First Enquiry into the Bribery Propensity of Leading Exporting Nations

Göttingen, September 1. 1997

In a recent study by Dr. Johann Graf Lambsdorff, the author of the annual Transparency International Corruption Perception Index, the willingness of leading exporting countries to bribe internationally has been investigated. The economist at Goettingen University says that there are considerable differences in the behaviour of leading exporting nations. Belgium/Luxembourg, France, Italy, the Netherlands and South Korea show the most outstanding propensity to pay bribes for the acquisition of contracts in international trade. Australia, Sweden and Malaysia have the lowest propensity towards corrupting importing countries. This econometric study is derived from the TI Corruption Perception Index. The full text version is forthcoming in the European Journal of Development Research, Vol. 10, No 1, 1998 (http://www.frankcass.com/jnls/ejdr.htm) and has been presented at the Institute of Development Studies, University of Sussex, Brighton, England in April 1997, at the 8th International Anti-Corruption Conference in Lima, Peru, September 1997 and at two other workshops.

-- Country --	Impact of Corruption on Trade
Belgium/Lux.	-8,00
France	-7,20
Italy	-6,80
Netherlands	-6,00
South Korea	-5,70
United Kingdom	-5,30
Spain	-4,80
China/HK	-4,50
Germany	-2,60
Singapore	-2,50
Canada	-1,90
Japan	-1,70
Switzerland	0,60
USA	0,70
Austria	1,20
Australia	4,80
Sweden	6,50
Malaysia	6,70

Consider an importing country such as India to reduce corruption as measured by the TI-Corruption Perception Index from the 1996 value of 2.63 by one unit to 3.63. This will have an impact on the shares leading exporting countries are able to obtain. As reported in the first column, Belgium's share will be reduced by 8% whereas the Swedish share will increase by 6.5%. **In case the level of corruption in India is reduced to that of Israel, Belgium will loose 40% of it's import share in India while the Swedes can raise their share by more than 30%.** These coefficients have been determined with the help of regression analysis for the biggest 87 import countries. Since other explanatory variables such as geographic proximity, common languages, sectoral differences, etc. are taken into account it is straightforward to address the results to a differentiated propensity of exporters to offer bribes and their capability to obtain contracts with the help of kickbacks.

"There is a popular excuse of industrial countries, their export business merely adapts to local standards of ethics when bribing the officials of the importing countries", said Lambsdorff. "This is clearly at odds with our findings". The countries show different inclinations to export into corrupt marketplaces. The significance of our results is fairly good. Comparing e.g. the United Kingdom to Malaysia this allows us to bet 20 odds to 1 that exporters from the UK are more inclined to pay bribes." Similar comparisons prove e.g. that Germany is more likely to offer bribes than Sweden. Or that Belgium/Luxembourg has a higher propensity to pay bribes than Switzerland.

