Awards as Signals

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Abstract

Awards are widespread in all countries and are prevalent both in the public sphere and in the private sector. This paper argues, and empirically supports, that awards serve public functions and economists should take them seriously. Using a unique cross-country data set, we suggest that awards serve as signals. Awards are more prevalent the more difficult the position and status of an individual is to observe due to an anonymous and globalized setting.

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Awards are a well-known feature in all societies throughout all times. They originated in monarchic societies as royal orders and titles; for example, in the United Kingdom, they first appeared in the form of an appointment as "Knight" or "Lord." Republics also present orders such as France's "Légion d'Honneur" or the United States' "Presidential Medal of Freedom" and "Congressional Gold Medal." Not-for-profit organizations, such as universities and scientific associations, also extensively use awards, examples being Nobel Prizes, the Fields Medal in mathematics, and the many awards given in sports, the media, and culture. Awards have also become important in for-profit enterprises. Companies honor their employees as "Employee of the Month" or with "Thanks! Awards" and companies are continuously creating new awards.

Almost 40 years ago, Hansen and Weisbrod (1972) suggested that an economics award should be created, but they associated it exclusively with an award in the economics profession. Nevertheless, economists have largely disregarded awards because economists focus their attention primarily on monetary rewards as their incentive.[3] Therefore, the economics profession still has little understanding of the function of awards in the public sphere despite their prevalence.

Elsewhere, it is shown that awards induce individuals to act in the interest of the award giver (Frey and Neckermann 2008; Kosfeld and Neckermann 2010) and also affect the subsequent behavior of award winners (Neckermann, Cueni, and Frey 2009). The goal of this paper is to study whether awards fulfill an important societal function by reducing transaction costs. The question posed is—do awards function as signals of otherwise unobservable individual characteristics such as passion and dedication, team spirit, ability, and past successes? We can answer this question by studying whether the use of awards is more prominent when the particular characteristics or behavior of an individual is difficult to observe. We suggest a number of context factors that should influence the value of awards as signals, thereby affecting the average number of awards given per person across countries. These relationships should hold in case awards actually do have a signaling function. We expect

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[3] There are some analyses of specific prizes in the cultural sector, for example, the Queen Elizabeth Piano Competition (Ginsburgh and van Ours 2003; Glejser and Heyndels 2001) or in academia such as the best paper prizes in economics (Coupé 2005). However, these studies do not analyze the functions of awards but rather focus on the accuracy of expert opinions in selecting the best candidates as prize winners.

that, in countries with a high degree of anonymity and international exposure, individuals need to rely on signals to communicate talent and motivation in a credible manner. Therefore, the expectation is that such countries present a high number of awards. This paper does not analyze the effects that particular "cultures," however defined, might have on awards. Instead, we use a rational choice approach and focus on the function of awards as a particular type of signal.

An empirical analysis of such propositions was impossible up to now because no data existed on the prevalence of awards for a large number of countries. To overcome the lack of data, we constructed a unique data set using a representative sample of 3,630 individuals from the *International Who's Who* (IWW) (Neal 2006). In addition to individual-specific characteristics, such as age and career, the IWW provides information on the entrants' honors and awards. The results of the econometric analysis are consistent with the theoretical propositions.

Economics has an extensive literature on signaling to overcome asymmetric information, which may result in market equilibria that fail to be Pareto optimal (Spence 1973,1974). The basic idea is that signals allow informed individuals to reveal information about their unobservable types through observable actions, actions that individuals of another type do not want to imitate. One prominent example is education that has signal value if the cost of an education is lower for high productivity types and if this, in turn, results in high productivity workers getting more education in equilibrium than low productivity workers. Signals are only informative in a separating equilibrium because this allows the high ability individuals to "prove" their type. Signals serve to coordinate expectations and roles and to reduce transaction costs.

Awards reward behavior that is desirable, worthy of esteem, and that typically goes beyond the scope of "normal duty." Hence, awards signal to others that the award recipient engaged in such behavior, thus the award. Similarly, uninformed parties can view awards as signals of unobservable individual characteristics, like dedication and motivation. In fact, awards have been explicitly shown to be signals of expertise (Heppner and Steve 1977). Awards given, for example, by the monarch or president of a country provide information to both insiders and

the public that the recipients have acted in a desirable way, and the awards establish the recipients as "good citizens." Furthermore, motivation and certain abilities may only become apparent during the course of economic and social activities. In such situations, awards by informed parties are valuable signals.

