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Selling Stuff to Foreigners? An Empirical Investigation of China’s Subsidy of its Exporters

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Abstract

This paper quantifies the aggregate impact of various subsidies enjoyed by China's exporting firms in the electronics and communications equipment manufacturing sectors, which nearly makes up the majority of China's exports. Using firm level data from China’s National Bureau of Statistics for 2007, the peak year for China’s trade surplus, we find that although within some narrowly defined industries exporting firms are enjoying net subsidies compared to non-exporting firms, the extensiveness and pervasiveness of export subsidies is actually much lower than what we initially expected. Out of the 793 narrowly defined subgroups that contain both exporters and non-exporters, less than 40 percent included exporters that received more subsidies than non-exporting firms. Indeed, these subsidized exporters only contributed to approximately 40 percent of China’s total electronics and communications equipment export value. This suggests that the majority of exporters did not receive noticeable subsidies relative to their non-exporting counterparts. Our empirical finding contradicts the common perception that China has been aggressively and indiscriminately subsidizing its exporters across the board. More surprisingly, the recipients of the subsidies are mostly large foreign firms rather than state owned enterprises or domestic firms. Finally, consistent with popular notion, the recipients of subsidies are predominantly large and medium size enterprises instead of the small enterprises that China would like to encourage going forward.

Keywords: China, export subsidy, policy analysis.

JEL Classification No.: F13, O24, O53.

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1. Introduction

Since China initiated its economic reform in 1978, its government has implemented numerous policies to facilitate economic growth and the results have been impressive. One component contributing to China’s economic growth is the phenomenal increase in China’s export. China’s total export value (in nominal terms) increased from approximately $18 billion in 1980 to more than $1.4 trillion in 2008 (see Figure 1). The composition of China’s export also shifted during this period. In particular, the fraction of manufactured goods in China’s total export has increased from 50 percent in 1980 to a dominating 95 percent in 2008 (see Figure 2). Consequently, it appears that China’s staggering trade surplus during this period was primarily driven by the overwhelming growth of its manufactured-goods export. Since China’s export has slowed noticeably due to weak global demand since the financial crisis, coupled with China’s desire to transform its economy to be more consumption oriented in the coming 5-10 years, we expect that the composition of China’s export will shift once again going forward. Therefore, this paper focuses on whether exporting firms within the manufacturing sector received additional governmental subsidies relative to their non-exporting counterparts at the peak of China’s trading surplus.

The increasing dominance of manufactured goods in China’s export reflects China’s competitiveness in the manufacturing sector, and at least part of this competitiveness is attributable to various government policies which subsidize—either intentionally or unintentionally—exporting firms in the manufacturing sector. It is not hard to imagine that China’s leadership during this period, recognizing that China’s
comparative advantage lies in producing labor-intensive manufactured goods, implemented various policies to enhance such advantage, thus resulting in the export composition highlighted above. Such practices would be consistent with the implications of Brander and Spencer (1985), who show that international non-cooperative equilibrium would be characterized by subsidies on the part of exporting nations. For instance, the Chinese government might instruct its banks to grant lending priorities to exporting firms at favorable rates, thus lowering the cost of capital for these firms. In addition, wages might be kept lower than the marginal product of labor for exporting firms, giving these firms an advantage on labor cost over non-exporting firms and also firms outside of China (Freeman 1995). Furthermore, looser regulations and lighter punishments on pollution in China (Wang et al 2003) might also give Chinese exporting firms an advantage over their non-exporting counterparts. Finally, exporters might also benefit from low energy prices, low land prices, and the fact that the Chinese government prioritizes infrastructure projects in export processing zones in the coastal regions. All of the above and many other policies would decrease the cost faced by Chinese exporters and consequently increase their international competitiveness. All of the above and numerous other academic studies not explicitly cited in this paper have contributed to the notion that Chinese authorities have been subsidizing its exporters broadly, and with a particular focus on the state owned enterprises (SOE). However, perhaps due to data availability issues, there has been little quantitative analysis examining the validity of this notion.

