

Owner Culture and Pay Inequality within Firms

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Introduction

Introduction

- Relative to firms owned by immigrants from the United States, firms owned by immigrants from most other countries have significantly smaller pay inequality.
- We only consider the firms in Canada, all firms operate in the same country, and the firms thus face similar economic and institutional environments.
- We asserts that the within-firm pay inequality across owners' country of origins can be largely attributed to variations in the owners' cultural heritages.
- Our hypothesis is that, pay inequality is smaller in more collectivistic countries, and greater in more individualist countries

Methodology

- $WFI_t^j = I_{SC}^j \times \beta_1 + X_t^j \times \beta_2 + IndustryFE + ProvinceFE + YearFE + \epsilon_t^j$
- I_{SC}^j is the indicator variable of firm j 's owner's source country.
- β_1 is the owners' country of origin fixed effect
- X_{jt} are the characteristics of firm or owner that may affect within-firm pay inequality.

Origins Effect

Origins does affect inequality

- Column (2) (3) & (4) are regression with different characteristics set X_t^j
- Most of the origin countries effect significantly mitigate inequality.
- The results are robust across various specifications with different fixed effects and using different sets of control variables.

| | (1) | (2) | (3) | (4) |
|-------------|----------------------------|------------------------|------------------------|------------------------|
| | Within-firm pay inequality | | | |
| Afghanistan | -0.0564*** (0.011) | -0.0447*** (0.0109) | -0.0381*** (0.0109) | -0.0356*** (0.0109) |
| China | -0.0621*** (0.0091) | -0.0567*** (0.0009) | -0.0455*** (0.0090) | -0.0445*** (0.0090) |
| Egypt | -0.0202* (0.0115) | -0.0178 (0.0114) | -0.0073 (0.0113) | -0.0088 (0.0113) |
| France | 0.0026 (0.0114) | 0.0044 (0.0112) | 0.0143 (0.0113) | 0.0155 (0.0113) |
| Germany | 0.0129 (0.0124) | 0.0091 (0.0122) | 0.0087 (0.0124) | 0.0108 (0.0125) |
| Hong Kong | -0.0607*** (0.0097) | -0.0560*** (0.0096) | -0.0473*** (0.0096) | -0.0440*** (0.0097) |
| India | -0.0310*** (0.0091) | -0.0283*** (0.0009) | -0.0177** (0.0090) | -0.0185** (0.0090) |

Origins individualism

- We replace the owners' country of origins fixed effects I_{SC} with Hofstede's measure of individualism at the country level
- We set the individualism score of U.S as 0, most other countries I_{SC} are negative.
- We run the regression of inequality on individualism score:

$$WFI_t^j = I_{SC}^j \times \beta_1 + X_t^j \times \beta_2 + \dots + \epsilon_t^j$$
- Positive significant association between individualism and within-firm pay inequality.



Mechanism

Pay-for-performance compensation

- Individualistic owners like to give monetary incentives, they pay for higher ability employees who are likely to perform well.
- To test such point, we run the regression:

$$y_t^{i,j} = HighAbility_t^{i,j} \times \alpha_1 + HighAbility_t^{i,j} \times IDV^j \times \alpha_2 + \dots$$
- Where $y_t^{i,j}$ is the salary of worker i in company j at time t . And IDV^j is the owner of company j 's origin individualism score.
- If $\alpha_1 = 0$ and $\alpha_2 > 0$, this indicates a high ability worker will only get extra compensation from a company owned by an individualistic boss

