Corruption and the Local Business Environment:
Insights from Small and Medium Scale Enterprises in 29 Philippine Cities

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Corruption undermines productivity, competitiveness and job creation

✓ Aterido and others (2007:20) study of over 70,000 enterprises in 107 countries during the period 2000-2006 found that a 10 percentage point increase in the incidence of bribes was associated with a 1.4 percentage point reduction of the employment rate of large firms.

✓ Fisman and Svennson (2007) study of taxes and firm growth using data on Ugandan firms covering the period 1995-1997 found that a one percentage point increase in the bribery rate leads to an over three percentage point reduction in firm growth. This effect is approximately 2.5 times larger than the estimated impact of taxation on firm growth.

✓ Escribano and others (2005:54) study of firms in Guatemala, Honduras and Nicaragua found evidence that if firms dedicate one more day to inspection and regulation control activities, on average, it would decrease productivity by anywhere from 5.8 to 10.7 percent. Similarly, firms that were able to afford to make payments to speed-up bureaucratic processes enjoyed, on average, an increase in productivity of between 1.3 and 3.3 percent.
Cai, Fang and Xu (Forthcoming) used the “entertainment and travel costs” (ETC) of Chinese firms as a proxy for bribe payments, and they found evidence that ETC over-all has a negative effect on firm productivity but some contexts of ETC seem to generate positive returns for firms, by protecting firms from excessive expropriation and helping them obtain better public services. These studies seemed to find evidence in support of the “greasing the wheels” argument.

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Will decentralization reduce corruption?

- Increased political competition—possibly brought about by decentralization—could **mitigate corruption**, as public pressure could be brought to bear more easily on politicians’ agendas (e.g. Prud’homme, 1995).

- Greater dispersion of government decision-making powers could also result in less coordination among government bureaucrats, and **excessive rent extraction** (e.g. Shleifer and Vishny, 1993).

- Freille, Haque and Kneller (2007) empirically examined the link between fiscal and constitutional decentralization and measures of corruption, using an extensive dataset covering 177 countries and a wide range of decentralization measures. These authors found a **negative relationship between decentralization and corruption**.

- Lessmann and Markwardt (2010) examined cross section data on 64 countries covering information on decentralization, corruption and an index of press freedom. Their empirical findings suggested that **in countries with the lowest press freedom indicators, decentralization in fact exacerbated corruption**. Decentralization lowers corruption only in those countries with relatively higher indicators of press freedom.
2009 AIM Enterprise Survey data, which was implemented in the second quarter of 2009 and covers about 1740 firms in 29 cities in the Philippines.

Firm size classified by asset value (Magna Carta definition):

- Micro: <3M
- Small: 3M to <15M
- Medium: 15M to <100M

Cities included in this survey are: Angeles, Bacolod, Baguio, Batangas. Butuan, Cagayan de Oro, Cebu, Cotabato, Dagupan, Davao, General Santos, Iligan, Iloilo, Lapu-Lapu, Legazpi, Lucena, Mandaue, Naga, Olongapo,Ormoc, Pagadian, Puerto Princesa, San Fernando, Santiago, Surigao, Tacloban, Tagum, and Tuguegarao.

MODEL:

\[
\text{CORRUPTION} = F \left[ \text{City competitiveness characteristics (e.g. proxy variables for private and public services, including access to electricity, credit and water, and length of time to acquire business permits, prevalence of crime, city cleanliness, etc); proxy variables for political competition and institutions (e.g. dynastic Mayor); entrepreneur characteristics (e.g. gender, age, interviewee’s position, and a proxy for risk-taking behaviour such as willingness to move out, etc.); and firm characteristics (e.g. number of years on operation, size, etc.)} \right]
\]
## Possible correlates of corruption

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<tr>
<th>Dimension</th>
<th>Description of Independent Variables</th>
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<tr>
<td>Public goods provision</td>
<td>Length of applying for a business permit&lt;br&gt;Length of power interruption&lt;br&gt;Frequency of water service interruption&lt;br&gt;Rating of road in terms of wear and tear (1 - Poor; 0 - not poor)&lt;br&gt;Rating of road in terms of travel time (1 - Poor; 0 - not poor)</td>
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<td>City characteristics</td>
<td>City's income class  (1 - 1st; 0 - 2nd/3rd)&lt;br&gt;Population density (0 - at most median; 1 - above median)&lt;br&gt;With dynastic executive (1 - with dynasty; 0 - without dynasty)&lt;br&gt;Poverty incidence (small area estimates 2003)&lt;br&gt;Number of AM radio stations&lt;br&gt;Distance from Manila (km)&lt;br&gt;Prevalence of crime (1 –Prevalent; 0 –Not prevalent)&lt;br&gt;City cleanliness (1 - Unclean; 0 - Clean)</td>
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<td>Firm level characteristics</td>
<td>Gender (1 - Male; 0 - Female)&lt;br&gt;Size (1 - micro; 0 - small-medium)&lt;br&gt;Interviewee's position (1 - owner or owner manager; 0 - manager)&lt;br&gt;Number of years in business&lt;br&gt;Accessed formal institution for credit&lt;br&gt;Accessed informal institution for credit&lt;br&gt;Accessed savings for credit&lt;br&gt;Will move out of the city</td>
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Actual MICRO firms (<3M asset value)