The primary goal of this paper is to quantify the aggregate impact of various subsidies enjoyed by Chinese exporting firms relative to their non-exporting counterparts.
Unlike many previous studies relating to Chinese export subsidies, we do not focus on China’s exchange rate policy, which has often been the focus of many U.S. politicians (Bergsten 2010). Instead, using a simple and clean methodology based on a commonly accepted theoretical framework, we use firm level data from China’s National Bureau of Statistics in 2007 to quantify the net subsidy enjoyed by manufacturing firms relative to their non-exporting counterparts in various narrowly defined industries. Our empirical results show that although Chinese exporting firms in certain industries indeed enjoyed significant subsidy over their non-exporting counterparts, the scope of those subsidies might not be as widespread as many might initially expect. In particular, out of the 793 narrowly defined subgroups that contain both exporters and non-exporters examined, less than 40 percent contained exporting firms that received more subsidies than non-exporting firms. These subsidized exporters contributed to nearly 40 percent of total export value in China in 2007, suggesting that the majority of the exporters did not receive noticeable subsidies relative to their non-exporting counterparts. In addition, our results also show that, contrary to popular belief, although some recipients are SOEs, the recipients of the subsidies are dominated by large foreign firms rather than state owned enterprises or domestic firms. Finally, the recipients of subsidies are predominantly large and medium size enterprises instead of the small enterprises that China would like to encourage going forward.

The remainder of this paper is organized in the following fashion. Section 2 presents the empirical methodology used to determine whether exporting firms are enjoying subsidies relative to non-exporting firms within the same industry. Section 3
describes the data. Section 4 discusses the empirical results and their interpretations. Finally, section 5 concludes and discusses future extensions of this paper.

2. Methodology

2.1 Existing Challenges

Although the intuition appears straightforward, quantifying the subsidies implied by various policies is difficult. For one, there are many government policies in China that might impact export competitiveness. Identifying all of them is a daunting, if not impossible task by itself. In addition, even if identification of the relevant policies is possible, analyzing each policy’s individual impact is another challenge. Finally, data availability might hinder the calculation of the overall subsidy gained from various policies, and the individual impacts might not be additive. Hence, alternative methods need to be explored rather than using the most straight-forward method of identifying, calculating, and summing.

2.2 Methodology Description

Any alternative methodology should satisfy two qualifications: theoretically defensible and empirically verifiable. Our methodology is a variant of the framework proposed by Hsieh and Klenow (2009). Assume that value-added by firm $i$ in industry $s$ can be expressed by a Cobb-Douglas production function.

$$Y_i = A_i K_i^{\alpha_s} L_i^{1-\alpha_s}$$

Where $Y_i$ is the firm’s value-added, $A_i$ is the firm’s total factor productivity (TFP), $L_i$ is labor input, and $K_i$ is the capital stock.
Given that there are two inputs, any policy can be decomposed into two types of potential policy distortions: distortions that affect the input prices of capital and distortions that affect the input prices of labor. The first type of distortion is denoted by $\tau_{K,j}$ and the second type of distortion is denoted by $\tau_{L,j}$.

Assume that firms behave competitively, i.e. they take prices (net of distortions) as given and maximize profit by choosing the levels of various inputs, then the objective function becomes

\[
\max_{L,K} Y_i - (1 - \tau_{L,i})w_i L_i - (1 - \tau_{K,i})r_i K_i
\]

Here we are assuming that input prices ($w_i$ and $r_i$) are common to all firms within a given industry, but they are unobservable because any firm level data would only report the distorted prices after taking into account all of the subsidies.

For example, an output subsidy of paying the firm five percent of its value added would increase both $\tau_{K,j}$ and $\tau_{L,j}$ by 0.05. A policy that grants the firm access to cheap credit would be reflected by a more positive $\tau_{K,j}$. Similarly, a labor subsidy (perhaps in the form of government contribution to social security) would be captured by a more positive $\tau_{L,j}$.

Taking the first order conditions yields the following relationships:

\[
1 - \tau_{L,j} = \frac{(1 - \alpha_s)PY_i}{w_i L_i}
\]

\[
1 - \tau_{K,j} = \frac{\alpha_s PY_i}{r_s K_i}
\]
Notice that if two firms from the same industry enjoy different levels of subsidies, say \( \tau_{L,i} > \tau_{L,j} \), then firm \( i \) would use more labor than firm \( j \). More precisely, \( \frac{Y_i}{L_i} < \frac{Y_j}{L_j} \). A similar comparison can also be applied to capital subsidies as well. This is precisely the insight we will exploit to identify the extent of subsidies. If we see two firms within a narrowly-defined industry where it is plausible to assume that they have the same \( \alpha_s \), but we observe \( \frac{Y_i}{L_i} < \frac{Y_j}{L_j} \), then we will interpret this as evidence that firm \( i \) enjoys more labor subsidy than firm \( j \).

