

## Female Top Managers in Malaysia

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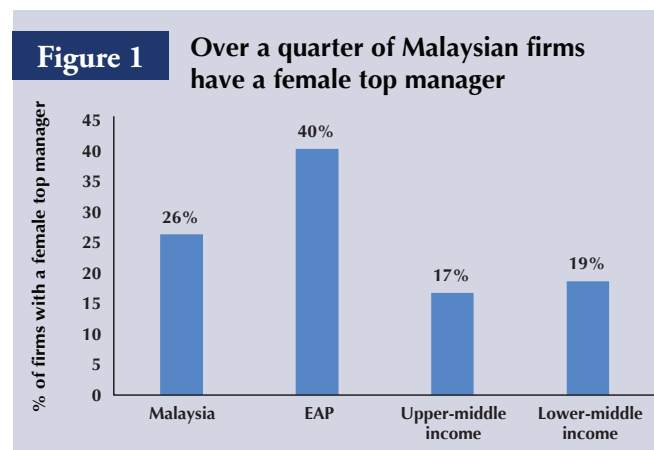
**R**ecent firm-level survey data collected by the World Bank's Enterprise Surveys (ES) shows that about a quarter of all Malaysian firms have a female top manager. Female top managers are more likely to be found in large firms than in small firms, in the retail sector vs. the rest of the economy, and in exporting than in non-exporting firms. In contrast to what the literature might suggest, in Malaysia, firms with a female top manager have higher labor productivity on average than firms with a male top manager. However, the business environment, along several important dimensions such as the regulatory burden, corruption, and the crime and security environment, is more difficult for firms with female top managers.

### Introduction

Gender inequality is an issue that persists in every country around the world (Hausmann et al., 2006). In firms, gender inequality at the managerial level occurs when men receive a disproportionate share of managerial positions, greater job security, and higher wages, among other things. Studies show that women tend to be concentrated in low-paying and vulnerable jobs, and are less likely to be found in dynamic and high-paying positions such as CEOs and managers of companies (World Bank 2011, Elson 1999, Blau and Kahn 2003). Using the World Bank's Enterprise Survey (ES) data,<sup>1</sup> this Enterprise Note analyzes various issues related to private firms in Malaysia having a female (vs. male) top manager, i.e. the main decision-maker. Malaysia's experience is benchmarked against the average across countries for the following comparator groups: countries in the East Asia & Pacific (EAP) region,<sup>2</sup> upper-middle-income countries, and lower-middle-income countries.<sup>3</sup> Unless otherwise stated, all figures and discussion below refer to the private sector as covered by the ES. Results discussed for Malaysia and the comparator groups are based on regression analysis. The statistical significance of the results, and their robustness with regards to differences in basic firm characteristics, which include firm size (log of number of employees), age of the firm, percentage of foreign ownership of the firm, and the industry to which the firm belongs, are discussed. Throughout, the term "significant" or "significantly" means statistical significance at the 10 percent level or less.

### Malaysian firms are more likely to have a female top manager than firms in upper-middle-income countries

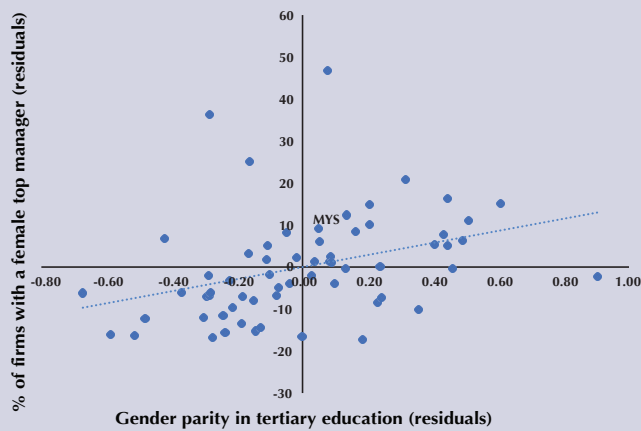
Over a quarter of all firms in Malaysia have a female top manager. This is significantly higher than upper- and lower-middle-income countries, where only 17 percent and 19 percent of the firms have a female top manager, respectively (figure 1). However, Malaysia still falls significantly behind the EAP region, where on average 40 percent of the firms have a female top manager. Within the EAP region, Malaysia only outperforms Indonesia and Vietnam, although not significantly so, where only 22 percent of firms have a female top manager. All these results continue to hold qualitatively even after accounting for differences in basic firm characteristics mentioned above. In short, while Malaysia has a reasonable share of female top managers by international standards, the regional experience suggests it could do even better.