"It has been about time to take a closer look at the responsibility of multinational companies and at the behaviour of whole countries engaging in exports. Dr Lambsdorff's study is the first serious academic effort to measure the inclination of leading exporters to bribe abroad. It will now be open to review and criticism and we hope that within the coming year it will be possible to launch a major international polling survey to complement his work", said Peter Eigen, chairman of Transparency International, the NGO based in Berlin dedicated to countering corruption in international business transactions.
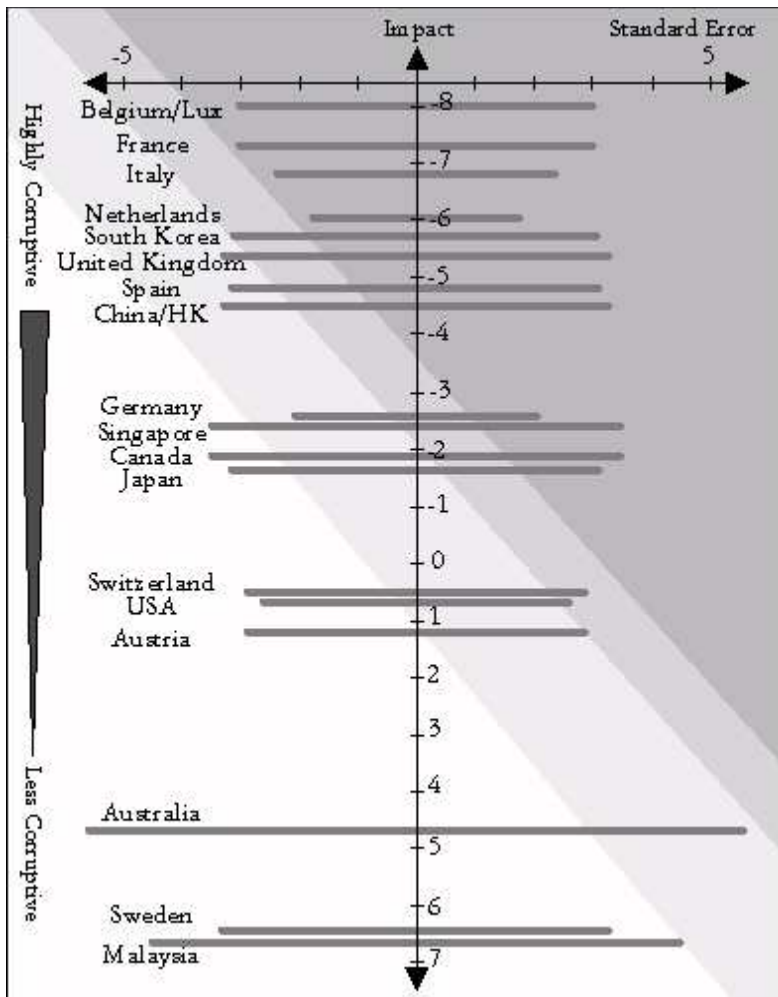
The results can appropriately be presented in the above diagram. While the "Impact" represents the propensity to pay bribes it should be taken into account that all coefficients are measured with a certain error, called the "Standard Error". We urge all who make use of our results to take this error into account. It indicates that the true value may indeed be higher or lower than the one we measured. By flipping the corresponding bar for a country, the resulting interval on the vertical axis now gives the upper and lower bound for an interval, which contains the true value with 60% probability. Doubling the size of this interval would provide a probability of 95%. Also the colours of the graphics are helpful in interpreting our results. In case the bars for two countries do not share a common colour in the graphics, the respective countries can be said to show a significant difference (on a 90% significance level) in their propensity to pay bribes. This applies e.g. to Australia and South Korea or to Belgium/Lux and Switzerland but not to China/HK and Austria.

The full text of the study will be forthcoming in the European Journal of Development Research, Volume 10, No. 1. It is an investigation of export structures and takes into account various causes and influences on trade, such as geographic distance, sectoral differences, common languages, trade blocks and - most important - the Transparency International Corruption Perception Index 1996, an index which describes the degree of corruption of importing countries as perceived by business

people. The influence of corruption of the biggest 87 importing countries has been shown to differently affect the trade structure of leading exporting countries. Since standard economic explanations for bilateral trade flows have been included into the investigation, the results point to a different inclination of exporters to offer bribes in exchange for contracts and their capability to apply these questionable skills in a succesful manner.

Briefing Notes on the First Enquiry into the Bribery Propensity of Leading Exporting Nations

Methodology

- *What is the methodology you have adopted?*
  The methodology focuses on the link between levels of trade and corruption. Corruption is measured as the inclination of public officials of importing countries to accept bribes (as illustrated by the TI Corruption Perception Index 1996). The current study investigates the relative advantage of an exporting country in import markets with high levels of corruption. Other factors that might influence international trading patterns, such as language barriers, geographical proximity, colonial heritage, the size of a trading economy, trade barriers and the composition of trade (i.e. agricultural products, chemicals, transport equipment, etc.) have been controlled for in the study.

- *How can trade be affected by corruption*
  The most obvious kind of influence refers to goods which are imported by the public sector. The extent of corruption of public officials and politicians influences, which competitor is most likely to win a contract. Tendering procedures can be falsified and contracts be awarded in favor of those competitors which offer the highest bribes. However, also the imports of the private sector (and also those of subsidiaries of multinational companies) can be influenced by the extent of corruption prevalent in a country. On the one hand, the extent of corruption at all state levels which regulate and control external trade (customs, trade ministry, trade regulation authorities) impact on this kind of business and those exporting countries that are inclined to go along with corrupt practices obtain a competitive advantage. On the other hand, also the acquisitions by the private sector may require the payment of bribes. In so far as our corruption index is a good proxy for the extent of private forms of corruption, also this influence is captured in our study.