As mentioned at the beginning, the specific comparison we are interested in is that of exporters to non-exporters within the same industry (for output elasticity might vary across industries). Take the ratio of equation (3) for an exporter relative to a non-exporter; one can obtain a ratio of labor subsidies on the left hand side, and an observable output-labor ratio on the right hand side. In particular,

\[
\frac{1 - \tau_{L,\text{Export}}}{1 - \tau_{L,\text{Non-Export}}} = \frac{Y_{\text{Export}} L_{\text{Non-Export}}}{Y_{\text{Non-Export}} L_{\text{Export}}}
\]

Performing the same procedure using (4) results in

\[
\frac{1 - \tau_{K,\text{Export}}}{1 - \tau_{K,\text{Non-Export}}} = \frac{Y_{\text{Export}} K_{\text{Non-Export}}}{Y_{\text{Non-Export}} K_{\text{Export}}}
\]

Notice that \( \alpha_s \), undistorted wage, and undistorted interest rate drop out of the ratios because we assume that these are the same for all firms in the same industry (yet another reason we need to look at firms in the same narrowly defined industry), which is important because the hypothetical undistorted input prices are unobservable. Also note that output elasticity cannot be accurately estimated using factor payment shares because
the input costs (total wage bill and total capital return to be exact) are calculated using distorted prices. Consequently, if we observe that the output-capital ratio and output-labor for exporting firms is smaller for exporting firms than non-exporting firms within the same industry, then it suggests that within that particular industry, exporting firms are enjoying net subsidies relative to their non-exporting counterparts.

To implement this empirically all we need is data on value-added \( (Y) \), labor input, and capital stock for exporting firms and non-exporting firms within the same industry. More precisely, we would be comparing value-added per worker between exporters and non-exporters to determine the relative labor subsidy and output-capital ratios to determine the relative capital subsidy.

3. Data Description and Treatment

3.1 Data Source and Sample Selection

We use firm level data from China’s Industrial Enterprises Financial Information Database\(^2\) collected by China’s National Bureau of Statistics. This database contains all manufacturing firms with annual revenue of 500 million yuan or more (both state-owned firm and non-state firms). The database was initiated in 1998 including 165,000 firms and, as of 2009, contains financial information for 434,000 firms. The firms included represent approximately 90 percent of China’s industrial output.

For this paper, we decided to use data from the year 2007, which contains 336,768 firms. Our decision to use 2007 was based on two reasons. First, China’s trade surplus (as a fraction of China’s GDP) was highest in 2007 at 10.13% (IMF WEO 2012).

\(^2\)The Chinese name of the database is 《中国工业企业财务信息数据库》.
Second, we have yet to obtain access to the value-added information for years 2008 and onward.\textsuperscript{3}

We then restrict our attention to firms from the following main industries that made up over approximately 43 percent of China’s export value in 2007: Electrical Machinery and Equipment Manufacturing (2-digit industry code: 39) and Communications Equipment, Computers and other Electronic Equipment Manufacturing (2-digit industry code: 40). There are 30,523 firms within these main industries in 2007 and they make up our data sample.

3.2 Separating Firms into Subgroups

One important assumption needs to be satisfied for our methodology to be valid, which is that exporting firms and non-exporting firms used for comparison need to have the same output elasticity ($\alpha_s$), undistorted wage, and undistorted interest rate. Many variations across firms (such as region, sub-industry, and size) can lead to the invalidity of this assumption. Hence, we divide our sample into fine subgroups according to the following criterion.

1. Divide the firms into three tiers by revenue size:
   a. Small firms: annual revenue less than 30 million RMB (15,120 firms).
   b. Medium firms: annual revenue between 30 million RMB and 300 million RMB (12,583 firms).
   c. Large firms: annual revenue greater than 300 million RMB (2,820 firms).

