2.553***	-7.908***	-1.709***	-5.348***	-4.164***
	(0.564)	(1.531)	(1.482)	(0.523)	(2.346)	(1.492)	(0.134)	(0.482)	(0.132)	(0.458)	(0.334)
CCj	-0.202***	-0.008	-0.060***				-0.005	-0.007**	0.124***	0.182***	0.168***
	(0.016)	(0.020)	(0.018)				(0.004)	(0.003)	(0.034)	(0.032)	(0.032)
Firm size	-0.423***	-0.431***	-0.431***	-0.445***	-0.453***	-0.450***	-0.412***	-0.420***	-0.444***	-0.450***	-0.450***
	(0.020)	(0.020)	(0.020)	(0.018)	(0.018)	(0.018)	(0.021)	(0.021)	(0.018)	(0.018)	(0.018)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
N	25917	25917	25917	27678	27678	27678	27397	27397	27678	27678	27678

Note: Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. CCj refers to country and industry characteristics – size of the informal sector (country), collective bargaining coverage (country), external financial dependence (industry), and export dependence (industry). For the informal sector: CCj = the informal sector size for each country, varying by year. For external financial dependence (EFD): CCj = industry level index of external financial dependence. For export dependence: CCj = binary variables, equal to 1 if the value in respective years is greater than the sample median. For collective bargaining coverage: CCj = binary variables, equal to 1 if the initial value is greater than the sample median. This is necessary since collective bargaining data is only available for a limited number of years for each country. Firm size = log of number of employees.

Robust standard errors in parentheses; \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 14: Capital Account Liberalization and Profit to Wage Ratio

		Chinn-Ito		-	FKRSU (Overall	l)	-	FKRSU (Inflows	s)
Dep Var: log of salary per employee	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
KA Openness # Initial salary rank # High initial profit- wage	1.062**	1.070***	0.843**	3.424**	4.185***	4.052***	2.806***	3.171***	2.797***
	(0.427)	(0.399)	(0.350)	(1.475)	(1.421)	(1.308)	(1.032)	(0.974)	(0.878)
KA Openness # Initial salary rank	1.530***	1.039***	1.237***	6.553***	5.335***	4.664***	4.434***	3.836***	3.079***
Tilitiai Saiaty Talik	(0.314)	(0.294)	(0.262)	(1.032)	(0.977)	(0.922)	(0.697)	(0.654)	(0.612)
KA Openness # High initial profit-wage	-0.653**	-0.740***	-0.622***	-3.464***	-4.135***	-3.670***	-2.291***	-2.597***	-2.799***
	(0.282)	(0.261)	(0.226)	(0.977)	(0.935)	(0.856)	(0.695)	(0.651)	(0.587)
KA Openness	-2.468***	-2.165***	-1.332***	-6.446***	-5.764***	-3.224***	-4.183***	-3.808***	-2.720***
	(0.202)	(0.186)	(0.171)	(0.664)	(0.620)	(0.583)	(0.453)	(0.416)	(0.405)
Firm Size		-0.411***	-0.445***		-0.420***	-0.453***		-0.415***	-0.453***
		(0.021)	(0.018)		(0.021)	(0.018)		(0.021)	(0.018)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	Yes	No	No	Yes	No	No	Yes
N	27678	27678	27678	27678	27678	27678	27678	27678	27678

Note: Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. High initial profit-wage = binary variable, equal to 1 if firm profit-wage ratio at the beginning of the sample period is higher than the sample median. Firm size = log of number of employees. Robust standard errors in parentheses -\*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01.

Table 15: Capital Account Liberalization and Profit to Wage Ratio – Profit to Wage ratio as dependent variable

	Chinn-Ito	Chinn-Ito	FKRSU (Overall)	FKRSU (Overall)		FKRSU (Inflows)
Dep Var: Profit to wage ratio	(1)	(2)	(3)	(4)	Dep Var: Profit to wage ratio	(5)
KA Openness-lagged	2.066***	0.472	0.952	-3.387	KA reform-lagged	0.481***
	(0.639)	(0.746)	(1.590)	(2.324)		(0.184)
KA Openness-lagged # High		2.749***		7.675***	KA reform-lagged # High initial profit-wage	0.077
initial profit-wage		(0.691)		(2.823)	nintiai pront-wage	(0.182)
Firm FE	Yes	Yes	Yes	Yes		Yes
Country FE	Yes	Yes	Yes	Yes		Yes
Year FE	Yes	Yes	Yes	Yes		Yes
r2	0.538	0.538	0.537	0.538		0.564
r2_within	0.001	0.003	0.000	0.001		0.002
N	19859	19859	19859	19859		13338

