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# STATE VISITS AND INTERNATIONAL TRADE

*Volker Nitsch*

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**Volker Nitsch**
Free University Berlin
Hong Kong Institute for Monetary Research

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## Abstract

Politicians travel extensively abroad, for various reasons. One purpose of external visits is to improve bilateral economic relations. In this paper, I examine the effect of state visits on international trade. I use a large data set covering the travel activities of the heads of state of France, Germany and the United States between 1948 and 2003. My results indicate that state and official visits are indeed positively correlated with exports. A typical visit is associated with higher bilateral exports by about 8 to 10 percent, holding other things constant.

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Address:
Volker Nitsch
Free University Berlin
Department of Economics
Boltzmannstrasse 20
14195 Berlin
Germany
Tel.: (030) 838-56280
Fax: (030) 838-54142
E-mail: vnitsch@wiwiss.fu-berlin.de

# 1. Introduction

Politicians travel extensively abroad. In 2003, United States president George W. Bush made seven international trips, visiting twenty-one countries. President Jacques Chirac of France travelled on average more than two times a month out of the country for a total of twenty-five visits. Moreover, international travel activity seems to have strongly increased over time. At an extreme, German president Theodor Heuss paid no visit at all to foreign countries during his first five-year term in office (1949-1954); he made his first international appearance, after having been re-elected, only in 1956. More generally, the German foreign ministry reports for the period from 1964 to 1968 158 incoming visits and 127 outgoing visits by heads of state, prime ministers or foreign ministers; by 1984-88, both numbers had risen to 397 (Auswärtiges Amt [1995]).[1]

The purpose of international trips by heads of state varies enormously. While the general aim is to develop and enhance bilateral relations, the focus may be on political issues, human rights, environmental protection, cultural contacts, or other themes. A topic that often features most prominently during these talks, however, concerns economic relations. Topics to be discussed may range from global economic issues and closer economic cooperation to joint investment projects and trade disputes. Also, heads of state are often accompanied by a high-ranking delegation of business people and managers. On the occasion of state visits, contact offices and business representations are opened, treaties and contracts are signed, and major bilateral projects are officially handed over.

In this paper, I examine the empirical relationship between foreign visits by politicians and international trade. It has long been known that political factors affect the pattern of trade. For instance, democratic institutions, similar foreign policies and membership in the same military alliance or international organization tend to benefit trade. Similarly, wars, military conflicts or other political disputes inhibit trade.[2] Most recently, Andrew Rose (2005) has argued that the presence of diplomatic representations, such as embassies and consulates, promotes exports. Here, I ask: do state visits promote exports?

To analyze this issue, I use a large data set covering the travel activities of the heads of state of France, Germany and the United States between 1948 and 2003; I differentiate between various types of visits. In my benchmark specification, I use a standard gravity model of trade to control for other determinants of bilateral trade. However, endogeneity may be a potential problem. Therefore, I have also performed a number of robustness checks, including the use of a differences-in-differences specification.

I find that state and official visits have on average a positive effect on exports. A typical visit is associated with higher bilateral exports by about 8 to 10 percent, holding other things constant. This finding is statistically robust and economically reasonable.

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1 Even leaders of politically isolated countries travel. The 'Dear Leader' of North Korea, Kim Jong Il, visited China and Russia in 2001, Russia in 2001, and again China in 2004 (see www.kcna.co.jp). El 'máximo líder' Fidel Castro of Cuba travelled to Algeria, Malaysia, Venezuela and South Africa in 2001, Ecuador and Mexico in 2002, and Argentina and Mexico in 2003 (see www.ain.cubaweb.cu).

2 James Morrow, Randolph Siverson and Tressa Tabares (1998) provide an excellent overview.

The remainder of the paper is organized as follows. The next section discusses the role of state visits for bilateral relations. Section 3 provides a detailed description of the data on state visits. Benchmark estimation results are presented in section 4, followed by extensive sensitivity analyses. Finally, section 7 provides a brief conclusion.

## 2. State Visits

State visits are important. They are the highest form of diplomatic contact between two countries, and they often mark the further development in bilateral relations. In political circles, it is common to refer to these events on later occasions.

State visits are also viewed as being effective. For instance, the office of the German president notes that: "Such visits make a valuable contribution to foreign relations, for although the Federal Republic of Germany is represented abroad by its embassies, it is often only through face-to-face talks between leaders that productive outcomes fair to both sides can be found. Whether the objective is coordinating policy, explaining German interests or resolving any bilateral problems that may arise from time to time, the kind of informal talks the Federal President has with foreign leaders during his trips abroad can be most helpful."[3] Similarly, the British government emphasizes: "Concerns about any matters, including observance of international law by the country concerned, may be raised during a state visit."[4]

Finally, state visits take place only relatively rarely. Part of the explanation is that such visits are time-consuming and expensive; they are characterized by major ceremonial and diplomatic protocol and formality.[5] For instance, in the United Kingdom, where the Queen acts as host, the royal protocol describes a state visit as follows: "Each visit lasts from a Tuesday to a Friday, and the visiting Head of State stays either at Buckingham Palace, Windsor Castle or, occasionally, The Palace of Holyroodhouse in Edinburgh. During the visit, the Head of State will meet the Prime Minister, government ministers, leaders of the political parties, as well as meeting the heads of diplomatic missions in London, and leaders of commerce and industry. The Head of State will attend a State Banquet in his or her honour, and host a banquet in turn. One day is spent by the visiting Head of State outside London or Edinburgh, visiting places or organisations of interest to the visitor so that they can see various aspects of British life." Given this immense amount of preparations, it is not surprising that the British Queen usually hosts only two incoming state visits each year.[6]

The overwhelming majority of foreign travels by politicians, then, are other visits than state visits. Trips can still have official character; others may be working visits, trips with semi-official character, or private

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3 http://www.bundespraesident.de/en/The-role-of-the-Federal-Presid/The-Federal-President-s-role-i-,11182/States-visits.htm

4 http://www.publications.parliament.uk/pa/ld199697/ldhansrd/vo961114/text/61114w01.htm

5 The costs of the visit are usually borne by the host country.

6 http://www.royal.gov.uk/output/Page376.asp

visits.[7] While all of these visits could be, in principle, associated with economic issues, some visits are clearly unrelated to the economy (such as attendance at ceremonies). Therefore, in analyzing the relationship between travels and trade, it is important to control for the actual purpose of a visit. I now describe the data on state visits in more detail.