2. Group firms from the same province.

\textsuperscript{3} We are in negotiation with relevant parties to obtain data post 2008. As the data becomes available, we plan to update our results in future papers.
3. Firms with the same four-digit industry code.

In light of the above criterion, we define firms to be in the same subgroup if and only if the firms are within the same size bucket, are from the same region, and have the same 4-digit industry code. We assume that firms within the same subgroup have the same output elasticity and face the same undistorted input prices. After these classifications, 2,240 subgroups are identified.

### 3.3 Identification of Exporters and Non-exporters

Exporters and non-exporters are defined as the following. If a firm’s exporting revenue is greater or equal to 50 percent of its total revenue, it is classified as an exporter. It is classified as a non-exporter otherwise. Out of the 2,240 subgroups identified (30,523 firms), not all subgroups have exporters based on our exporter identification criteria. Once the subgroups without exporters are eliminated, 793 subgroups and 24,180 firms are left. Table 1 shows the distribution of firms by exporting revenue in our sample.

<table>
<thead>
<tr>
<th>Exporting Revenue/Total Revenue</th>
<th>Number of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 25%</td>
<td>16,017</td>
</tr>
<tr>
<td>≥25% and &lt;50%</td>
<td>1,185</td>
</tr>
<tr>
<td>≥50% and &lt;75%</td>
<td>1,396</td>
</tr>
<tr>
<td>≥75%</td>
<td>5,582</td>
</tr>
</tbody>
</table>
4. Empirical Results and Policy Implications

Once the subgroups (and exporters and non-exporters within each subgroup) are identified, we follow our methodology described in Section 2 and sum up the value added, number of workers, and amount of capital respectively for exporters and non-exporters within each of the 793 subgroups. Table 2 below summarizes the extent of subsidies enjoyed by exporters versus non-exporters.

Table 2: Subsidies Enjoyed by Exporters relative to Non-exporters (2007)

<table>
<thead>
<tr>
<th>Subsidy Type (exporter vs. non-exporter)</th>
<th>Number of Subgroups</th>
<th>Percentage of Total Number of Subgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both labor and capital subsidies</td>
<td>307</td>
<td>38.71</td>
</tr>
<tr>
<td>Labor subsidy only</td>
<td>165</td>
<td>20.81</td>
</tr>
<tr>
<td>Capital subsidy only</td>
<td>133</td>
<td>16.77</td>
</tr>
<tr>
<td>Neither</td>
<td>188</td>
<td>23.71</td>
</tr>
<tr>
<td>Total</td>
<td>793</td>
<td>100</td>
</tr>
</tbody>
</table>

From Table 2, we see that out of the 793 subgroups that made up 39.20 percent of China’s export value in 2007, exporters within approximately 38.71 percent of the subgroups enjoyed both capital and labor subsidies relative to non-exporters. In approximately 23.71 percent of the subgroups, exporters enjoy subsidies relative to non-exporters in neither capital nor labor. From Table 2 alone, one cannot draw the conclusion that China is broadly subsidizing its exporters, which is both interesting and arguably surprising. In light of this information, it is natural to examine the amount of export associated with these subsidies. Table 3 highlights the amount of export (export value) associated with each subsidy type identified in Table 2.
Table 3: Exporters’ Export Value by Subsidy Type (2007)

<table>
<thead>
<tr>
<th>Subsidy Type (exporter vs. non-exporter)</th>
<th>Exporters Export Value (Bn RMB)</th>
<th>Percentage of Total Export from 793 Subgroups&lt;sup&gt;4&lt;/sup&gt;</th>
<th>Percentage of Total Export from the 2 Main Industries&lt;sup&gt;5&lt;/sup&gt;</th>
<th>Percentage of Total China Export&lt;sup&gt;6&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both labor and capital subsidies</td>
<td>1,589.17</td>
<td>54.25</td>
<td>40.42</td>
<td>15.84</td>
</tr>
<tr>
<td>Labor subsidy only</td>
<td>381.57</td>
<td>13.03</td>
<td>9.70</td>
<td>3.8</td>
</tr>
<tr>
<td>Capital subsidy only</td>
<td>273.24</td>
<td>9.33</td>
<td>6.95</td>
<td>2.72</td>
</tr>
<tr>
<td>Neither</td>
<td>685.14</td>
<td>23.39</td>
<td>17.43</td>
<td>6.83</td>
</tr>
<tr>
<td>Total</td>
<td>2,929.12</td>
<td>100</td>
<td>74.5</td>
<td>29.19</td>
</tr>
</tbody>
</table>