Only individualistic owner give monetary incentives

| | (1) | (2) | (3) | (4) |
|------------------------------|-----------------------|------------------------|------------------------|------------------------|
| | Log (Earnings) | | | |
| High ability × Individualism | 0.2096*** (0.0541) | 0.2097*** (0.0541) | 0.2045*** (0.0543) | 0.2044*** (0.0543) |
| High ability | 0.0443 (0.0288) | 0.0446 (0.0288) | 0.0464 (0.0290) | 0.0464 (0.0290) |
| Ability | 0.3100*** (0.0147) | 0.3099*** (0.0146) | 0.3099*** (0.0147) | 0.3100*** (0.0147) |
| Log (# employees) | | -0.1417*** (0.0512) | -0.1876*** (0.0539) | -0.1885*** (0.0538) |
| Log (Capital-labor ratio) | | 0.0055 (0.0232) | -0.0098 (0.0180) | -0.0094 (0.0180) |
| Log (Revenue) | | | 0.0749 (0.0751) | 0.0715 (0.0756) |
| Log (Firm age) | | | -0.1748 | -0.1711 |

Individualistic owner select groups of employees with more dispersed employee ability

- Regression of variance of ability on individualism score: $\text{Var}(\text{Ability}) = \text{IDV}^j \times \gamma_1 \dots$

| | (1) | (2) | (3) | (4) |
|---------------------------|-------------------------------|-----------------------|-----------------------|-----------------------|
| | Variance (New hires' ability) | | | |
| Individualism | 0.0783*** (0.0140) | 0.0723*** (0.0140) | 0.0670*** (0.0143) | 0.0666*** (0.0143) |
| Log (# employees) | | 0.0228*** (0.0049) | 0.0098 (0.0068) | 0.0111 (0.0068) |
| Log (Capital-labor ratio) | | 0.0110*** (0.0023) | 0.0068** (0.0029) | 0.0067** (0.0029) |
| Log (Revenue) | | | 0.0127*** (0.0043) | 0.0125*** (0.0043) |
| Log (Firm age) | | | 0.0016 (0.0199) | 0.0011 (0.0200) |

Difference-in-differences analysis

- Owners' countries of origins may be systematically correlated with firms' company sector. E.g. some countries immigrants are more likely to hold an technology companies which usually have more inequality pay
- So we need to fix a firm and to see it's inequality after it's taken over by new owner from another country
- treated group (owner from another country), control group (owner from the same country)
- $WFI_t^j = I(Post_{jt} \times Treated^j)\mu_1 + I(Post_{jt} \times Treated^j \times \Delta Culture_t^j)\mu_2 + \dots$
- If $\mu_1 = 0$ and $\mu_1 > 0$, it means only culture change is the key

Difference-in-differences analysis cont.

- Changing the owner's country doesn't directly affect the inequality
- Culture changing affects the inequality

| | (1) | (2) | (3) | (4) |
|----------------------------|--|-----------------------|-----------------------|-----------------------|
| | Within-firm pay inequality among all employees | | | |
| Post × Treated | 0.0009 (0.0168) | 0.0004 (0.0168) | -0.0026 (0.0168) | -0.0017 (0.0168) |
| Post × Treated × Δ Culture | 0.0374** (0.0157) | 0.0372** (0.0157) | 0.0321** (0.0157) | 0.0330** (0.0157) |
| Log (# employees) | | 0.0520*** (0.0091) | 0.0611*** (0.0109) | 0.0616*** (0.0109) |
| Log (Capital-labor ratio) | | -0.0009 (0.0053) | 0.0022 (0.0057) | 0.0030 (0.0057) |
| Log (Revenue) | | | -0.0051 (0.0100) | -0.0058 (0.0100) |

Difference-in-difference analysis cont.

- Repeat the DiD analysis on a subsample of employees who work in the firm both before and after the ownership change (do not consider those new staffs brought by the new owner). Such result still holds.
- Result also holds when only focusing on Restaurant Accommodation and Food Service industry

Conclusion

Conclusion

- Relative to firms owned by U.S. immigrants, firms owned by immigrants from most other countries have significantly smaller pay inequality.
- Individualistic owners emphasize monetary incentives, but others focus more on group harmony and equal pay.
- We find an increase in within-firm pay inequality after the firm was taken over by immigrant owners from a more individualistic country.

Thanks!

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