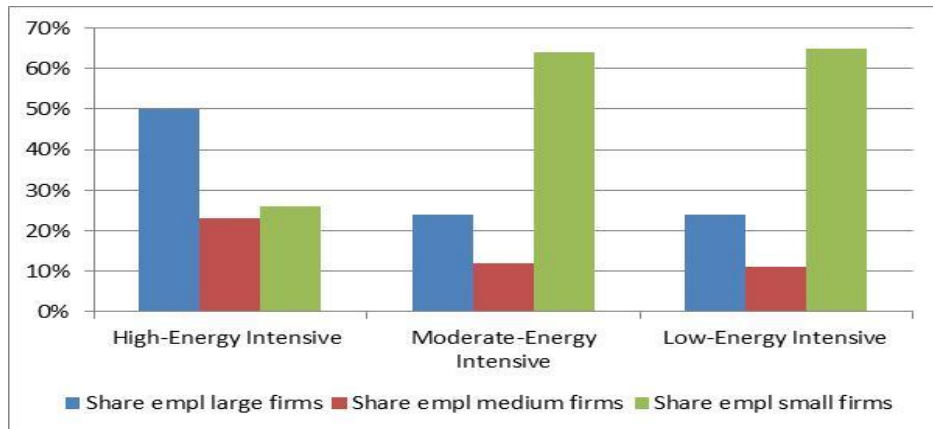


## How can political connections help in capturing the energy subsidies that go to the energy intensive manufacturing sectors in Egypt?

It is well known that energy subsidies are high in Egypt. The total bill was close to 12% of GDP in 2012. Much of the attention has focused on that part of the subsidies that goes to households as it is also well known that these are highly regressive, with a large share of the benefit estimated at about 50% of the subsidy accruing to the top population quintile.

But energy subsidies also go to firms, and mainly to those in the energy intensive sectors. These subsidies, mainly in the form of diesel, account for nearly 25% of total energy subsidies, costing overall about 3% GDP, or close to \$8 billion (in comparison, public investment was 6% GDP in 2012). Are these subsidies less regressive than those going to consumers?

Let us focus on the manufacturing sector. Using a UN classification of manufacturing industries into low, medium, and high energy intensive sectors, it is possible to classify the firms represented in the most recent industrial survey depending of the sector in which they operate. We find that large establishments (with over 1000 employees) are over-represented in energy-intensive manufacturing sectors, and thus benefit disproportionately from the energy subsidy. So energy subsidies to firms are also regressive. Is this simply because energy-intensive firms are capital intensive, and thus tend to be large?



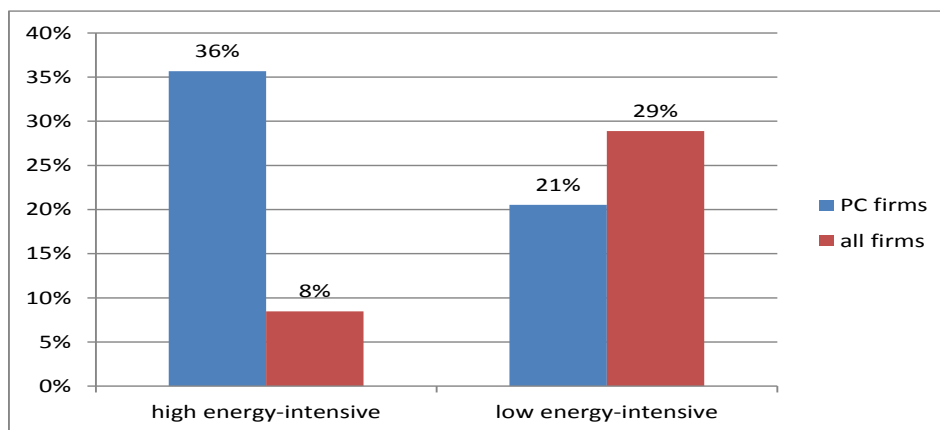
Source: Establishments Census

Certainly, this is part of the story, but it seems that it is not the whole story. Could it be that these subsidies are mainly captured by a subset of large firms, for example those with strong political connections?

Our recent work has focused a lot on understanding the economic impact of political connections. In our work, we have constructed a list of 469 politically connected firms, whose behavior we compare to non-connected large firms. We constructed the list by focusing on 32

politically connected businessmen who had served as directors or board members in one of the 4 think tanks founded by Gamal Mabarak. We identified 104 publicly listed firms for which these politically connected businessmen served as CEOs, board members, or major shareholders (>10%). Several of the 104 firms are holding companies or investment funds masking large business conglomerates. Recovering all subsidiaries (up to two tiers), we unambiguously identify 469 firms that are directly or indirectly controlled by one of the connected businessmen. We then extract corporate information on these, and xx other large firms, from the Orbis data base to compare the extent to which connected and non connected firms operate in the energy intensive sectors, and also to compare their profitability.

First, we find that among large firms, politically connected firms are disproportionately present in the energy intensive sectors -- 36% of the connected firms operate in the energy intensive sector, as compared to only 8% of large firms.



Source: Orbis

Second, is it profitable to move into energy intensive sector, and do political connections help? Using the corporate data provided by the Orbis database, we ask whether high profits are correlated with being in the high energy sector or having political connections. It turns out that political connections bring more profits (not surprising), that being in the energy intensive sector by itself does not, and that the profit margins of politically connected manufacturing firms are **only** superior when they are in high energy intensive sectors -- with margins of 4.5 percentage points higher.

This means that the connected have an advantage at capturing the subsidies. Our question to our reader then is: how do they do it? Any ideas?

<i>Dependent Variable</i>	<i>Ln Profits</i>				<i>Ln Profit margins</i>			
PC firms	1.67*** (3.47)	1.63*** (3.22)	1.65*** (3.02)	1.11* (1.76)	<b>1.58***</b> (3.24)	<b>1.38***</b> (2.30)	<b>1.56**</b> (2.37)	<b>.267</b> (0.33)
Dummy high energy			-.154 (-0.32)	-.625 (-0.96)			-.634 (-1.04)	-2.60** (-2.73)
PC firms * Dummy high energy				1.64* (1.73)				<b>4.55***</b> (3.77)
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age	No	Yes	Yes	Yes	No	Yes	Yes	Yes
N	536	489	489	489	253	253	253	253
R2	0.071	0.062	0.062	0.065	0.059	0.061	0.063	0.094