In general, signals are useful in situations where outsiders cannot directly observe behavior, but they do have access to information on awards as a coarse measure of an agent's performance (for a similar argument on why the provision of plaques can increase donations, see Ariely, Bracha, and Meier 2009; Andreoni and Petrie 2004). Outsiders acquire this information because of the publicity associated with awards. The presentation of an award is frequently part of a formal ceremony in front of an audience. In addition, the press often reports who award recipients are, and official government publications commonly list this information. In the case of firms, companies post the information on the intranet or in a company newsletter. Recipients are encouraged to display the award or to wear the associated badge. In addition, recipients of awards often list their awards in their CVs and some include them as titles on their business cards. This feature sets awards apart from other rewards like praise or money that do not receive the same publicity and that are not associated with a sustainable visible symbol.

Hence, the signaling literature provides one rationale for the prevalence and desirability of awards. People are willing to exert extra effort to obtain an award in order to reap the benefits in terms of recognition by other persons as well as to facilitate job offers, wage increases, and access to highly valued social networks. Award givers have an incentive to provide awards because they induce effort and bring publicity.

In the case of companies, one might argue that they have no interest in installing award systems that increase the outside options of their employees and likely result in demands for higher wages. This argument is parallel to the one that firms should not invest in the general human capital of their employees because this augments the worker's productivity in the same way in multiple firms so that the employee reaps the whole rent of the investment (Becker 1962; Parsons 1972; Hashimoto 1981). Investments in general human capital are rationalized with market imperfections that render the benefit of the investment larger within

the company than what the employee can market outside the company. Examples include asymmetric information (Katz and Ziderman 1990) and wage compression (Acemoglu and Pischke 1998,1999). The same arguments hold for awards when outside parties can infer the employee productivity increase induced by the award less well than can insiders.

Section I discusses the data. Section II develops the theoretical hypotheses, and Section III reports the results of the econometric analysis. Section IV concludes.

I. Data on Awards

To empirically address awards as signals, we constructed a unique data set using the IWW (Neal 2006), a reference work comprising the most important people in 212 countries. The data source provides information on specific characteristics such as nationality, job, age, and international mobility, as well as on the number and kinds of awards each person received. We selected a subsample of 82 countries according to the availability of the basic country-specific variables necessary for the statistical analysis.[4] For these 82 countries, we took a random sample of 50 persons per country. When there were less than 50 entries, we coded all the available entries. With respect to awards, we collected the following information when available:

- Source of the award (country of origin, foreign country, or international-like organization)
- Award-giving institution (state, private organization, nonprofit organization, university, media)
- Category in which the prize was awarded (social welfare, military, science, culture/art, sports, media, business, religion)
- Type of award (order, medal, prize, title, grant, membership/fellowship)
- Whether the award was accompanied by a monetary bonus

Using the information from many different sources including the Internet, we constructed aggregate award data such as the number of awards per person.

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[4] See the appendix for a more detailed description and discussion of the data. We could not test sample selection due to the unavailability of data for countries not in the sample. However, the 82 countries in the sample represent a large set of countries for a cross-country analysis.

In the IWW, invitees provide the award information themselves. The IWW editorial team and their freelance researchers investigate and write the biographical entries for the persons selected for inclusion. Individuals listed in the IWW receive annual update forms where they can update and amend their information in any way necessary. All entries in the IWW follow an editorial process to verify the accuracy of the information. We assumed that respondents only indicated those awards that they considered noteworthy. Hence, award quality is somewhat endogenously controlled. Using the IWW as a source of data, we captured the prominent persons in each country. The awards of prominent persons, especially those listed, are of national or international significance. This allowed us to make the number of awards more comparable across countries. However, it also made it harder for us to detect any significant effect because the hypotheses pertain to the average individual in a country and prominent persons are often more internationally orientated and less affected by home-country characteristics.

The information on the number of awards per individual as well as per country as captured in the IWW database represents an interaction of award demand and supply in that country as well as an endogenous correction for award quality (demand side). The setup is as follows. The number of awards y_i^* person i has in country j is a function f of X_{ij}, where X_{ij} is a vector of country- and individual-specific factors. The number of awards y person y_i indicates in the IWW is a function g of the number of awards the person actually has (y_i^*). Hence,

$$y_i^* = f(X_{ij}) \tag{1}$$

and

$$y_i = g(y_i^*(x), X). \tag{2}$$

In our view, this approach, using y_i as the variable of interest, is as close as one can currently get when measuring the intensity of usage and importance of awards across many countries. Nevertheless, the data collected from the IWW have several specific features that we need to consider carefully before a reasonable econometric estimate can be undertaken.