Source: Enterprise Surveys (various years).

**Figure 2**

**Greater gender parity in tertiary education is associated with a higher percentage of firms with a female top manager**



Source: Enterprise Surveys and World Development Indicators, World Bank (various years).

Note: “MYS” in the figure denotes Malaysia. The graph is a partial scatter plot of the relationship between the percentage of firms with a female top manager in the country and gender parity in tertiary education. The relationship is obtained after controlling for differences in GDP per capita (log values). The positive relationship shown in the figure is statistically significant at the 1 percent level.

### For its level of education among women relative to men, Malaysia outperforms other countries in the proportion of female-managed firms

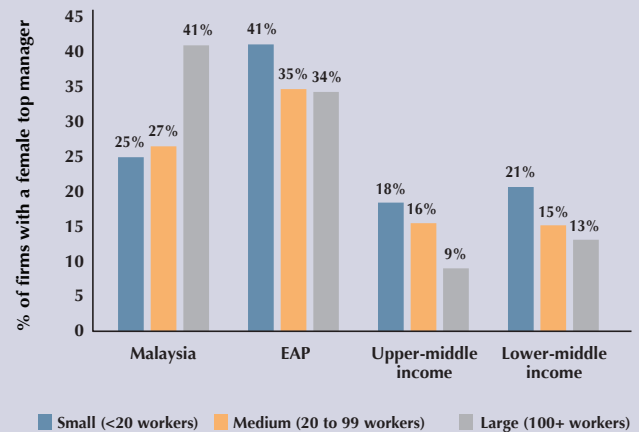
Education is one of the most important determinants of a women’s career path. Therefore, education is key to closing the gender gaps in income and employment (World Bank 2011). For higher levels of gender parity in tertiary education, we expect the percent of female top managers to increase significantly (see Amin and Islam 2016). This positive and significant relationship is shown in figure 2, and it continues to hold even after accounting for differences in GDP per capita across countries and basic firm characteristics.<sup>4</sup> The relationship is stronger in Malaysia than in other countries. That is, as more females receive tertiary education (relative to men), even more are hired as top managers in Malaysia than in other countries.

### Bucking the international trend, large firms in Malaysia are more likely to have a female top manager than small firms

Firm-size is considered an important proxy measure and determinant of various firm characteristics. For instance, large firms – measured by annual sales or number of employees – are often associated with greater exporting activity, innovation and R&D, productivity etc. However, it is not clear how firm-size affects the tendency of having a female top manager. One possibility is that

**Figure 3**

**Large firms in Malaysia are much more likely to have a female top manager than small- and medium-sized firms**



Source: Enterprise Surveys (various years).

large firms are more visible, and hence less likely to discriminate against women candidates for the top manager position. However, it is also possible that large firms are more hierarchical – making it difficult for women to reach the top managerial position, as they often fall behind men in networks, training, and relevant job experience.

The ES data show that in the case of Malaysia, there is a positive and significant relationship between firm-size (log of number of employees) and the tendency of having a female top manager. Close to 41 percent of large firms in Malaysia have a female top manager as compared with only 25 percent of small-sized firms and 27 percent of medium-sized firms (figure 3). In contrast, the stated relationship is the opposite in the comparator groups and statistically significant except for the EAP region (figure 3). All the results discussed in this paragraph continue to hold even after accounting for differences in basic firm characteristics.