It is apparent from Table 3 that exporters from subgroups that receive both forms of labor and capital subsidies relative to their non-exporting counterparts contribute significantly to China’s export value. Of course, whether the amount of export is a result of the subsidy enjoyed by exporters, or the Chinese government chooses to subsidize exporters from subgroups that already export a significant amount is unclear at this stage and will be left for future investigations. However, this empirical evidence confirms the notion that the recipients of export subsidies indeed export a significant amount in terms of the percentage of export value.

What is worth highlighting is that based on Tables 2 and 3, only exporters from 307 subgroups in our sample enjoy both forms of subsidies. It only makes up less than 40 percent of the 793 subgroups that contain both exporters and non-exporters, which already goes against the impression that China is subsidizing exporters broadly across a wide range of subgroups. In addition, it should be pointed out that 307 is a relatively

<sup>4</sup> Percentages are calculated based on export value of 2,929.1 billion RMB.
<sup>5</sup> Percentages are calculated based on export value of 3,213.7 billion RMB.
<sup>6</sup> Percentages are calculated based on export value of 6,834.8 billion RMB.
small number in light of the total number of subgroups (2,240) we have identified within the 2 main industries. In fact, it is only 17 percent of the total number of subgroups. Yet, despite such a small fraction, exporters from these 382 subgroups contribute to approximately 40.42 percent of the exporting value of the 2 main industries combined and contribute to nearly 16 percent of China’s total export value in the year 2007. Such high concentration of export value from such a small percentage of subgroups suggests that the Chinese authorities might not be granting export subsidies indiscriminately. Instead, the empirical evidence suggests that the authorities are targeting a relatively small subset of exporting firms from certain specific sub-industries and regions. If this implication is true, then the common perception that China has been aggressively subsidizing its exporters across the board and non-discriminately would be inaccurate. Indeed, Table 4 examines the number of exporting firms enjoying various types of subsidies and confirms the above notion that indeed it is a small fraction of exporting firms receiving the subsidies, which nevertheless generate a disproportionately high amount of exporting value. This result shows that nearly 16 percent of China’s export in 2007 is generated by only 4,119 firms from 2 main industries. Even within these 2 main industries, these firms only represent less than 15 percent of the total, and the percentage gets even smaller if we look at the total number of firms in the database (1.2 percent).
Table 4: Number of Exporters by Subsidy Type (2007)

<table>
<thead>
<tr>
<th>Subsidy Type (exporter vs. non-exporter)</th>
<th>Number of Exporters</th>
<th>Percentage of Total Firms from 793 Subgroups</th>
<th>Percentage of Total Firms from the 2 Main Industries</th>
<th>Percentage of Total Firms in Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both labor and capital subsidies</td>
<td>4,100</td>
<td>3.56</td>
<td>2.89</td>
<td>1.22</td>
</tr>
<tr>
<td>Labor subsidy only</td>
<td>1,354</td>
<td>2.59</td>
<td>2.10</td>
<td>0.40</td>
</tr>
<tr>
<td>Capital subsidy only</td>
<td>642</td>
<td>5.46</td>
<td>4.44</td>
<td>0.19</td>
</tr>
<tr>
<td>Neither</td>
<td>882</td>
<td>16.53</td>
<td>13.43</td>
<td>0.26</td>
</tr>
<tr>
<td>Total</td>
<td>6,978</td>
<td>28.13</td>
<td>22.86</td>
<td>2.07</td>
</tr>
</tbody>
</table>

Consistent with Table 4, Table 5 also shows that China’s export tends to be concentrated in a few firms. Table 5 shows the fraction of export value that originates from the top firms (when ranked by export value), demonstrating that the top few firms contribute to a disproportionally large percentage of China’s total export value. For instance, within the 793 subgroups, the top 10 percent of exporters make up over 50 percentage of the total export attributable to the these subgroups.

