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Popular Attitudes, Globalization, and Risk

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POPULAR ATTITUDES, GLOBALIZATION, AND RISK

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Abstract

Popular opposition to globalization may be interpreted as xenophobia or hostility to market economics and signal country risk, including the degree of security risk—the possibility that local staff or facilities could be subject to discriminatory treatment, harassment, or attack.
  This paper integrates the Pew Global Attitudes data into a series of economic models on foreign direct investment (FDI), sovereign ratings, and local entrepreneurship and finds that some responses correlate with economic variables of interest, conveying information beyond what can be explained through standard models. More tolerant countries attract more FDI, obtain better ratings, and exhibit more entrepreneurship.

Globalization is typically defined as an expansion of cross-border economic interaction, though the term also embodies less precise though important, noneconomic connotations relating to the erosion of local control, autonomy, and identity in the organization of political, social, and cultural life. At the popular level, these meanings are sometimes conflated with anticapitalist, anti-Western, or anti-American impulses.

Popular attitudes toward globalization, in both its narrow and broad meanings, potentially matter for economic outcomes for two reasons. First, public opinion exerts at least some constraint on local officials in democratic and nondemocratic polities alike. As a consequence, popular attitudes toward globalization may signal local policy tendencies and, perhaps more important, the likely character of policy implementation by local authorities. In this way, public opinion acts as a signal of country or political risk. These risks include direct expropriation as well as indirect expropriation through the ex post imposition of policies such as new labor regulations, corporate taxes, or restrictions on the repatriation of capital. This signaling channel may be particularly important to foreign firms contemplating direct investment in a particular locale.

More directly, popular attitudes may signal the degree of security risk—the possibility that local staff or facilities could be subject to harassment or attack. Such actions range from largely symbolic assaults on well-known foreign archetypes such as vandalism of McDonald's hamburger outlets, to more deadly terrorist attacks by militants targeting foreign businesses, to more broadly participatory mob assaults on foreign-owned businesses, to less publicized kidnappings and assassinations of expatriates that occur on a disturbingly regular basis around the world.[1]

The question naturally arises as to how prospective investors form their subjective appraisals of potential risks across alternative host locations. One can imagine investors obtaining information through a variety of sources including surveys, consultants, and professional risk assessment services. In 2002 the Pew Global Attitudes project surveyed more than 38,000

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[1] McDonald's (and other well-known, foreign-branded retail outlets such as KFC and Shell) have been attacked in Europe, Latin America, and South Asia. Examples of terrorist attacks against a foreign enterprise would be the May 2004 assaults by militants on foreign business offices and residences in the towns of Yanbu and Khobar, Saudi Arabia, that left 28 people dead. An example of xenophobic communal violence would be the January 29, 2003, rioting in Phnom Penh, Cambodia. According to a US State Department report, rioters methodically attacked Thai-owned businesses, causing an estimated $50 million in damages. Reportedly hundreds of foreign executives are kidnapped annually, with the bulk of these abductions occurring in Latin America, South Asia, and the Philippines.

respondents in 44 countries on their attitudes toward globalization.[2] The responses revealed a considerable degree of cross-country variation in attitudes toward globalization in both its economic and noneconomic dimensions. Broadly speaking, the publics of East Asia and sub-Saharan Africa exhibit the most "pro-globalization" attitudes, while those in the Middle East and South Asia harbor the greatest reservations. Assuming that these responses are a fair proxy for the subjective assessments formed by investors, the issue is whether popular attitudes, as elicited in this survey, convey any information about risk or economic outcomes beyond what can be explained through standard economic models.

This paper integrates the Pew data into a series of economic models of foreign direct investment, where the investor is foreign and has a physical presence; sovereign bond ratings and spreads, where the investor is foreign but has no physical presence, though local public opinion may constrain official policy; and local entrepreneurs, who have a physical presence but are indigenous. The results indicate that the cross-national responses to a number of Pew survey questions correlate with economic variables of interest and appear to convey information about risk, and by extension, outcomes. That said, these results should not be oversold: Most of the Pew survey responses are insignificant once economic fundamentals are taken into account, and the same questions are not statistically significant in each application. Nevertheless, the general pattern— stronger correlation between the Pew survey responses and FDI that involves the physical presence of a foreign entity as distinct from purely financial transactions or the presence of indigenous entrepreneurs—suggests that the pattern of cross-national responses may contain information about subjective assessments of security risk.