## 3. Data

My basic sample consists of all official external visits by the heads of state of France, Germany and the United States for the period from 1948 through 2003.[8] In all three countries, the formal head of state is the president. For Germany, however, I use the trips of the chancellor (*Bundeskanzler*) instead of the president (*Bundespräsident*) since the latter has no executive power and his foreign travels have mostly representative character. French data is only available from 1959 onwards.

In total, my data set comprises 1,513 official travels. For all these travels, I have compiled the date, the destination and the main purpose of the trip. The upper part of Table 1 provides a breakdown of travels by (home) country, period, and main destination. As noted before, travel activity has considerably increased over time. Also, European leaders tend to travel more often; this is not surprising given smaller country size and their higher degree of international cooperation and integration.

Data on travels are obtained from a number of different sources. Foreign travels by U.S. presidents are recorded by the Office of the Historian of the U.S. Department of State; the data are available online at http://www.state.gov/r/pa/ho/trvl. Detailed information on travels by French presidents is kindly provided by the archives and documentations department of the French presidency; additional information is obtained from the Musée du président Jacques Chirac. Finally, a listing of official travels by German chancellors, aggregated by chancellor and destination, is available from Auswärtiges Amt (1995); data from 1994 onwards is provided by the German foreign ministry directly. Based on these listings, the exact dates and the main purpose of the trips are identified, using information from Keesing's Archiv der Gegenwart.[9]

In most cases, the above sources also provide information on the status of a visit. Typically, a trip's status as a state visit or as a working visit (sometimes referred to as bilateral consultations) is clearly identified. All other visits are then classified by hand into two groups, based on the main purpose of the visit: official visits and other visits.

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[7] The British government notes on the difference between state visits, official visits, working visits and private visits: "Private visits and working visits take place at the initiative of the visitor. The arrangements are usually made by their London embassy or high commission. Programmes for working visits, as the name suggests, normally contain a working element, often a meeting with a senior government Minister. Private visits do not. State visits take place at the personal invitation of The Queen. The arrangements are made by Buckingham Palace, with support from the Foreign and Commonwealth Office and the relevant London embassy or high commission. [...] Heads of state can also visit this country as guests of Her Majesty's Government. Arrangements for guest of government visits are made by the Foreign and Commonwealth Office. Programmes normally include a number of working elements, including meetings with government Ministers, and government-hosted hospitality." See http://www.publications.parliament.uk/pa/ld200102/ldhansrd/vo020703/text/20703w01.htm

[8] It should be noted that, in 2003, these countries were the #1 (Germany), #2 (the U.S.), and #5 (France) leading exporter in the world, making up 25 percent of world merchandise exports.

[9] I thank Evan M. Duncan for some clarifying information, and Emmanuelle Flament-Guelfucci, Anne-Sylvie Chemille, and Barbara Wiegel for the provision of data.

Since all of the visits in my sample are, by definition, official, the main classification strategy for visits not explicitly labeled a state or a working visit is to identify reasons for travel other than bilateral talks. These reasons may include, among other things, attendance at multilateral talks and summits (such as G-7/G-8 meetings), visits to international organizations (such as the United Nations), attendance at ceremonies (such as official openings, anniversaries or state funerals), and informal visits (such as visits to military personnel and stop-overs). If none of these reasons is identifiable, travels are classified as official visits. In sum, I distinguish between four types of visits: state visits, official visits, working visits, and other visits.

In the empirical analysis, I will mainly focus on a pooled variable of state and official visits. While there may be little observable difference between a state visit and an official visit anyway (apart perhaps from protocol and formality), this procedure also helps to avoid some potential difficulties. For instance, there may have been ambiguities in the classification of a visit as a state visit. Further, in France, state visit status (*visite d'etat*) was unknown before president Francois Mitterrand took office; major trips by French presidents were previously labeled *visite officiel* or *voyage officiel*. Finally, in Germany, only the president (not the chancellor) officially pays state visits (though some of the chancellor's trips are occasionally labeled a state visit in the press). As a robustness check, however, I examine whether state visits have a separate effect on exports.

## 4. Results from a Gravity Approach

As my baseline econometric specification, I apply a gravity model of trade to examine the association between travels and exports. The gravity model, which essentially links the bilateral value of trade between two countries to their economic size and the distance between them, has been recently used extensively in the literature. It has an excellent empirical fit and also has robust theoretical foundations; see, for instance, Anderson and van Wincoop (2003).

In particular, I estimate variants of the following equation:

$$\mathrm{Exp}_{ijt} = \alpha + \beta_1 \mathrm{Dist}_{ij} + \beta_2 \mathrm{GDP}_{it}\mathrm{GDP}_{jt} + \Sigma_{k=3} \beta_k \mathrm{X}_{ijkt} + \gamma \mathrm{Visit}_{ijt} + \delta_t + \varepsilon_{ijt} \qquad (1)$$

where $Exp_{ij}$ denotes the log of exports from country i to j at time t in current U.S. dollars; *Dist* and *GDP* are the standard gravity regressors: the log of great-circle distance between geographic centers and the gross domestic product in current U.S. dollars, respectively; *X* is a set of other control variables that are typically found to affect the bilateral pattern of trade, including per capita incomes, sharing a common land border, sharing a common language, membership in the same free trade arrangement, current and former colonial links, and sharing a common currency; $Visit_{ijt}$ is a binary dummy variable that takes the value of one if the head of state of country i has paid an official visit to country j at time t; $\delta_t$ is a full set of year-specific fixed effects; and $\varepsilon_{ijt}$ is a stochastic error.

The coefficient $\gamma$ on the visits dummy is the parameter of interest to me; it captures the extent to which the value of exports to countries which have been recently visited by heads of state differ from the average value in the sample, after holding constant for other determinants of trade.