Table 5: Export Value of Top Exporting Firms as Percentages of Total Export Value

<table>
<thead>
<tr>
<th>Metric</th>
<th>Top 0.01%</th>
<th>Top 0.1%</th>
<th>Top 1%</th>
<th>Top 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Total Export from 793 Subgroups</td>
<td>6.18</td>
<td>20.92</td>
<td>36.33</td>
<td>50.19</td>
</tr>
<tr>
<td>Percentage of Total Export from the 2 Main Industries</td>
<td>5.63</td>
<td>19.07</td>
<td>33.12</td>
<td>45.75</td>
</tr>
<tr>
<td>Percentage of Total China Export</td>
<td>2.42</td>
<td>8.20</td>
<td>14.24</td>
<td>19.67</td>
</tr>
</tbody>
</table>

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7 Percentages are calculated based on 24,814 firms.
8 Percentages are calculated based on 30,523 firms.
9 Percentages are calculated based on 336,768 firms.
Hence, although China’s staggering export value might be attributable to government subsidies, those subsidies are highly concentrated and enjoyed by a relatively small number of recipients. In other words, China’s subsidy is more likely to be firm specific rather than a broad subsidy to all exporters.

Table 6 illustrates the distribution of subsidy recipients by firm type. Surprisingly, although one might expect that the majority of the recipients are likely to be state-owned enterprises (SOEs). The empirical result actually shows the opposite. In fact, a much higher number of the firms that received both types of subsidies are foreign firms that also accounted for a much greater percentage of the export value. Furthermore, Table 7 describes the subsidy recipients by firm size. It shows that although some small and medium size enterprises are receiving both types of subsidies, they do not account for much of the export value within the 793 subgroups we investigated. Instead, over 40 percent of the export value from these 793 subgroups is attributable to the large enterprises that received both forms of subsidies.

Table 6: Subsidy Recipients by Firm Type\textsuperscript{10}

<table>
<thead>
<tr>
<th>Firm Type</th>
<th>Received neither labor nor capital subsidies</th>
<th>Received both labor and capital subsidies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of Firms</td>
<td>Percentage of Total Export from 793 Subgroups</td>
</tr>
<tr>
<td>SOE</td>
<td>2</td>
<td>0.03</td>
</tr>
<tr>
<td>Non-SOE</td>
<td>257</td>
<td>0.32</td>
</tr>
<tr>
<td>Foreign</td>
<td>492</td>
<td>20.77</td>
</tr>
</tbody>
</table>

\textsuperscript{10}SOE stands for state owned enterprises. Firms with capital from Hong Kong, Macao, Taiwan are also included as “Foreign.”
Table 7: Subsidy Recipients by Firm Size

<table>
<thead>
<tr>
<th>Firm Size</th>
<th># of Firms</th>
<th>Received neither labor nor capital subsidies</th>
<th>Received both labor and capital subsidies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Percentage of Total Export from 793 Subgroups</td>
<td># of Firms</td>
</tr>
<tr>
<td>Large</td>
<td>228</td>
<td>21.69</td>
<td>567</td>
</tr>
<tr>
<td>Medium</td>
<td>229</td>
<td>0.69</td>
<td>2,140</td>
</tr>
<tr>
<td>Small</td>
<td>425</td>
<td>0.20</td>
<td>1,393</td>
</tr>
</tbody>
</table>

5. Conclusion

By using firm level data, this paper provides a theoretically simple and defendable quantitative estimate of the extent of government subsidies enjoyed by exporters over non-exporters in the manufacturing sector of China. The main results are the following. First, although there is empirical evidence confirming that for some industries, exporters are enjoying subsidies relative to their non-exporting counterparts, their scope is much smaller than what one might initially anticipate. Second, the recipients of the subsidies are more likely to be foreign corporations instead of Chinese corporations, inconsistent with the common perception that Chinese authorities are providing more subsidies to the SOEs. Of course, our result so far cannot be used to determine the magnitude of subsidies enjoyed by SOEs relative to other firms. So it is possible that although a smaller number of the subsidy recipients are SOEs, they receive more subsidy than the broader and much larger group of subsidy recipients. This question will be reserved for future investigation. Finally, the recipients of subsidies are predominantly large and medium size enterprises instead of the small enterprises that China would like to encourage going forward.
Figures

Figure 1:

Source: NBS China (2009)

Figure 2:

Source: NBS China (2009) and author’s calculation
References