FOREIGN DIRECT INVESTMENT

Direct investment is the fastest growing segment of cross-border capital flows. Although the theoretical impact of foreign investment on economic performance is ambiguous, most research suggests that it has a positive impact on growth, at least conditional on education, financial

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[2] The complete set of questions, country sample sizes, fieldwork dates, modes of collection, and other details are provided in the annexes to The Pew Global Attitudes Project (2003). The country sample, by region, is North America (United States, Canada), Western Europe (Italy, Great Britain, Germany, France), Eastern Europe (Ukraine, Poland, Russia, Czech Republic, Slovak Republic, Bulgaria), Latin America (Mexico, Brazil, Honduras, Bolivia, Guatemala, Venezuela, Peru, Argentina), East Asia (Vietnam, Philippines, South Korea, Japan, Indonesia, China), South and West Asia (India, Pakistan, Uzbekistan, Turkey, Bangladesh), Africa (Nigeria, Mali, Angola, Senegal, Ghana, Uganda, South Africa, Kenya, Tanzania, Ivory Coast), and the Middle East (Lebanon, Egypt, Jordan). In addition, respondents in Morocco and Kuwait were surveyed in May 2003.

market development, and trade policy openness.[3] As suggested in the introduction, foreign direct investors may be particularly sensitive to antiglobalization sentiment inasmuch as they are subject to both political risk at the policy level and, to a much greater extent than portfolio investors, direct security risk to themselves, their employees, and their facilities.[4] Eight of the questions posed in the Pew survey are statistically correlated at the 10 percent level or better with the share of FDI inflows in GDP. These statements were phrased in agreement/disagreement form, and respondents were asked to indicate whether they strongly agreed, somewhat agreed, somewhat disagreed, strongly disagreed, did not know, or had no response. The list of statements or questions were as follows:

(1)   The closing of large inefficient factories (enterprises) is a hardship, but is necessary for economic improvement.[5]

(2)   Our way of life needs to be protected from foreign influence.

(3)   International organizations such as the World Bank, IMF, and World Trade Organization have a very good, somewhat good, neutral, somewhat bad, very bad influence on the way things are going in our country.

(4)   What do you think of growing business ties between [survey country] and other countries—do you think that it is a very good thing, somewhat good, neutral, somewhat bad, or a very bad for our country?

(5)   Large companies from other countries have a very good, somewhat good, neutral, somewhat bad, or a very bad influence on the way things are going in our country.

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[3] A plausible theoretical example of welfare-reducing capital inflows is FDI induced into a protected capital-intensive import-competing sector that can be immiserizing (Bhagwati and Srinivasan 1983). Recent empirical work suggests that FDI inflows are growth-promoting conditional on outward orientation (Balasubramanyam, Salisu, and Sapsford 1996), education (Borensztein, De Gregorio, and Lee 1999), and financial sector development (Alfaro et al. 2003).

[4] In contrast, Eaton and Gersovitz (1984) argue that foreign direct investors may actually be less subject to expropriation than portfolio investors since the foreign direct investment often is associated with an intangible asset that is difficult to expropriate.

[5] This question was not asked of respondents in North America and Western Europe, and in China the statement was phrased as which was closest to their opinion: less inefficient large enterprises is helpful to economic improvement, or less inefficient large enterprises is not helpful to economic development. (This version of the question is sufficiently unlike the others that the responses were not included in the subsequent analysis.) Question 8 on attitude toward homosexuality was not permitted in China, Egypt, and Tanzania. The response to question 2 on foreign influence is not available for Vietnam. For Morocco and Kuwait, response data is only available for the globalization question, and it is phrased differently, "All in all, how do you feel about the world becoming more connected through greater economic trade and faster communication…?"

(6)   Do you think that globalization is a very good, somewhat good, neutral,   somewhat
        bad, or very bad thing?