The data are mainly taken from standard sources. Exports (f.o.b.) come from the Direction of Trade Statistics CD-ROM compiled by the International Monetary Fund (IMF).[10] GDP and population are obtained from the World Bank's World Development Indicators; the series are extended to the period before 1960 with data from the IMF's International Financial Statistics. Distances are calculated based on geographic coordinates (latitude and longitude) taken from the CIA's World Factbook. For all other variables, I have used the classification from Rose (2004).[11]

Benchmark results are reported in Table 2. The first column of the table reports standard pooled OLS estimates for a conventional gravity specification. Throughout, standard errors have been adjusted for clustering across country pairs, and period-specific intercepts are always included. As shown, the gravity framework works well in explaining the trade pattern of the three exporting nations. Trade values tend to fall with distance and increase with the economic size (as measured by the countries' GDP) of the pair. Also, a common language, colonial links, and a common currency encourage trade, while landlockedness reduces trade. In total, the model explains remarkably large 86 percent of the variation in bilateral trade flows.

The next column adds the variable of interest. Are state and official visits by French and U.S. presidents and German chancellors associated with higher exports to a particular country? The answer is: yes. The estimated $\gamma$ coefficient is positive, statistically highly significant (with a t-statistic of 2.9) and economically reasonable. The magnitude of the coefficient of about 0.13 indicates that a typical official visit is associated with larger bilateral exports by about 14 percent (=exp[0.129]-1), holding other things constant.

In the other three columns of Table 2, I report the results from three different estimators. First, I include a comprehensive set of exporter and importer fixed effects. Then, I allow for country-pair specific fixed intercepts, and finally I also allow for country-pair specific random effects. To the extent that unobservable (or otherwise omitted) variables affect the pattern of trade, these estimators should provide a more consistent estimate of $\gamma$ since all time-invariant factors are automatically taken into account.[12] Therefore, these estimators seem generally better suited for the panel structure of the data (though I have no particular preference for one of these estimators).

The panel estimators leave the key finding of a robust positive association between visits and exports basically unaffected. The estimated $\gamma$ coefficient is always positive and significant, though the point estimate is marginally lower. The estimates indicate that state and official visits are on average associated

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[10] I follow conventional practice and ignore entries of zero (or unrecorded) trade. However, this problem is of only minor relevance anyway, since for most bilateral pairs in my sample, positive trade values are reported.

[11] The World Factbook is available online at www.cia.gov/cia/publications/factbook. Andrew Rose generously makes available his data sets at http://faculty.haas.berkeley.edu/arose/RecRes.htm.

[12] This also includes observable time-invariant factors which are included in the regression such as landlockedness in the case of country-specific fixed effects or distance in the case of country-pair specific fixed effects.

with higher exports by about 8 (=exp[0.076]-1) to 10 percent (=exp[0.094]-1) which is similar in magnitude to Rose's (2005) results for the effect of embassies on exports.

Next, I explore the time pattern of the linkage between visits and exports. In particular, I re-run the regression, but this time I add a comprehensive set of dummy variables for the five years before and after a state or official visit has taken place; that is, I estimate separate $\gamma$'s for $Visit_{ijt-5}$, $Visit_{ijt-4}$,…, $Visit_{ijt+5}$. Figure 1 provides a graph of the coefficients, with the vertical line marking the year in which a visit occurs. For convenience (and also for comparison with the results in Table 2), the figure plots four sets of estimates corresponding to the four different estimation techniques that I have used before; coefficients that are statistically different from zero are marked.

Interestingly, for all four estimation techniques, the $\gamma$'s are already positive and significant in the pre-visit period, indicating that exports to a country tend to be disproportionately large already before a visit to this country has taken place. While this may imply that simultaneous causality affects the results, an issue to which I will return in more detail below, it is encouraging to note that this effect is partly cured by the fixed effects estimators. When fixed effects are included, the pre-visit $\gamma$'s are lower (than those computed from pooled least-squares) and, for periods of more than two years before a visit, also indistinguishable from zero. Moreover, it may be not too surprising to see exports increase in the run-up to a visit. Some visits are, for instance, clearly related to the finishing and official handing-over of large (bilateral) investment projects.

Most importantly, however, state visits appear to have an independent, measurable effect on exports. The $\gamma$ parameter increases sizably in the year a visit takes place and increases further in the following two years (thereby in total almost doubling in magnitude), before the effect gradually begins to fade. In sum, exports are substantially higher in the post-visit period than before.

I have also performed a number of other robustness checks. Table 3 examines the sensitivity of the results to different types of visits. In the first row, I reproduce for convenience the baseline estimates for state and official visits. I then test explicitly for the effect of state visits on trade – without much success; the coefficient is not statistically different from zero at any conventional level of significance and actually takes a consistently negative sign. Results seem to be stronger for working visits, with $\gamma$ being mostly positive and significant, while other visits than state, official or working visits display no statistically identifiable association with exports. I consider these results as generally plausible and reassuring.

In Table 4, I replace the log of exports with the log of imports as regressand. The statistical association between visits and imports appears to be weaker than for exports; the estimates of $\gamma$ are smaller in magnitude and often lose statistical significance. Thus, although visits by politicians (and accompanying trade delegations) may generally indicate good bilateral economic relationships, they tend to promote exports rather than imports. Again, it is comforting to note that the results confirm intuition.[13]

[13] In the working paper version of this paper, I provide some further sensitivity analysis (e.g., slicing the sample along various lines). The results show some variation in the results for individual sub-samples, but overall are in line with the benchmark results.

Table 5 performs another extension, allowing for politician-specific effects of visits on exports. Not surprisingly, the head-specific $\gamma$'s vary considerably. There is substantial heterogeneity across individual politicians; results also differ for different estimators. For some politicians, however, estimates turn out to be remarkably robust, though I intend to take the precise point estimates not too literally. For instance, travels by president Charles de Gaulle and chancellor Konrad Adenauer are negatively correlated with exports. On the other hand, visits by president Jimmy Carter, chancellor Helmut Kohl and, most strongly, chancellor Gerhard Schröder are accompanied by substantially higher exports.[14]

## 5. Results from a Differences-in-Differences Specification

A potentially serious problem is simultaneous causality. State visits may promote exports, but the choice of destinations for state visits may also be affected by a destination's importance as an export market. To the extent that invitations for visits are accepted based on export potential, the estimate of $\gamma$ would be upwardly biased.