Although individual awards vastly differ, we can nevertheless aggregate them into different broad categories assuming that, on average, the number of awards in the respective award category reacts to the hypothesis under consideration. Moreover, an aggregation of awards is warranted because all awards share certain essential features. Examples of such features are the publicity and visibility of awards, the social recognition they bring, and the typically broad set of evaluation criteria with a subjective element. It is worth mentioning that awards do not fall under the purview of the law. A nonrecipient cannot claim an award by trying to establish that its performance was worthy of an award. In many countries, state orders are, for instance, one of the only areas of governmental acts that are not subject to administrative law.

Using the above-mentioned data, the average number of personal awards in each country was calculated. Included were all awards listed in the IWW section "honors and awards," as well as those prizes and awards listed in the sections "career" and "works" and honorific titles mentioned next to the name of the person. We counted memberships and fellowships only when the IWW listed them in the "honors or awards" section or explicitly reported them as being honorary. We excluded golden, silver, and platinum records from the analysis because they do not represent awards but directly reflect sales success. For the same reason, we excluded gold, silver, and bronze medals in sports competitions. The latter lack several of the defining characteristics of awards such as the broad performance criteria and subjective performance evaluations (with the exception of some sports like dancing). The number of awards per individual lies in the interval [0, 99] and has a mean of 2.8 and a standard deviation of 5.5.

To provide a visual of the data, Table 1 displays the average numbers of awards for the top 10 countries as well as for five other selected countries.

TABLE 1 ABOUT HERE

II. Factors Affecting Award Effectiveness

Anonymity

Signals about individual characteristics tend to be of more importance *in more anonymous settings*. Hence, we expect a larger number of awards in countries with higher degrees of anonymity of social interactions within the country.

The general relationship predicted between awards as signals and anonymous social relationships leads to two hypotheses.

Hypothesis A: *The number of awards in a country increases depending on the degree of a country's urbanization.*

We used the percentage of a country's population living in urban areas as the explanatory variable.[5] The World Bank publishes the data as one of the world development indicators. Unfortunately, there is no time series available for this variable. We used 1990 data because this date was well within the timeframe of awards that we captured. Hypothesis A is not trivial as it could be argued that more urbanized countries have more institutions interested in presenting awards. Whether the degree of urbanization raises or lowers the average number of awards in a country is therefore an empirical issue.

Hypothesis B: *The number of awards in a country increases depending on the extent of the market sector.*

Markets are known to be more anonymous than other allocation rules (Bowles 1998). Therefore, the larger the size of the market sector in a country the greater the degree of anonymity, hence the need for signals in the form of awards. Precise data on the size of the market sector were not available because it depends on the "market" definition. However, many countries publish the government share of GDP. Because market activities can be approximated as those activities not undertaken by the government, we constructed the

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[5] From a sociological perspective, anonymity is the defining criterion of a city (Porterfield 1952; Tittle and Stafford 1992).

variable *size of the market sector* as one minus the government share of GDP.[6] The data on the government share of the real GDP in 1996 constant prizes was the average over the period from 1950 to 2000.

We cannot take Hypothesis B as a given because there may be some doubt if awards are indeed used as symbols of differentiation and status in countries with a high market share. Traditionally, the elite of most countries consist of politicians, famous artists, and sports personalities—the group that represents the majority of entries in the IWW. This old elite tends to resort to awards to visibly attest to their importance. It is thus conceivable that a smaller market sector is associated with more awards. Again, empirical analysis must establish whether the hypothesis formulated holds.

Openness

In settings with continuous, locally based interactions by the same set of persons, individual characteristics are assessed over time and a reputation is built. There is less need for awards to signal position and status. However, to establish such knowledge is more difficult when there is frequent interaction with strangers; therefore, generally recognized awards are particularly useful as signals.

Hypothesis C: The number of generally recognized awards increases depending on the extent of globalization.

In contrast, the more globalized a country is the less important are national awards given by governments because they mean comparatively little in an international setting.

Hypothesis D: The number of national state awards is smaller when the extent of globalization is larger.