(7)   Most people are better off in a free market economy, even though some people are
        rich and some are poor.

(8)   Homosexuality is a way of life that should be accepted by society, or homosexuality
        is a way of life that should not be accepted by society.[6]

As one might expect, inward FDI flows were positively correlated with support for factory
closings, a market economy, multinational corporations, international economic organizations,
globalization, growing cross-border business ties, and societal acceptance of homosexuality.
Inward direct investment was negatively correlated with support for protection from foreign
influence.[7]

        Simple regional averages of the responses for these questions are reported in figures 1
through 8. Two things stand out. First, there is considerable variation in regional attitudes on
these issues. Second, among the primarily non-OECD regions (i.e., everything except North
America and Western Europe), the populations of East Asia and Africa tend to be the most
enthusiastic about globalization (with the notable exception of attitudes toward homosexuality on
which Africa's are the least tolerant of any region), while those of the Middle East and South and
West Asia tend to be the most skeptical of globalization. The Latin American and Eastern
European responses tend to fall in the middle.

        Table 1 reports a set of OLS regressions based on these responses. For some countries the
volume of inward FDI flows is relatively small and can exhibit significant variability due to
particular individual investments, thus the regressions are estimated on both the contemporaneous
inflows in 2002 and the average over the previous five years. Columns 1.1 and 1.2 report
regressions of the Pew responses on the log FDI inflow as a share of GDP in 2002 and 1997–
2002 respectively. Together the Pew variables explain roughly half of sample variation. The
coefficient on tolerance of homosexuality is statistically significant in both regressions; the
coefficient on protecting against foreign influence is significant in the regression on the five-year

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[6] One might question how accurately the Pew survey captured public attitudes. The wording of the
questions on foreign multinational corporations and another question relating to trust in the United Nations
are similar to questions posed by two GlobeScan surveys (GlobeScan 2003 and 2004). The cross-country
correlations between the Pew and GlobeScan responses are quite strong.

[7] Both positive and negative responses to questions are generally correlated with the economic measure
under consideration. In the interests of parsimony only the more highly correlated response is reported.
These correlations hold both with respect to contemporaneous FDI inflows in 2002 as well as the average
level of inflows over the previous five years.

average. When log per capita income is added to the regressors in columns 1.3 and 1.6, the statistical significance on the coefficients relating to homosexuality and foreign influence increases. In addition, in regression 1.3, on 2002 FDI flows, the coefficients on the responses relating to closing factories and supporting international organizations are now statistically significant. In regressions 1.5 and 1.7 statistically insignificant variables are dropped from the regressions, leaving specifications that explain nearly half of sample variance as a function of per capita income and the Pew responses on homosexuality, protecting against foreign influence, and closing inefficient factories.

These results are suggestive, but what is really necessary is to demonstrate that they have some explanatory power beyond that of conventional economic models. To explore this possibility, a conventional economic model of FDI was estimated to establish a baseline cross-country norm for inward FDI flows. This is a challenge because foreign direct investment may be undertaken for a wide variety of motives. One can think of direct investment occurring both "horizontally" across countries, as multinational firms reproduce similar activities across countries with similar incomes and endowments, and "vertically" across countries of differing incomes and endowments, as these firms disaggregate the production process and geographically site activities to minimize costs.[8] Carr, Markusen, and Maskus (2001) produce an elegant synthesis of these approaches, but their model is highly stylized, and its implications are rejected by the data (Blonigen and Wang 2004). What one is left with is an empirical literature that for the most part attempts to explain the bilateral volume of FDI flows using gravity-type models augmented by specific considerations, such as the role of trade barriers (e.g., Park and Lippoldt 2003), taxes (e.g., Park and Lippoldt 2003, Grubert and Mutti 2000, Mutti and Grubert 2004), corruption (e.g., Wei 2000), intellectual property rights protection (e.g., Park and Lippoldt 2003), financial sector development (Albuquerque, Loayza, and Servén 2003), market potential (e.g., Carstensen and Toubal 2004, Cieślik and Ryan 2004), and local population health status (Alsan, Bloom, and Canning 2004).