- *What is measured by your approach?*
  We measure the propensity of exporters to offer bribes as indicated by actual trade relations. This includes not only the inclination, but also the skilful (criminal) capacity to obtain contracts via bribes. Those countries which may not object morally against paying bribes but are lacking the necessary experience to obtain and secure contracts with the help of bribes also come out less corruptive in this investigation.

- *Why did you use this methodology?*
  The methodology allows us to study international bribery as reflected in real business transactions not just as a matter of perception. However, we concede that the methodology applied may not be the only fruitful approach. By proposing this methodology the study also encourages future research in this area which may allow for even more precision of the results. As an alternative approach one may conduct an expert survey. However, the costs involved in doing a credible international survey is considerable. A first survey has been conducted with a self selecting sample at this site. The results are given only to those who also contribute their evaluation. It reveals a very similar assessment of western countries behaviour and thus supports the results of the first enquiry. Still, many Asian countries

scored worse there, which could however be traced back to the dominance of the western hemisphere in the sample. As more methodological approaches are available in the future the results may improve further with respect to credibility and precision.

- *Has this methodology been endorsed by other academics in the field?*
The article has been circulated among leading economists and scholars of corruption and at three academic meetings and conferences. Overwhelmingly, it has attracted encouraging comments. Selective quotations from leading researchers in the area of corruption and development are: "The article is impressive in that it tries to open new empirical ground by bringing to bear a powerful array of econometric tools". "it is 'a first', on a very important yet tricky and uncharted issue, and approached with much academic rigour and technical ingenuity. It is also very interesting. Whichever constructive criticisms one may have with the paper, they arise because it is a very good and valiant first effort on this issue". "this paper is an interesting and clever effort". While no one criticised the basic methodology the criticism voiced has been included into the paper or the explanatory notes presented here.

Data and Sources

- *How were the countries in the study selected?*
The 18 exporting countries are the world's largest exporters. Two countries are noteworthy for their exclusion from the list. For Taiwan the statistical data is sometimes hard to obtain (also, their national statistical bureau did not cooperate in providing data) and may lack comparability to the other data. The results that we obtained did not satisfy us and we had subjective doubts as to whether the regression results reflect the business behaviour. These doubts led to the omission of the country. Saudi Arabia on the other hand is so different in its exports structure (mainly oil) that any comparisons to other exporters did not appear valuable. It would not be useful to extend the list to more countries since the data for bilateral trade flows are more difficult and random influences may be stronger. The importing countries that were assessed in the study represent the world's most important importers above $2 billion import value per annum. These are countries from all regions of the world. 8 African countries had been additionally included in order to appropriately represent this continent.

- *How up-to-date is your assessment?*
The assessment basically rests on two data pools. The Corruption Perceptions Index primarily draws on data from 1995 and 1996, but also on surveys dating back to 1993. The large amount of data needed for reliable scoring makes it necessary to use older data as well. The high correlation between the surveys, however, indicates that corruption rankings do not change dramatically in a short time span. Older data is therefore not necessarily less reliable. The trade data covers the period from 1992 to 1995.

- *What are the sources of your study?*
The degree of corruption in the world's 87 major importing countries was measured by the [Corruption Perception Index of 1996](). The source for the trade data is the International Monetary Fund Direction of Trade Yearbook, 1995 and 1996. The bilateral trade data covered the four-year period from 1992 to 1995. The composition of exports and imports has been obtained from the International Trade Statistics Yearbook 1994, United Nations, Vol. I. Geographic distances have been determined by the longitude and latitude of countries´ demographic centers and the application of spherical trigonometry.

- *May your data be "corrupted"?*
Export statistics are not always reliable. Deals which required bribery may not always be correctly documented in the export statistics. The study therefore relied only on the import

statistics. Importers do not have reasons to obfuscate the country where particular products came from. In other words, there is no systematic way for exporting countries to influence the statistics and improve their results by covering up corrupt contracts.