The degree of social globalization is empirically captured by an index constructed by Dreher and Schneider (2006). The index is composed of a weighted average of data on personal contacts (outgoing telephone traffic, financial transfers, international tourism, phone costs for

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[6] This is only a rough approximation because there is no accounting for the third sector. Data on the size of the third sector are only available for the restricted set of OECD countries.

international calls, foreign population), data on information flow (telephone mainlines, Internet hosts, Internet users, cable television, daily newspapers, and number of radios), and data on cultural proximity (number of McDonald's restaurants). The index is available for a large number of countries on a yearly basis between 1970 and 2003 on a 0 to 10 scale, where higher values denote more globalization. We used the average value of the social globalization index over this time period.

IV. Empirical Estimates

For the analysis, we used the individual-level data from the IWW together with the country data from the different sources described above. This allowed us to use the control variables that were available on the individual level like age, sector of occupation, and mobility.

It may be that the sample composition depends on some of the explanatory variables of interest and that the sample composition in turn has an effect on the average number of awards in a country. Looking at the business people on the list illustrates this. The IWW team automatically includes the members of the board of directors and the CEOs of the top 500 U.S. companies and the top 500 non-U.S. companies. We would have biased estimates if (1) managers and board members of these companies received less or more prizes than individuals from other sectors, and (2) some of the variables we use to explain the number of awards in a country also influenced a company's location decision. There is suggestive evidence that countries with global companies have a higher percentage of business people in the sample and that these business people, on average, have fewer awards than individuals from other sectors. Hence, variables that influence whether a company locates in a country influence the number of awards via sample composition.

The same holds for current and former socialism as an explanatory variable. Socialist countries exhibit a higher share of sportsmen and musicians. These in turn seem to have more awards than individuals from other sectors. For the same reason, the estimate of the effect of political instability on the number of awards might be biased. The IWW team admits that all heads of governments and important ministers are on the IWW list. Hence, countries with frequent political changes tend to have a higher percentage of politicians in the IWW than more stable countries. Again, there will be a spurious correlation between instability and the

number of awards driven by differences in sample composition if politicians have systematically more or less awards than entries from other sectors. In addition, countries with high international profiles could have a higher than average proportion of diplomats and ambassadors. Ambassadors and diplomats tend to have a high number of awards due to the nature of their jobs. Hence, some international countries might exhibit a higher average number of awards due to factors that are exogenous to this analysis. To eliminate these kinds of biases, we controlled for sample composition in all regressions by including the sector of occupation for each individual.

Further, we controlled for variables, which were unrelated to selection, but picked up variation in the number of awards between countries in which we were not interested. First, we controlled for the average age of the individuals in each country in every regression. Older persons tend to have more awards because they have accumulated awards over a longer span of time. Second, mobile persons tend to have more awards because they are exposed to a greater number of different award-giving institutions (e.g., different national governments). Hence, countries with a higher percentage of mobile persons tend to have more awards irrespective of the explanatory variables of interest. Mobility is controlled for by a dummy variable constructed based on the biography of each individual. It indicates whether a person has spent more than half of their career life outside the home country. Third, we also controlled for the long-term average of per-capita income. This controls for a variety of country-specific factors such as development. The long-term average is used to account for the fact that the individuals in the IWW accumulated their awards over an extended period. The explanatory variables should be representative of those that prevailed during the time that the awards were accumulated. The average age of the people in the sample is 68. Hence, the awards of the average individual in the sample were accumulated approximately over the span of the last 40 years. In the regressions, the mean over the years 1950 to 2004 of real GDP per capita (inflation adjusted by chain series from the Penn World Table) is used.

To control for the fact that the observations within one country are dependent on another country, we clustered at the country level. For ease of interpretation, we present OLS results. However, all results are robust with respect to the usage of zero-inflated negative binomial models that account for the large percentage of persons with zero awards (48 percent) and the

count nature of the data. If anything, the coefficients get more significant. The residuals are approximately normally distributed, which gives us confidence in the estimation results obtained with OLS.

Table 2 presents the results.