The sheer multiplicity of models raises deep specification issues; there is no meta-model template, and there may well never be one. Since in this application the focus is on the potential impact of antiglobalization sentiment on risk assessment and, by extension, economic outcomes, the goal is simply to derive a plausible reduced form model of the "fundamentals" into which the data on public opinion can be integrated. To this end, models on the FDI share in GDP were estimated as a function of various combinations of income per capita, wage rates, an OECD

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[8] Caves (1996) contains a survey of this literature.

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membership dummy, GDP growth, life expectancy, educational attainment, human capital, regional dummies, legal origin and receptiveness dummies, official language dummies, WTO membership, the CIF/FOB ratio, the official tariff rate, an index of nontariff trade barriers, the corporate tax rate, the effective tax rate, a patent rights index, an index of institutional quality, the Transparency International corruption score, a variety of indicators of governance, responses on a Pew survey question relating to bribery, fiscal balance as a share of GDP, inflation, external debt as shares of exports and income, variability of the real exchange rate, the government share of GDP, a dummy for privatization revenues, international trade as a share of GDP, and mineral and fuel extraction as a share of GDP. In several cases (e.g. wages, the CIF/FOB ratio, the Pew bribery question), the available data severely limited the sample size. Some parsimonious reduced form regressions are reported in table 2.[9]

Like the attitudinal models reported in table 1, the "economic" regressions in table 2 explain 50 to 70 percent of sample variance. The most robust explanators of inward FDI are the corporate tax rate and a dummy variable for whether there was a privatization in 2001 (or during 1996–99 in the case of regressions on the five-year average of FDI).[10] The international trade share of GDP is significant in regression 2.3 on 2002 FDI flows but just misses significance at the 10 percent level in regression 2.4 on the five-year average flow. It is arguable that neither the openness nor privatization measures are fully exogenous. The rate of inflation was significant with the expected negative sign in the regressions on FDI inflows in 2002 (regressions 2.1 and 2.3) but not on average inflows over 1997–2002. The estimated coefficients on Transparency International and World Bank indices of corruption exhibit the same pattern: They are significant with the expected negative sign in the regressions on FDI inflows in 2002 but not the five-year average. In sum, taxes matter. Openness and privatizations probably count for something, and macroeconomic stability and corruption may matter as well. No major surprises here.

The next step is to synthesize the two explanations—public attitudes and economic fundamentals. Due to multicollinearity and small sample size, simply combining the two sets of regressors in tables 1 and 2 yields a relatively uninformative set of insignificant coefficient estimates. Table 3 reports specifications that feature the most robust subset of explanators from the union of the two variable pools derived from a careful though ad hoc specification search. The

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[9] The country sample for these regressions consists only of countries that overlap with the Pew sample. Regressions estimated for a larger sample (up to 123 countries) were not materially different and are not reported.

[10] Variable definitions and sources are provided in the appendix.

robust regressors are per capita income (or OECD membership), two "fundamentals" (taxes and openness), and the responses to two of the Pew questions—whether local culture should be protected from foreign influence and whether homosexuality should be tolerated. The most important explanators are per capita income, corporate taxes, and acceptance of homosexuality—alone, these three variables explain roughly half of sample variance.[11]

To get a sense of how quantitatively significant the public attitudes variables are, the following calculation was performed. The exclusively OECD-member North America and Western Europe regions were excluded, and a "best practice" standard was formed by averaging the highest score from each of the remaining predominately non-OECD member regions. For the "do not protect against foreign influence" question, this "non-OECD best practice" score is 34 (the simple average of Peru, 38; Ukraine, 34; Angola, 37; China, 31; Uzbekistan, 20; and Jordan, 40). For the homosexuality question, the best practice standard is 48 (the average of Argentina, 66; Czech Republic, 83; South Africa, 33; the Philippines, 64; Turkey, 22; and Lebanon, 21. The coefficients estimated in regressions 3.1 through 3.4 were then used to calculate the increase in FDI that would be associated with an increase in a country's actual score to the best practice score.[12]

The first column of table 4 reports the percentage FDI changes associated with increased acceptance of foreign influence on local culture, derived from averaging the coefficients obtained from regressions 3.1 and 3.2. The second column of the table does the analogous calculation for homosexuality based on regressions 3.3 and 3.4. The suggested increases in FDI are quite large, in some cases implying a doubling or more. These two columns are not properly additive, however. An estimate of the joint effect of increasing tolerance for foreign influences is reported in the third column of table 4, derived from the coefficients in regressions 3.5 and 3.6. Again, the implied increases in FDI are quite large, especially in South and West Asia, Africa, and the Middle East.