To deal with this issue, I apply a long-run differences-in-differences specification. In particular, I regress the annual growth rates of bilateral exports ($Expgrowth_{ijt}$) on a dummy variable ($EverVisit_{ij}$) that takes the value of one when a country has ever received an official visit from the exporting nation in my sample (and thus is a member of the treatment group) and a dummy ($Visit_{ijt}$) that is equal to one when an actual visit (i.e., treatment) has taken place. As before, I also include a comprehensive set of time dummies ($\delta_t$) so that I estimate an equation of the form:

$$\text{Expgrowth}_{ijt} = \alpha + \beta\ \text{EverVisit}_{ij} + \gamma\ \text{Visit}_{ijt} + \delta_t + \varepsilon_{ijt} \qquad (2)$$

This specification has a number of advantageous features. First, the focus on growth rates deals with all time-invariant factors that affect the level of bilateral exports; these factors simply cancel out, thereby taking account of any particularly large and intense bilateral trade relationship. Using growth rates instead of levels also deals with the problem of serial correlation in differences-in-differences regressions as emphasized by Bertrand, Duflo and Mullainathan (2004). Second, the $EverVisit_{ij}$ dummy controls for any systematic difference in growth in exports between countries which have received a visit (the treatment group) and countries which are not visited (the control group). To the extent that politicians travel to destinations to which their country exhibits particularly strong growth in exports, this dummy should capture this effect. Third, the time dummies control for any period-specific shocks and common trends in exports growth. Finally, other regression controls can be easily added to this model.

[14] There is also anecdotal evidence, supporting the view that the effect of visits may vary across heads of state. Edzard Reuter, former CEO of Daimler-Benz, notes: "In 1978, chancellor Schmidt invited me to accompany him to Tokyo and Singapore. In contrast to current practice, where the number of so-called "special guests" on those state visits has increased by a multiple, there were three business colleagues and a representative from the unions on board the air force Boeing 707. [...] It was completely different to accompany chancellor Kohl; I travelled with him and his delegation to the People's Republic of China, to Beijing and Canton, in 1983. By then, it was part of the usual decorum of such a visit to give the impression to the public that the chancellor in person has helped German companies to win orders worth billions." (Berliner Zeitung, January 31, 1998).

I first estimate equation (2) without additional controls by conventional pooled least squares. Table 6 presents the results. In the first column, I tabulate estimates when the treatment period is restricted to the year in which the visit actually takes place. The $\beta$ coefficient, which identifies the treatment group of countries which have ever received a visit, is positive and significant; that is, there is indeed a measurable difference in bilateral exports growth between countries which receive visits and places on earth that remain unvisited. But also the $\gamma$ coefficient is positive and significant, implying a substantial additional increase in exports growth to these countries at the time a visit actually occurs. In fact, the magnitude of the effect of visits on exports is almost twice as large as the long-run difference in exports growth between the treatment group and the control group.

In the other columns of Table 6, I report estimates when the treatment period is gradually extended over time. The results show strong evidence of a positive, but short-lived effect of state visits on exports. Rising marginally in magnitude for the year immediately following a visit, the estimate of $\gamma$ tends to get smaller for longer periods and eventually becomes insignificant. For periods of more than two years after a visit, a difference in exports growth rates is no longer measurable at a reasonable level of significance.

In the lower half of the table, I present analogous estimates when exporter and importer fixed effects are added. While the $\beta$ coefficient on the treatment group variable is insignificant in this specification (the treatment group identifier is a country-pair fixed effect), the key results remain essentially unaffected. Shortly after a state visit, exports grow strongly, an effect that loses significance after more than two years.

In another extension, I differentiate between the first visit to a country and repeated visits.[15] The first visit by a head of state to a particular country is typically strongly emphasized in political circles as well as in the press. Still, it may require frequent visits to achieve measurable outcomes. Therefore, to identify a possible non-linearity in the effect of visits on exports, I split the *Visit* variable into two separate variables, one for the first visit to a particular country (in my sample of almost 60 years) and another one for all other trips that (may) have followed to this destination.

Table 7 contains the results. The estimates reveal a striking difference in the effect of initial and repeated visits on exports growth. In fact, the estimated effect of state visits on exports seems to result purely from repeated visits. A first visit, in contrast, affects exports growth only in the first year (if anything) and is then often followed by a decline in exports in subsequent years.

While the differences-in-differences specification clearly shows that exports increase after a visit, one might still argue that politicians mainly choose travelling to destinations with large market potential; that is, politicians may tend to visit countries with generally strong import demand, so that the $\gamma$ coefficient would simply reflect strong increases in a country's imports (from potentially many suppliers) at the time a foreign official travels the country. To explore this hypothesis, I include an additional dummy variable to the specification, labeled *ReceivedVisit*, that takes the value of one whenever a country receives a visit (from one of the three exporters in my sample). The $\gamma$ coefficient then captures the visitors' country

[15] I also experimented, without much success, with adding year-specific regressors such as GDP growth.

exports growth to the travel destination (at the time a visit takes place) not only relative to other periods (as before) but also relative to other exporters.

The upper part of Table 8 shows that whenever a country receives a visit, exports of other countries also tend to be higher; the coefficient on the additional control variable is consistently positive, although not statistically different from zero. A potential explanation for this finding is that heads of state often pay visits to a similar set of countries within a few years. Also, a visit may indicate improved conditions of doing business with the host country. Still, the country that pays the visit exports significantly more than other countries in the sample.

In another robustness check, I extend the sample and include the rest of the world as an (aggregate) exporter, in addition to France, Germany and the United States. Perhaps other countries also report strong export growth to destinations that receive visits from French or U.S. presidents or German chancellors. Since I lack information on travels of other heads of state, however, and I also ignore other determinants of trade growth, I consider this a very strong test. As shown in the lower part of Table 8, estimation results are generally weaker with this specification, and the $\gamma$ coefficient even loses statistical significance. However, the coefficient remains strongly positive and is only marginally reduced in magnitude so that the effect of a visit on exports remains economically important. The estimated coefficients imply that exports growth of a visiting country is almost twice as large as that of other countries (which may or may not have paid a visit).