TABLE 2 ABOUT HERE

Effects of Anonymity

Hypothesis A: *Model 1 shows that the percentage of urban population has a statistically significant positive impact on the number of awards per person. An increase in the share of the population living in urban areas by 10 percentage points increases the average number of awards per person by 0.02.*

Hypothesis B: *The size of the market sector has a weakly significant positive impact on the number of awards per person. An increase of nongovernmental activities as a percentage of GDP by 10 percentage points increases the number of awards per person by 0.4 (Model 2). The size of the effect is substantial considering that the average person in the sample has 2.7 awards.*

Effects of Openness

Hypothesis C: *Model 3 of Table 2 shows that social globalization has a statistically significant positive effect on the average number of awards in a country. Hence, the more a country is exposed to foreigners, the more important are visible and communicable signals of success or quality, which is reflected in a higher number of awards.*

Hypothesis D: *According to Model 4, social globalization has no statistically significant effect on the number of national state awards. Although there is a difference in the general number of awards received, where globalization raises this number, Hypothesis D must be left open; it cannot empirically be shown that national state awards lose importance in a globalized world.*

In a final regression, all of the previously discussed variables were included in a single regression simultaneously. Table 2, Model 6, presents the results. The qualitative results remain unchanged, although the significance levels improved somewhat. Hence, the effects of anonymity and fractionalization on the number of awards per person are robust with respect to the inclusion of a variety of other variables in addition to the controls and do indeed capture different context factors, rather than being expressions of one underlying factor. Awards are used when the setting is more intensive, more anonymous, and more open. In particular, the more urbanized a country, the larger the market sector, and the more exposed to globalization, the more that awards are used as signals.

In addition, older people exhibit a statistically significantly higher number of awards per person, which simply reflects an accumulation effect over time. Mobility does not have an effect on the average number of awards per person. However, as expected, mobile people tend to have fewer awards from the government of their country of origin. There is no systematic relationship between GDP and the number of awards.

For a given demand and supply of awards and a given perceived award quality, a higher profile as well as the importance of the IWW increase the benefit of stating more awards. The estimates are biased when the explanatory variables of interest influence the profile and the importance of the IWW across countries. No data on the spread and influence of the IWW is available across countries so that we cannot control for the variation in the degree of significance attributed to the IWW across countries. However, we cannot think of a variable that is correlated with our explanatory variables and influences the perceived importance of the IWW at the same time. As a rough test, we approximated this factor by controlling for whether the country was part of the OECD, assuming that the reference work might be valued higher in the respective countries. However, this variable was insignificant in all the regressions presented below and did not alter coefficients or significance levels in any meaningful way.

Norms related to status, visible symbols of honor, and awards could influence the willingness of individuals to state their awards. However, these norms are largely endogenous, being

channels via which some of the explanatory variables of interest influence the stated number of awards and therefore do not need to be controlled.

V. Conclusion

This paper presents the first empirical analysis of the phenomenon of awards in a cross-country perspective. Our analysis shows that the intensity of usage and importance of awards follow economically predictable patterns. Awards serve as *signaling devices*; their importance increases with the degree of anonymity and the extent of globalization in a country.

Although our results are consistent with the hypothesis that awards serve as signals and hence fulfill an important function in society in decreasing transaction costs, we leave open whether the current number and rate of awards is socially optimal. In particular, an analysis remains open on the relationship between awards and monetary compensation as alternative rewards. However, such an endeavor is restricted by the lack of data on awards presently available.

Appendix: Description of the Data Source for Awards

Criteria for Admission into the International Who's Who

In general, the editorial team of the *International Who's Who* uses a set of criteria for inclusion in the book, for example, all heads of state, all directors of international organizations, all principal members of the 'cabinets' of all countries,[7] some national-level leaders,[8] permanent representatives to the UN, key diplomats in each country, the head of each religion (all Cardinals, Chief Rabbis, etc.), heads of leading universities worldwide, chairmen, board members, CEOs and CFOs of the Global 500 (non-U.S.) and Fortune 500 (U.S.) companies, and prize winners of distinguished awards (such as Nobel Prize, Pulitzer Prize, Prix Goncourt, Fields Medal, Akutagawa Prize, UNESCO International Science Prize, etc.). Within sports, the winners of the most important international competitions as well as the captains of principal sports teams are included. Within the film and television industries, the winners of the principal awards, festival prizes, and so on are admitted. Hence, the entries in the IWW do not necessarily represent the respective national elite, but a comparable sample of individuals in all countries. It could be considered problematic that prizes are used as criteria for the inclusion of individuals in some areas, such as music, sports, or film. However, because the criteria are the same for all countries, this should not induce any systematic bias between countries.[9]

Coverage

Some areas of the world are underrepresented in the IWW, specifically parts of Africa and Asia. However, due to the Internet, international coverage has been greatly enhanced in the last few years. Nevertheless, there are still more U.S. and western European entrants than entrants from other parts of the world. This may result in a skewed distribution of entries, which might bias our results. However, several tests confirmed that this was not the case. With 212 countries in the IWW, basically, all countries of the world are included. Further,

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[7] Included are the equivalent of finance minister, foreign minister, and defense ministers, and any ministers of particular national importance, for example, oil ministers in OPEC countries.