- Above: Several micro souvenir shops.
- Left: A micro furniture shop
- At most 1M in asset with less than 5 employees

Photos courtesy of Mr. Steve Almeda
Actual SMALL firms (3M-<15M asset value)

- Both establishments have at most 7M in asset value and at most 15 employees.
- Each satisfies both the Magna Carta and MSME Devt. (MSMED) Council definition of “small” firm.
Both are medium establishments with value of asset at most 35M.
However, both have less than 15 employees which is less than the MSMED Council definition for medium establishments.
Corruption linked to poor business environment?

Reported bribery: YES; NO

- Length of power interruption
- Frequency of water interruption
- Days to get a business permit
## Correlates of corruption at the city-level: Initial regression results

| Variable                                  | Coeff.   | Std. Error | Z-value | Pr(>|z|) |
|-------------------------------------------|----------|------------|---------|----------|
| Intercept                                 | -3.443   | 0.615      | -5.600  | 0.000 ***|
| Length of applying for a business permit  | 0.007    | 0.003      | 2.675   | 0.007 ***|
| Length of power interruption (Square root)| 0.133    | 0.078      | 1.711   | 0.087 *  |
| Road rating in travel time                | 0.584    | 0.298      | 1.958   | 0.050 *  |
| Population density                        | 1.063    | 0.505      | 2.103   | 0.035 ** |
| Dynastic Mayor                            | -0.591   | 0.282      | -2.094  | 0.036 ** |
| Poverty incidence                         | -0.023   | 0.012      | -1.915  | 0.056 *  |
| AM radio stations                         | 0.162    | 0.043      | 3.718   | 0.000 ***|
| Years in business                         | 0.012    | 0.007      | 1.739   | 0.082 *  |
| Accessed credit from formal source        | 0.403    | 0.220      | 1.831   | 0.067 *  |
| Crime x Gender                            | 1.076    | 0.411      | 2.617   | 0.009 ***|
| Population x Radio Stations               | -0.137   | 0.060      | -2.274  | 0.023 ** |
| Dynasty x Move out                        | 1.093    | 0.570      | 1.917   | 0.055 *  |
| Dynasty x Crime prevalence                | 0.828    | 0.411      | 2.012   | 0.044 ** |

Note: Only significant correlates are reported here. Full regression results are reported in the paper.
Some key findings from the model

• More corruption is reported by firms if they are located in cities with very poor business environments:
  
  • Bribery reported among those who got their business permits 30 days late is 1.23 times compared to those that receive their permits approximately the same day.

  • Firms experiencing an hour of power interruption report bribery 1.14 times more than the firms that don’t experience any power interruption.

  • Higher reported bribery among those who said that their roads are poorly maintained, i.e. almost twice those who did not rate their roads poor.

  • Among firms that accessed informal sources for credit, those who live in poorer cities will likely report bribery more than those in less poor cities.

  • Firms in cities with 15 percent poverty incidence will report bribery 1.2 times those in cities with 7 percent poverty incidence.
Results suggest that corruption affects Philippine SMEs in a very pernicious way—more corruption is reported by firms if they are located in cities with very poor business environments.

Drawing on the literature, there are several possible explanations here and these include the observation that there are possibly higher opportunities for corruption bribe-seeking when public goods and services are inadequate and inefficient.

- Firms will simply pay bribes to be spared the much higher cost of exposure to these poor services.
- For example, firms pay for fixers to help speed up processing of permits.

Complex links of dynasty with reported bribery.
- As noted in the literature, long-lived or dynastic political regimes may help reduce the uncertainty linked to corruption as well as minimize it on the margin.
- Yet these same conditions may also weaken the prospects for stamping out corruption altogether.
Summary

- Media may have a similar ambiguous empirical link with reported bribery
  - According to literature, presence of media may help curb corruption
  - Might also facilitate more information on the practice and more likelihood to report bribery

- Addressing the challenges by boosting public goods and services provision and by making the business environment more friendly to SMEs could alter the dynamics of the business environment
  - Lowering the number of steps to set up a business could also lower the opportunity for “gatekeepers” to extort bribes.
  - Reducing poverty such as by improving education, health and other human capital investments could dramatically boost competitiveness.
  - This could also have knock-on effects in building a stronger “demand” by a well-educated voting cohort for less corruption and a more professional public sector at the local level.

- Policymakers need to address these challenges if they are to unleash the full potential of SMEs.

This paper is a working draft and this presentation highlights the initial results. The draft paper is available from the authors on request. Please contact: policycenter@aim.edu.