### Like other countries, retail firms in Malaysia are much more likely to have a female top manager than firms in manufacturing and other services sectors

A large literature exists on the segregation of men and women workers by occupation as well as industry (World Bank 2011, Hsieh et al. 2013, Randall 2012). In fact, using the ES data for a large cross-section of countries, Amin and Islam (2014) report that the tendency of having

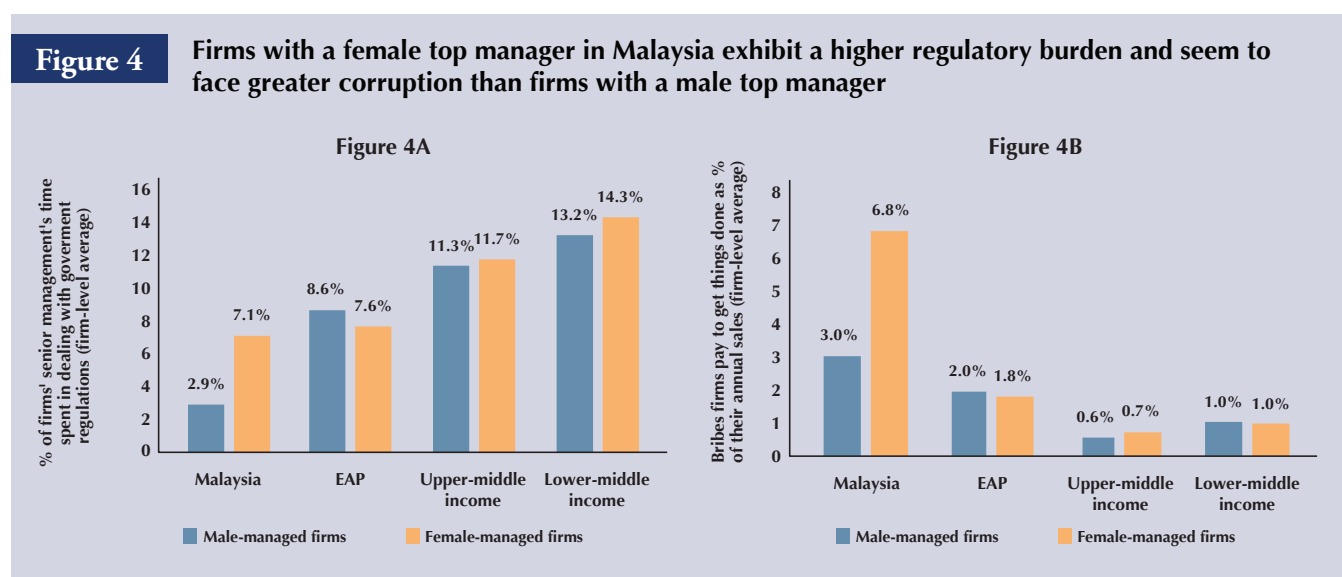
a female top manager is much higher in the retail sector than in the rest of the economy (other services and manufacturing). This holds in Malaysia too, where about 35 percent of retail firms have a female top manager, significantly higher than the 21 percent of firms in the rest of the economy (28 percent in manufacturing and 20 percent in the other services sectors). The comparator groups exhibit a similar result, except for the EAP region where the difference is not significant. Moving beyond sectors, one area where Malaysia stands out over comparators is the significantly higher proportion of firms with a female top manager among exporters (43 percent) compared with non-exporters (24 percent). In contrast, comparator groups do not show any noticeable difference in these proportions. Accounting for differences in the basic firm characteristics does not make any qualitative difference to the findings discussed in this paragraph.

### Firms with a female top manager experience a more difficult business environment than firms with a male top manager in several ways

The ES data show that for several business environment measures, firms with a male top manager in Malaysia enjoy a better business environment than firms with a female top manager. First, the time tax – an overall measure of the regulatory burden on private firms – is significantly higher for Malaysian firms run by females than males (7.1 percent vs. 2.9 percent, respectively). The time tax is higher for female-managed firms in the upper- and lower-middle-income countries and lower in the EAP region, but these differences are quantitatively small and not significant (figure 4A). Accounting for differences in basic firm characteristics does not make any difference to the qualitative nature of the results discussed above for the time tax.