## 6. Results from a Instrumental Variables Approach

An alternative approach to establish causality is IV estimation. The problem here is to find a good instrumental variable which is exogenous yet highly correlated with state visits. Moreover, since *Visit* is a time-variant, year-specific variable, it is important that the instrument also takes account of the panel structure of the data.[16] A useful candidate in all these respects appears to be the (log of the) number of visiting tourists that a country has received in a given year. While it could be argued that larger tourist flows between two countries benefit bilateral trade (though I am not aware of convincing evidence linking tourism to trade), it is not obvious that a country's general attractiveness for tourists as a travel destination should affect pair-wise trade; I take this as suggesting that the total number of visiting tourists aggregated across all bilateral trading partners is plausibly exogenous. Further, (time-varying) preferences of tourists may also influence the actual choice of travel destinations by heads of state, an issue which I analyze below. Data on tourist arrivals are obtained from various issues of the Yearbook of Tourism Statistics from the World Tourism Organization; the data are available from 1952 onwards.

Two-stage least-squares estimates of equation (1), where state visits are treated as endogenous, are presented in Table 9. The upper panel of the table presents the 2SLS estimates of the coefficient of interest, $\gamma$, and the bottom panel gives the corresponding first stages. Again, results from various econometric specifications, adding various sets of fixed effects, are reported.

[16] Rose (2005) uses, in a cross-country sample, variables of a country's geo-political importance and its attractiveness for tourists as instruments for the presence of diplomatic missions.

Reassuringly, the IV results broadly confirm earlier OLS and differences-in-differences results, though the estimates (not surprisingly) turn out to be less robust and somewhat less significant. At one extreme, in the specification without any fixed effects, the IV estimation fails completely, as shown in column (1). In this set-up, state visits are unrelated to tourism so that the identification strategy suffers from a weak instrument problem. For the two other regression specifications, however, where different combinations of fixed effects are included, the identification strategy works well.[17] For one thing, tourist arrivals are a valid predictor for the occurrence of a state visit. More importantly, the 2SLS estimate of the effect of state visits on exports is positive and statistically significant at conventional levels. Without emphasizing the IV results too strongly, the estimates provide further evidence that the finding of a positive effect of state visits on trade is not the result of endogeneity bias.

# 7. Conclusions

Politicians travel extensively abroad, for various reasons. One purpose of external visits is to improve bilateral economic relations. In fact, an often stated objective is to promote a country's exports. In this paper, I examine whether state visits have indeed a measurable effect on international trade.

Based on a large data set that covers the travel activities of the heads of state of France, Germany and the United States for the period from 1948 to 2003, I find that state and official visits are indeed positively correlated with exports. I first apply a gravity model of trade to control for other trade determinants and find that a visit is typically associated with higher exports by about 8 to 10 percent. My results are sensitive to the type of visit (as they should be), and are much less robust for imports.

I then use a differences-in-differences specification to deal with the issue of reverse causality. The results show a strong, but short-lived effect of visits on bilateral exports growth, which is driven by repeated visits to a country. Additional support is provided by an exploratory instrumental variables analysis.

[17] This is consistent with the finding of Rose (2005) that the IV results are stronger when destination fixed effects are included.

# References

Anderson, James E. and Eric van Wincoop (2003), "Gravity with Gravitas: A Solution to the Border Puzzle," *American Economic Review*, 93(1): 170-92.

Auswärtiges Amt (1995), *Außenpolitik der Bundesrepublik Deutschland*, Köln: Verlag Wissenschaft und Politik.

Bertrand, Marianne, Esther Duflo and Sendhil Mullainathan (2004), "How Much Should We Trust Differences-in-Differences Estimates?" *Quarterly Journal of Economics*, 119(1): 249-75.

Morrow, James D., Randolph M. Siverson and Tressa Tabares (1998), "The Political Determinants of International Trade: The Major Powers, 1907-1990," *American Political Science Review*, 92(3): 649-61.

Rose, Andrew K (2004), "Do We Really Know that the WTO increases Trade?" *American Economic Review*, 94(1): 98-114.

Rose, Andrew K (2005), "The Foreign Service and Foreign Trade: Embassies as Export Promotion," NBER Working Paper No.11111, Cambridge MA: National Bureau of Economic Research.

**Table 1. Visits by heads of state**

a) All visits

| | France (president) | Germany (chancellor) | United States (president) | Total |
|---|---|---|---|---|
| **1948-49** | – | 0 | 0 | 0 |
| **1950-59** | 3[1] | 39[2] | 23 | 65 |
| **1960-69** | 50 | 51 | 61 | 162 |
| **1970-79** | 83 | 91 | 65 | 239 |
| **1980-89** | 171 | 114 | 61 | 346 |
| **1990-99** | 180 | 149 | 144 | 473 |
| **2000-03** | 71 | 93 | 64 | 228 |
| **1948-2003** | 558 | 537 | 418 | 1513 |
| **Top destination** | Germany (43 visits) | France (52 visits) | France (23 visits) | UK (88 visits) |

b) State and official visits

| | France (president) | Germany (chancellor) | United States (president)[3] | Total |
|---|---|---|---|---|
| **1948-49** | – | 0 | 0 | 0 |
| **1950-59** | 3[1] | 12[2] | 2 | 17 |
| **1960-69** | 36 | 25 | 16 | 77 |
| **1970-79** | 43 | 41 | 31 | 115 |
| **1980-89** | 87 | 46 | 24 | 157 |
| **1990-99** | 87 | 71 | 16 | 174 |
| **2000-03** | 29 | 59 | 1 | 89 |
| **1948-2003** | 285 | 254 | 90 | 629 |

Notes:

1 Data for 1959 only.

2 Chancellor Konrad Adenauer also served as (his own) minister of foreign affairs from 1951-1955.

3 Many bilateral visits of U.S. presidents are officially classified as working visits.

**Table 2. Benchmark results**

| | Pooled OLS | Pooled OLS | Exporter & importer fixed effects | Pair-wise fixed effects | Pair-wise random effects |
|---|---|---|---|---|---|
| **Period** | 1948-2003 | 1948-2003 | 1948-2003 | 1948-2003 | 1948-2003 |
| **State and official visits** | | 0.129** (0.045) | 0.094** (0.033) | 0.076** (0.028) | 0.083** (0.028) |
| **Log Distance** | -0.983** (0.050) | -0.981** (0.050) | -1.253** (0.014) | | -1.024** (0.047) |
| **Log Product GDP** | 0.848** (0.018) | 0.847** (0.018) | 0.163** (0.043) | 0.311** (0.037) | 0.771** (0.016) |
| **Log Product GDP per capita** | 0.032 (0.032) | 0.033 (0.032) | 0.435** (0.040) | 0.281** (0.034) | -0.093** (0.017) |
| **Common border** | 0.003 (0.181) | 0.001 (0.181) | -0.679** (0.046) | | 0.135 (0.207) |
| **Common language** | 0.369** (0.093) | 0.370** (0.092) | 0.347** (0.021) | | 0.488** (0.090) |
| **RTA** | -0.197# (0.109) | -0.197# (0.109) | 0.010 (0.042) | 0.411** (0.044) | 0.488** (0.043) |
| **Landlocked** | -0.825** (0.097) | -0.824** (0.097) | | | -1.021** (0.080) |
| **Island** | 0.008 (0.102) | 0.007 (0.102) | | | -0.147 (0.097) |
| **Current colony** | 1.765** (0.249) | 1.765** (0.249) | 1.480** (0.111) | 1.380** (0.318) | 1.693** (0.276) |
| **Ever colony** | 1.255** (0.160) | 1.248** (0.160) | 1.833** (0.034) | | 1.112** (0.147) |
| **Currency union** | 0.482** (0.153) | 0.482** (0.153) | -0.213** (0.049) | -0.035 (0.058) | 0.063 (0.057) |
| **R-squared** | 0.86 | 0.86 | 0.76 | 0.76 | 0.76 |

Notes: Dependent variable is the log of exports. Robust standard errors are in parentheses. **, * and # denotes statistically robust at the 1%, 5% and 10% level, respectively. Year effects included in all regressions but unreported. Exporting nations are the United States, France (post-1958), and Germany. Number of observations = 18,409.

**Table 3. Results by type of visit**

| | Pooled OLS | Exporter & importer fixed effects | Pair-wise fixed effects | Pair-wise random effects |
|---|---|---|---|---|
| **State and official visits** | 0.129** (0.045) | 0.094** (0.033) | 0.076** (0.028) | 0.083** (0.028) |
| **State visits** | -0.063 (0.082) | -0.014 (0.071) | -0.078 (0.059) | -0.083 (0.060) |
| **Working visits** | -0.059 (0.071) | 0.150** (0.050) | 0.104* (0.042) | 0.099* (0.043) |
| **State, official and working visits** | 0.074# (0.042) | 0.119** (0.029) | 0.090** (0.024) | 0.094** (0.024) |
| **Other visits** | -0.078 (0.049) | 0.030 (0.037) | 0.020 (0.030) | 0.036 (0.031) |
| **All visits** | 0.018 (0.043) | 0.105** (0.025) | 0.078** (0.021) | 0.088** (0.021) |

Notes: Dependent variable is the log of exports. Robust standard errors are in parentheses. **, * and # denotes statistically robust at the 1%, 5% and 10% level, respectively. Same controls used (but unreported) as in Table 2. Year effects always included but unreported. Number of observations = 18,409.

**Table 4. Imports**

| | Pooled OLS | Exporter & importer fixed effects | Pair-wise fixed effects | Pair-wise random effects |
|---|---|---|---|---|
| **State and official visits** | 0.067 (0.061) | 0.054 (0.047) | 0.034 (0.041) | 0.052 (0.042) |
| **State visits** | -0.055 (0.090) | 0.073 (0.101) | -0.009 (0.088) | -0.020 (0.090) |
| **Working visits** | -0.144 (0.092) | 0.148* (0.071) | 0.161* (0.063) | 0.159* (0.064) |
| **State, official and working visits** | 0.001 (0.054) | 0.088* (0.041) | 0.077* (0.035) | 0.089* (0.036) |
| **Other visits** | -0.074 (0.058) | 0.066 (0.052) | 0.049 (0.045) | 0.094* (0.046) |
| **All visits** | -0.032 (0.053) | 0.098* (0.036) | 0.082** (0.031) | 0.112** (0.032) |

Notes: Dependent variable is the log of imports. Robust standard errors are in parentheses. **, * and # denotes statistically robust at the 1%, 5% and 10% level, respectively. Same controls used (but unreported) as in Table 2. Year effects always included but unreported. Number of observations = 17,990.

**Table 5. Results by head of state**

| | Pooled OLS | Exporter & importer fixed effects | Pair-wise fixed effects | Pair-wise random effects |
|---|---|---|---|---|
| **U.S. Presidents** | | | | |
| **Truman** | | | | |
| **Eisenhower** | -0.193 | 0.143 | -0.008 | -0.043 |
| | (0.232) | (0.373) | (0.309) | (0.313) |
| **Kennedy** | -0.326# | -0.047 | -0.491 | -0.513 |
| | (0.188) | (0.431) | (0.356) | (0.361) |
| **Johnson** | 0.379# | -0.235 | -0.389 | -0.348 |
| | (0.221) | (0.335) | (0.278) | (0.281) |
| **Nixon** | -0.216 | -0.105 | -0.356* | -0.349# |
| | (0.267) | (0.216) | (0.179) | (0.181) |
| **Ford** | -0.036 | -0.197 | -0.314 | -0.293 |
| | (0.513) | (0.373) | (0.309) | (0.314) |
| **Carter** | 0.462** | 0.556** | 0.338* | 0.360* |
| | (0.169) | (0.193) | (0.160) | (0.162) |
| **Reagan** | 0.092 | 0.247 | 0.001 | 0.028 |
| | (0.134) | (0.177) | (0.147) | (0.149) |
| **Bush I** | 0.843** | 0.525 | 0.055 | -0.022 |
| | (0.302) | (0.526) | (0.436) | (0.441) |
| **Clinton** | 0.426* | 0.302 | 0.082 | 0.059 |
| | (0.210) | (0.193) | (0.160) | (0.162) |
| **Bush II** | -1.575** | -0.662 | -0.266 | -0.306 |
| | (0.081) | (0.747) | (0.627) | (0.634) |
| **French Presidents** | | | | |
| **De Gaulle** | -0.569** | -0.329** | -0.219# | -0.255* |
| | (0.148) | (0.148) | (0.123) | (0.125) |
| **Pompidou** | 0.196 | 0.261 | 0.040 | 0.044 |
| | (0.213) | (0.216) | (0.179) | (0.181) |
| **Giscard d'Estaing** | -0.062 | 0.135 | 0.077 | 0.069 |
| | (0.099) | (0.131) | (0.109) | (0.110) |
| **Mitterrand** | -0.008 | 0.098 | 0.096 | 0.091 |
| | (0.079) | (0.077) | (0.064) | (0.065) |
| **Chirac** | 0.042 | 0.091 | 0.172* | 0.169* |
| | (0.082) | (0.082) | (0.069) | (0.069) |
| **German Chancellors** | | | | |
| **Adenauer** | -0.758** | -0.610** | -0.326# | -0.393* |
| | (0.195) | (0.218) | (0.181) | (0.183) |
| **Erhard** | -0.299 | -0.141 | -0.008 | -0.067 |
| | (0.244) | (0.238) | (0.197) | (0.200) |
| **Kiesinger** | 0.120 | -0.040 | 0.097 | 0.079 |
| | (0.142) | (0.264) | (0.219) | (0.222) |
| **Brandt** | -0.030 | -0.004 | 0.182 | 0.149 |
| | (0.154) | (0.225) | (0.187) | (0.189) |
| **Schmidt** | 0.146 | -0.099 | -0.011 | -0.008 |
| | (0.142) | (0.144) | (0.120) | (0.122) |
| **Kohl** | 0.484** | 0.139# | 0.121# | 0.154* |
| | (0.089) | (0.082) | (0.068) | (0.069) |
| **Schröder** | 0.540** | 0.304** | 0.228** | 0.293** |
| | (0.132) | (0.092) | (0.078) | (0.078) |
| **R-squared** | 0.86 | 0.56 | 0.76 | 0.85 |