**Note:** Initial salary rank = rank of firms based on the level of salary per employee at the beginning of the sample period. Higher ranking firms are those with the highest initial salary per employee. High initial profit-wage = binary variable, equal to 1 if firm profit-wage ratio at the beginning of the sample period is higher than the sample median. Firm size = log of number of employees. Robust standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

### Appendix.

Table A1: Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
	Macroeconom	nic level da	ta		
Gini coefficient (disp. income)	124	41.66	2.39	37.50	47.40
Gini coefficient (market income)	124	43.65	2.14	38.80	47.30
Chinn-Ito Index	125	0.55	0.27	0.16	1
FKRSU index – overall flows	125	0.45	0.26	0.11	0.98
FKRSU index – inflows	125	0.46	0.26	0.10	0.95
FKRSU index – outflows	125	0.43	0.29	0.11	1
FKRSU index – FDI inflows	125	0.59	0.49	0	1
FKRSU index – Equity flows	125	0.64	0.34	0	1
FKRSU index – Bond flows	112	0.68	0.32	0	1
FKRSU index – Bond inflows	112	0.58	0.37	0	1
Financial development index	125	0.50	0.16	0.24	0.79
FARI Index – overall flows	105	0.30	0.05	0	0.69
FARI Index – inflows	105	0.24	0.03	0	0.57
FARI Index – outflows	105	0.39	0.04	0	0.88
Size of informal sector	115	30.74	13.33	9.40	55.40
Collective bargaining coverage	34	3.26	4.16	0.40	18.10
Financial Crises	125	0.14	0.35	0	1
	Industry l	evel data			
Export dependence	10440	41.64	26.74	0	99.79
External finance dependence	8527	-4.45	21.65	-106.33	55.50
	Firm lev	el data			
Salary per employee (Log)	27,868	9.01	1.07	-0.22	16.02
Profit-to-wage ratio	27,868	2.13	63.42	-1914.96	8170
Firm size	27,868	5.48	2.03	0.69	12.33
Total factor productivity (Log)	11,170	2.52	3.85	-4.50	16.82

Table A2: Description of variables

Variable	Description	Source
	Macroeconomic level data	
Gini coefficient (disp. income)	Estimate of GINI index based on households' disposable net income (post-tax, post-transfer).	Standardized World Income Inequality Database (SWIID)
Gini coefficient (market ncome)	Estimate of GINI index based on households' market income (pre-tax, pre-transfer).	Standardized World Income Inequality Database (SWIID)
Chinn-Ito Index	Index of overall capital account liberalization	Chinn and Ito (2008)
FKRSU index – overall flows	Index of overall capital account liberalization	Fernandez et al. (2016)
FKRSU index – inflows	Index of capital inflow liberalization	Fernandez et al. (2016)
FKRSU index – outflows	Index of capital outflow liberalization	Fernandez et al. (2016) Fernandez et al.
FKRSU index – FDI inflows	Index of FDI inflow liberalization	(2016)
FKRSU index – Equity flows	Index of equity flow liberalization	Fernandez et al. (2016)
FKRSU index – Bond flows	Index of bond flow liberalization	Fernandez et al. (2016) Fernandez et al.
FKRSU index – Bond inflows	Index of bond inflow liberalization	(2016)
FARI Index – overall flows	Index of overall capital account liberalization	Baba et al. (forthcoming) Baba et al.
FARI Index – inflows	Index of capital inflow liberalization	(forthcoming)
FARI Index – outflows	Index of capital outflow liberalization	Baba et al. (forthcoming)
Financial development index Size of informal sector	Measure of depth, access, and efficiency of financial markets and financial institutions with a country. The informal sector refers to all economic activity, hidden from authorities for monetary, regulatory or institutional reasons. This is estimated using a multiple-indicator multiple cause (MIMIC) model.	International Monetary Fund (IMF Medina and Schneider (2020)
Collective bargaining coverage	Share of employees covered by one or more collective agreement.	International Labour Organization (ILO) Statistics
Financial Crises	Dummy that takes the value 1 if there is a financial crisis. Financial crises include banking, currency, and debt crises.	Nguyen et al (2022)
	Industry level data	
Export dependence	Share of domestic value added in foreign final demand	OECD Statistics
External finance dependence EFD)	Industry median of firm level EFD – calculated as firm capital expenditure less cash flows, as a percentage of capital expenditure	Estimated using firm level data from Orbis
	Firm level data	
Salary per employee (Log)	Total wage costs divided by number of employees	Orbis
Profit-to-wage ratio	After tax profit as a proportion of total wage costs	Orbis
Firm size	Number of employees	Orbis
Total factor productivity (Log)	Log of total factor productivity	Orbis

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