Corruption is another important area where firms with a female top manager in Malaysia fare worse. In the ES, respondents were asked if firms pay bribes to public officials to “get things done” as well as how much. A significantly higher proportion of firms with a female top manager in Malaysia reported paying such bribes, compared with firms with a male top manager (36 percent vs. 17 percent). Although the difference is not significant, bribes paid as a percentage of firms’ annual sales is quantitatively much higher for firms with a female top manager than a male top manager (7 percent vs. 3 percent). In contrast, in the comparator groups, the gender-based gap for both the corruption variables is much smaller, insignificant, and often favors firms with a female top manager. Figure 4B illustrates the point. The findings for corruption for Malaysia and the comparator countries remain qualitatively unchanged even after accounting for differences in basic firm characteristics.

In terms of crime and security, firms with a female top manager in Malaysia are more likely to experience crime and spend on security, than firms with a male top manager; as a percentage of firms’ annual sales, losses due to crime as well as expenses on security are higher for firms with a female top manager than a male top manager. While these gender-based differences are quantitatively large, they are not always statistically significant. For instance, losses due to crime equal 2.4 percent of annual sales for a typical firm with a female top manager compared with 1.2 percent for a firm with a male top manager. The difference is quantitatively large but not significant. For the comparator groups, the results are mixed, as firms with a female top manager face tougher crime and security situations in some cases and better situations in others. However, these gender-based differences are typically small in magnitude and statistically insignificant.



Source: Enterprise Surveys (various years).

For instance, in Malaysia, the combined crime losses and security expenses for a typical firm with a female top manager and with a male top manager equals 6 percent and 2.2 percent, respectively. The gender-based gap in the comparator countries is much smaller where the corresponding figures (for firms with a female or male top manager, respectively) are 1.4 percent and 1.8 percent in the EAP region, 2.2 percent and 2.1 percent in the upper-middle-income group, and 4.1 percent and 3.9 percent in the lower-middle-income group. The qualitative nature of the results discussed in this paragraph does not change when accounting for differences in basic firm characteristics.

A comprehensive measure of credit-constrained firms that factors in why firms do not apply for loans shows that firms with a female top manager tend to face greater difficulties in obtaining finance in Malaysia. About 47 percent of firms with a female top manager in Malaysia are credit constrained (partially or fully), compared with a much lower 36 percent of firms with a male top manager. While the difference is large, it is not significant. In contrast, there is almost no difference in the proportion of firms with a female rather than male top manager that are credit constrained among upper middle income or lower middle-income groups. For the EAP region, the proportion is lower among firms with a female rather than male top manager (33 percent vs. 38 percent, respectively), although not significantly so. The qualitative nature of the results in this paragraph is unaffected when accounting for differences in basic firm characteristics.

### Labor productivity is higher for firms with a female top manager, a result largely driven by retail-sector firms

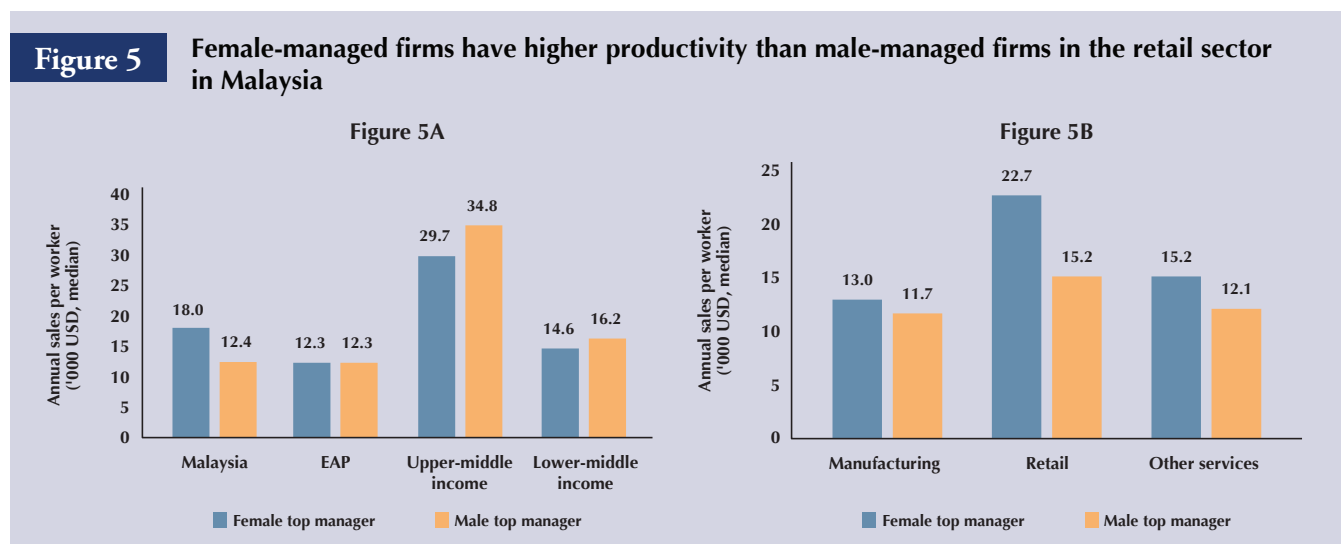
Studies comparing the productivity of female- vs. male-owned or -managed firms seem to suggest that productivity is lower for firms with a female top manager