Notes: See notes to Table 2.

**Table 6. Differences-in-differences results**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | **Pooled OLS** | | | |
| **Ever Visit** | 0.019** (0.004) | 0.016** (0.004) | 0.016** (0.004) | 0.017** (0.004) | 0.017** (0.004) | 0.019** (0.004) |
| **Visit (year 0)** | 0.028** (0.010) | | | | | |
| **After 0-1 year** | | 0.029** (0.008) | | | | |
| **After 0-2 yrs** | | | 0.021** (0.006) | | | |
| **After 0-3 yrs** | | | | 0.011# (0.006) | | |
| **After 0-4 yrs** | | | | | 0.009# (0.005) | |
| **After 0-5 yrs** | | | | | | 0.003 (0.005) |
| **R-squared** | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| | | | **Exporter & importer fixed effects** | | | |
| **Ever Visit** | 0.005 (0.003) | 0.002 (0.003) | 0.002 (0.003) | 0.003 (0.003) | 0.004 (0.003) | 0.005 (0.003) |
| **Visit (year 0)** | 0.022* (0.010) | | | | | |
| **After 0-1 year** | | 0.024** (0.008) | | | | |
| **After 0-2 yrs** | | | 0.015* (0.007) | | | |
| **After 0-3 yrs** | | | | 0.005 (0.006) | | |
| **After 0-4 yrs** | | | | | 0.004 (0.006) | |
| **After 0-5 yrs** | | | | | | -0.002 (0.005) |
| **R-squared** | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |

Notes: Dependent variable is the annual growth rate of bilateral exports. Robust standard errors are in parentheses. **, * and # denotes statistically robust at the 1%, 5% and 10% level, respectively. Year effects always included but unreported. Visits generally refer to state and official visits. Number of observations = 22,590.

**Table 7. First visit vs. multiple visits**

| | Pooled OLS | | | | | |
|---|---|---|---|---|---|---|
| **Ever Visit** | 0.018** (0.004) | 0.016** (0.004) | 0.016** (0.004) | 0.017** (0.004) | 0.017** (0.004) | 0.018** (0.004) |
| **First Visit (year 0)** | 0.012 (0.022) | | | | | |
| **Repeated Visit (year 0)** | 0.033** (0.011) | | | | | |
| **First Visit (after 0-1 year)** | | 0.031 (0.021) | | | | |
| **Repeated Visit (after 0-1 year)** | | 0.029** (0.008) | | | | |
| **First Visit (after 0-2 yrs)** | | | 0.018 (0.015) | | | |
| **Repeated Visit (after 0-2 yrs)** | | | 0.022** (0.007) | | | |
| **First Visit (after 0-3 yrs)** | | | | 0.008 (0.012) | | |
| **Repeated Visit (after 0-3 yrs)** | | | | 0.012# (0.007) | | |
| **First Visit (after 0-4 yrs)** | | | | | -0.003 (0.011) | |
| **Repeated Visit (after 0-4 yrs)** | | | | | 0.013* (0.005) | |
| **First Visit (after 0-5 yrs)** | | | | | | -0.012 (0.010) |
| **Repeated Visit (after 0-5 yrs)** | | | | | | 0.008 (0.005) |
| **R-squared** | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |

**Table 7 (continued). First visit vs. multiple visits**

| | Exporter & importer fixed effects | | | | | |
|---|---|---|---|---|---|---|
| **Ever Visit** | 0.003<br>(0.003) | 0.002<br>(0.018) | 0.003<br>(0.003) | 0.004<br>(0.003) | 0.004<br>(0.004) | 0.005<br>(0.004) |
| **First Visit (year 0)** | -0.001<br>(0.022) | | | | | |
| **Repeated Visit (year 0)** | 0.029*<br>(0.011) | | | | | |
| **First Visit (after 0-1 year)** | | 0.018<br>(0.021) | | | | |
| **Repeated Visit (after 0-1 year)** | | 0.025**<br>(0.009) | | | | |
| **First Visit (after 0-2 yrs)** | | | 0.006<br>(0.016) | | | |
| **Repeated Visit (after 0-2 yrs)** | | | 0.018*<br>(0.007) | | | |
| **First Visit (after 0-3 yrs)** | | | | -0.004<br>(0.013) | | |
| **Repeated Visit (after 0-3 yrs)** | | | | 0.008<br>(0.007) | | |
| **First Visit (after 0-4 yrs)** | | | | | -0.014<br>(0.012) | |
| **Repeated Visit (after 0-4 yrs)** | | | | | 0.010#<br>(0.006) | |
| **First Visit (after 0-5 yrs)** | | | | | | -0.023*<br>(0.011) |
| **Repeated Visit (after 0-5 yrs)** | | | | | | 0.005<br>(0.005) |
| **R-squared** | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 |

Notes: Dependent variable is the annual growth rate of bilateral exports. Robust standard errors are in parentheses. **, * and # denotes statistically robust at the 1%, 5% and 10% level, respectively. Year effects always included but unreported. Visits generally refer to state and official visits. Number of observations = 22,590.