[8] Included are U.S. senators, Indian state chief ministers, and Chinese provincial heads.

[9] Further, the IWW team only considers major prizes such as the Oscars or Nobel prizes. Individuals included in the IWW due to a major prize they won still contribute to assessing country-level factors. Depending on perceived award quality and the importance of awards in their country, they will typically have received more or less prizes prior to winning the decisive award and may or may not indicate these other prizes.

because the set of criteria for inclusion is fixed, the types of persons in the IWW are the same for all countries. The greater number of entries in some countries is driven by the longer period of coverage, so that the admissible set of persons is represented for more years. We tested whether there is a systematic relationship between the percentage of the population represented in the IWW and the average number of awards in each country. The correlation between the two variables is 0.016. In a regression, the coefficient of the share of population represented is far from significant. Further, the coefficient has a positive sign, although it should have been negative in case our concern was valid. Including the variable for the share of the population in the IWW in any of the regressions presented below changes neither the coefficients nor the significance levels in any meaningful way.

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TABLES

Table 1: Average Number of Awards per Individual per Country

Total Awards	
Mean	2.66
Variance	1.96
Top 10 Countries in Each Category	
Canada	6.82
UK	6.78
Poland	6.16
Australia	5.66
Senegal	5.30
Hungary	5.00
New Zealand	4.96
Switzerland	4.70
Finland	4.64
Spain	4.20
Information on 5 Additional Countries	
USA	3.80
France	3.60
Germany	2.46
Spain	4.20
Italy	1.96

Source: Own data collection based on the *International Who's Who* (Neal 2006).

Table 2: Distribution of Awards Across Countries: Results

Dependent Variable	Model 1	Model 2	Model 3	Model 4 National State Awards	Model 5
Awards per person			Coefficient		
Urbanization	0.020*				0.026**
	(0.009)				(0.009)
Long-term size of market sector*		0.039(*)			0.045**
		(0.023)			(0.020)
Long-term social globalization			1.026*	0.049	1.077**
			(0.405)	(0.094)	(0.373)
Academic	2.480**	2.536**	2.557**	0.121(*)	2.550**
	(0.383)	(0.380)	(0.367)	(0.066)	(0.366)
National politician	0.475*	0.543*	0.573*	-0.031	0.575*
	(0.234)	(0.231)	(0.228)	(0.058)	(0.226)
Ambassadors & diplomats	1.465*	1.536**	1.504**	0.185*	1.482*
	(0.589)	(0.573)	(0.573)	(0.081)	(0.583)
Cultural sector	3.947**	3.995**	4.030**	0.371**	3.986**
	(0.471)	(0.470)	(0.487)	(0.116)	(0.471)
In other sector✧	1.904**	1.986**	2.003**	0.431**	1.993**
	(0.371)	(0.363)	(0.366)	(0.124)	(0.370)
Age	0.072**	0.070**	0.072**	0.014**	0.069**
	(0.011)	(0.011)	(0.011)	(0.003)	(0.011)
Mobility◆	0.341	0.352	0.395	-0.163**	0.349
	(0.388)	(0.390)	(0.393)	(0.062)	(0.388)
Average GDP	$3.8*10^{-5}$	$7.2*10^{-5}$*	$-5.6*10^{-5}$	$-4.9*10^{-6}$	$-1.3*10^{-4}$*
	$(3.6*10^{-5})$	$(3.1*10^{-5})$	$(5.6*10^{-5})$	$(1.5*10^{-5})$	$(6.1*10^{-5})$
Constant	-4.994**	-3.323**	-4.168**	-0.540**	-4.227**
	(0.914)	(0.944)	(0.803)	(0.189)	(1.001)
Observations	2684	2684	2684	2684	2684
Number of Countries	78	78	78	78	78
R^2	0.092	0.092	0.096	0.045	0.101

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