– the so-called “female firm under-performance hypothesis”. Possible explanations could be the relatively small size of female-owned or -managed firms, discrimination that women often face in access to finance and public infrastructure facilities, social norms and laws that often favor men over women, and providing care at home that is largely borne by women. However, most of this literature focuses on developed rich countries (see Robb and Wolken 2002, Sabarwal and Terrell 2008).

The ES shows that in the case of Malaysia, labor productivity as defined by annual sales per worker is much higher for firms with a female rather than a male top manager (USD 17,965 and USD 12,369, respectively; median values). This holds despite the fact that female-managed firms face a more difficult business environment in several ways (discussed above), suggesting that other factors that affect productivity dominate. However, this productivity gap is not significant, and is driven largely by the retail sector. These findings hold even after accounting for differences in basic firm characteristics.

Higher productivity among firms with a female top manager is observed in the individual sectors (figure 5B). The productivity difference is large and significant for retail firms, and this holds even after accounting for differences in basic firm characteristics. For the manufacturing sector and the other services sectors, the productivity gap is noticeable but not significant; even quantitatively, it becomes much smaller when accounting for differences in basic firm characteristics.

In the EAP region, the productivity level is roughly the same for firms with a female or a male top manager. In the upper- and lower-middle-income countries, the productivity level is somewhat lower for firms with a female top manager (figure 5A). These productivity differences in the comparator groups are not significant. Results discussed here for the comparator groups are qualitatively unchanged even after accounting for differences in basic firm characteristics.



Source: Enterprise Surveys (various years).

## Conclusion

Over a quarter of all firms in Malaysia have a female top manager. The tendency of having a female top manager in Malaysia is particularly high among large firms, exporting firms, and firms in the retail sector. There is no evidence that firms with a female top manager are less productive than firms with a male top manager; in fact, the opposite result holds and is largely driven by the retail sector. One worrisome feature is that across many important dimensions of the business environment, such as regulatory burden, corruption, and crime and security, female top managers in Malaysia tend to work in firms that experience a more difficult business environment than firms with male top managers. Policy measures aimed at improving the business environment faced by firms with female top managers may therefore be needed to maximize the contribution of females as top managers.

## Notes

1. Enterprise Surveys are designed to be representative of the non-agricultural and non-financial formal (registered) private sector of the economy. Note that the survey does not cover firms with less than five employees or those in the informal sector. The surveys are stratified by firm-size (small, medium, and large), sector, and location within the country. The surveys follow a common sampling methodology and a common questionnaire, allowing for cross-country comparability. More information on the surveys and the raw data can be obtained from [www.enterprisesurveys.org](http://www.enterprisesurveys.org).
2. The EAP region comprises the six large economies in the region for which data are available. These are Cambodia, Indonesia, Lao PDR, the Philippines, Thailand, and Vietnam. The EAP regional averages exclude Malaysia.
3. The upper-middle-income and lower-middle-income classification follows the World Bank, excluding Malaysia and countries already included in the EAP comparator group. There are 45 countries in the lower-middle-income group and 41 in the upper-middle-income group. Due care is taken to ensure that the results discussed for the various comparator groups are not unduly affected by outlier countries.
4. Gender parity in tertiary education is defined as the ratio of gross enrollment rate in tertiary education for women to men. Data source is WDI, World Bank and for the years covered by the ES.

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