**Table 8. Adding control for host countries**

| | Basic sample | | | | | |
|---|---|---|---|---|---|---|
| | Pooled OLS | | | Exporter & importer fixed effects | | |
| **Ever Visit** | 0.018** (0.004) | 0.015** (0.004) | 0.016** (0.004) | 0.005** (0.003) | 0.003 (0.003) | 0.003 (0.003) |
| **Visit (year 0)** | 0.019 (0.014) | | | 0.013 (0.014) | | |
| **After 0-1 year** | | 0.020* (0.010) | | | 0.014 (0.010) | |
| **After 0-2 yrs** | | | 0.019* (0.008) | | | 0.012 (0.009) |
| **Received Visit (year 0)** | 0.010 (0.011) | | | 0.010 (0.012) | | |
| **Received Visit (after 0-1 year)** | | 0.011 (0.008) | | | 0.012 (0.009) | |
| **Received Visit (after 0-2 yrs)** | | | 0.003 (0.007) | | | 0.004 (0.008) |
| **Observations** | 22,590 | 22,590 | 22,590 | 22,590 | 22,590 | 22,590 |
| **R-squared** | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 |

| | Add rest of the world as exporter | | | | | |
|---|---|---|---|---|---|---|
| | Pooled OLS | | | Exporter & importer fixed effects | | |
| **Ever Visit** | 0.008* (0.004) | 0.007# (0.004) | 0.007# (0.004) | 0.014** (0.003) | 0.012** (0.004) | 0.012** (0.004) |
| **Visit (year 0)** | 0.013 (0.012) | | | 0.010 (0.012) | | |
| **After 0-1 year** | | 0.014 (0.009) | | | 0.010 (0.009) | |
| **After 0-2 yrs** | | | 0.011 (0.007) | | | 0.007 (0.007) |
| **Received Visit (year 0)** | 0.016* (0.008) | | | 0.014 (0.009) | | |
| **Received Visit (after 0-1 year)** | | 0.015* (0.006) | | | 0.014* (0.007) | |
| **Received Visit (after 0-2 yrs)** | | | 0.009# (0.005) | | | 0.008 (0.006) |
| **Observations** | 31,286 | 31,286 | 31,286 | 31,286 | 31,286 | 31,286 |
| **R-squared** | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |

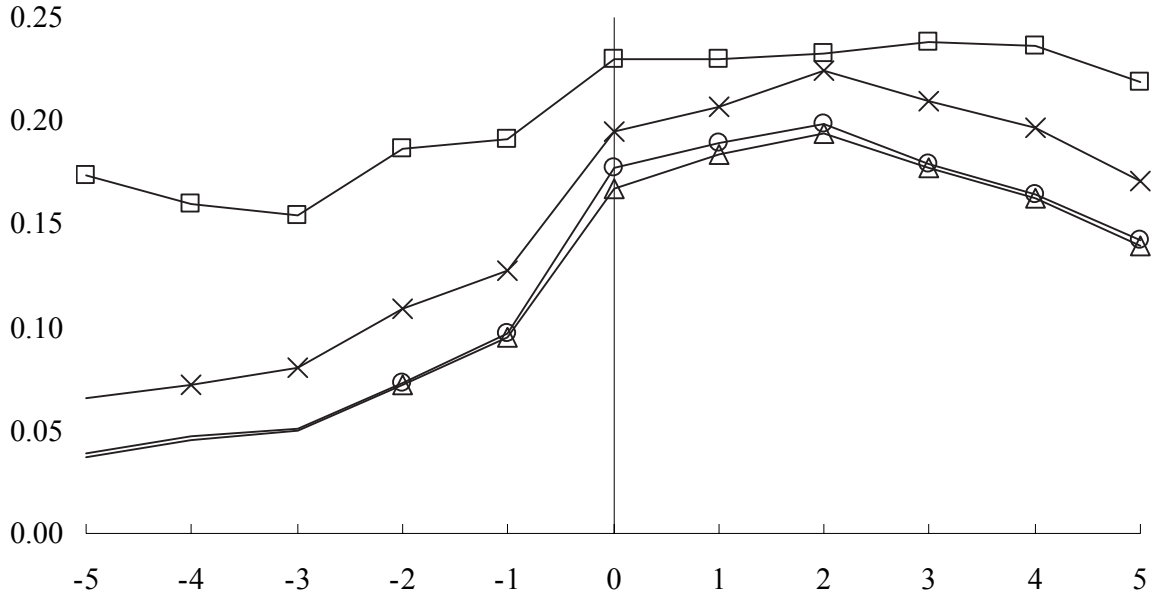
Notes: Dependent variable is the annual growth rate of bilateral exports. Robust standard errors are in parentheses. **, * and # denotes statistically robust at the 1%, 5% and 10% level, respectively. Year effects always included but unreported. Visits generally refer to state and official visits.

**Table 9. Instrumental variables results**

| | Pooled | Exporter & importer fixed effects | Pair-wise fixed effects |
|---|---|---|---|
| **Two-stage least squares** | | | |
| **State and official visits** | -16.917<br>(20.791) | 11.930#<br>(6.595) | 6.913**<br>(1.088) |
| **First stage for state and official visits** | | | |
| **Log Total Tourist Arrivals** | -0.007<br>(0.008) | 0.009**<br>(0.003) | 0.015**<br>(0.002) |
| **R-squared** | 0.00 | 0.32 | 0.75 |

Notes: Two-stage least squares estimation. Dependent variable is the log of exports. Robust standard errors are in parentheses. **, * and # denotes statistically robust at the 1%, 5% and 10% level, respectively. In both stages, the same controls are used (but unreported) as in Table 2. Year effects always included but unreported. Number of observations = 18,409.

**Figure 1. The effect of state visits on exports**




Notes: Lines show coefficient estimates for different estimation techniques. Lines with squares, crosses, triangles and circles indicate pooled OLS, exporter and importer FE, pair-wise FE and pair- wise RE, respectively. Squares, crosses, triangles and circles mark coefficients that are statistically robust at the 5% level.