Assumptions and Conclusions

- *Are you saying that you must be corrupt if you are exporting successfully into a country where corruption is high?*
  The classification does not seek to indicate the degree to which individual corporations are corrupt, or are seen to be corrupt. What the study assumes is that the more corrupt an importing country the more difficult it may be for exporters into that country to abstain from paying bribes. Exporters with a high level of ethics will have difficulties exporting into such countries, unless their products are unique or of exceptional quality and price. The inclination by their competitors to bribe public officials will set these exporters at a disadvantage. Their offers will be turned down more often when they refuse to pay bribes, while their competitors can more easily acquire contracts. In relatively 'clean' countries paying bribes will always be regarded an improper way of promoting exports and so the exporter with a higher level of ethics will not be set at a disadvantage due to the resistance to offer bribes.
  Taking this into account, the study presupposes that exporters with a higher inclination to pay bribes have an unfair advantage over other exporters in countries with high levels of corruption. However, not all bribes are paid voluntarily: there are many instances of bribes being extorted by officials.

- *Wouldn't it simply be profitable for corrupt exporters to concentrate on corrupt importing countries to increase their market shares?*
  This is already happening. It should be kept in mind, however, that if corrupt exporters may temporarily be at a competitive advantage over less corruptive competitors, in the long run, corruption tends to harm both exporters and importers. Furthermore, as governments seek to control corruption it is the less corruptive exporters that stand to gain from these developments.

- *To what extent can governments of exporting nations influence the results you present?*
  Many governments support the bribery of their exporting industries by granting tax deductibility or turning a blind eye on criminal offences. Others are actively engaging in corruption, e.g., by allowing parts of their aid money to be diverted from the original purposes. To the extent that this contributes to the acquisition of import market shares the study does not only measure the behaviour of private exporters but also of the respective governments who support or at least do not resist this behaviour of their export business.

- *Is it realistic to assume that exporters would not pay bribes in order to achieve contracts and risk their existence in competitive markets?*
  Many business people argue that exporters merely adapt to local ethical standards in their effort to remain in business. This would force all competitors to act in the same way. This study indicates that differences between exporters exist. Theoretical considerations also suggest that a variety of ethical standards can survive market pressures. Allowing employees to pay bribes is not always profitable since the discretion required also puts employees into a position to fraudulently keep a share of the revenues for themselves. Furthermore, contracts achieved with the help of bribery usually lack legal possibilities of enforcement, bringing about contractual risks to firms choosing this method of acquisition.

- *Shouldn't the study focus on public sector imports rather than overall imports?*
  As has been argued before, also private sector imports are affected by the level of

corruption. Still, it would be worthwhile to study trade data of the public sector alone and possibly our results might even be improved. However, the difference between the public and private sectors are often very difficult to draw. While the private sector may lobby for particular public sector resources, the public sector may control parts of the "private" business. Therefore, since accurate data are not available such an approach may never be feasible.

- *Is it appropriate to compare less developed countries like China/HK or Malaysia with more developed countries such as Italy and Sweden?*
  Our results do not reveal any correlation between the degree of development and the behaviour of the export industry. To the best of our knowledge we are not aware that such a correlation exists. What may of course influence the performance of a country is the particular product which is produced and exported. In so far as less developed countries produce more basic manufactures as is China/Hong Kong or has a slight emphasis on crude materials, like Malaysia, this impact is accounted for in the regression. Such differences from the average export structure occurred in a similar fashion with more developed countries. Comparisons between higher and less developed countries are therefore valid.

- *To what extent does the local level of corruption correlate with the level of corruption of the exporters?*
  Countries with a high level of corruption of local politicians and public officials also score badly in our first enquiry into the exporters' behaviour. This can be seen by comparing Italy, Belgium and South Korea with Sweden and Australia. Looking at other countries, however, this relationship is less clear. Particularly in the Netherlands there appears to be the highest discrepancy between the two figures. In so far as some correlation exists we can conclude that a double standard of ethics which tries to limit corruption only to the export business is not necessarily sustainable. Either the export industry may import their standards of ethics from abroad or the exporter´s behaviour may already be determined by what they learned at home.

First Press Reports (incomplete)

- Wall Street Journal. August 25 and September 23, 1997.
- Le Soir, Belgium. September 5, 1997.
- The Straits Times, Singapore. September 18, 1997.