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[11] This analysis applies to all FDI. Regressions were also estimated on US FDI in manufacturing, derived from the 1999 benchmark survey of the Bureau of Economic Analysis. (The US data were used because the manufacturing-only data are not available from all global sources.) Compared with the results presented in tables 1 and 2, the bilateral manufacturing-only data are less correlated with both fundamentals and attitudes variables. Perhaps this is not surprising—much of manufacturing FDI is done through local subcontractors and may be much less visibly "foreign" than in mining or services, where facilities may be in prominent public display and branding is an important part of local marketing.

[12] If a country is already scoring higher than the best practice standard, no change is assumed. Japan falls into this category on both questions and is omitted from the table for this reason.

To be clear, these are simply statistical correlations and the precise channels of causality are not well defined. That said, these results echo the finding that the homosexual population share was the single best predictor of high-technology industry activity across US metropolitan areas (Florida 2002). In turn, the highest demographic correlate with the gay population share was the foreign-born share, which could be interpreted as an indicator of acceptance of foreign cultural influences. Richard Florida interpreted openness to homosexuals and immigrants as good indicators of low entry barriers to human capital, important to spurring creativity and prosperity.[13] These results are also reminiscent of the arguments made in Glaeser (2004) and Glaeser and Saiz (2004) about the role of tolerance, acceptance of foreign immigrants, and human capital formation in explaining the varied experiences of US cities in surmounting negative shocks. Presumably, one aspect of this tolerance is relative freedom from discrimination, fear of harassment, or attack.

SOVEREIGN DEBT RATINGS AND SPREADS

Sovereign debt ratings are another measure of risk, in this case the risk of default on a financial obligation.[14] Although political risk plays a role in ratings, security risk should not play a significant role since the investor has no physical presence. To the extent that popular attitudes signal political and security risk, one would expect some correlation between the survey results and sovereign debt ratings, though perhaps less correlation than with FDI, both in light of the absence of the security risk concern and the possibility that sovereign borrowers may successfully project a less xenophobic image than would be warranted on the basis of popular attitudes.

The sovereign debt rating business is dominated by three firms worldwide: Standard and Poor's, Moody's, and Fitch-IBCA. The firms are contracted by national authorities who wish to float bond issues internationally. Traditionally, the ratings were set in a fairly opaque and subjective manner by the ratings agencies' ratings committees, which bring together analysts with comparative expertise in different groups of countries in an attempt to assign consistent ordinal

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[13] This interpretation has been disputed. Black et al. (2002) find that across American cities "adult-related amenities" proxied by housing costs more strongly affect the location decisions of homosexual couples than local attitudes toward homosexuality. But this does not clearly establish the direction or pattern of causality with respect to economic prosperity: Cross-jurisdictional housing costs are presumably a function of expected future rental streams, themselves a function of expected future economic activity. In any event, it is not clear that this dispute is germane to the case at hand, where attitudes can be measured directly, and macroeconomically significant cross-border population movement in response to varying attitudes toward homosexuality is implausible.

[14] Moody's (2001), Bhatia (2002), and Reisen (2003) provide useful overviews of the ratings industry and its methodology.

rankings across their clients. Historically, rating was concentrated on foreign currency debt, but there has been rising demand for local currency ratings, and today the ratings agencies rate nearly as many countries for local currency debt as for foreign currency debt.

Sovereign debt ratings are of direct importance for the impact they have on sovereign borrowing terms and of indirect importance through the impact on the borrowing costs of subnational government entities, banks, and nonfinancial corporates, inasmuch as historically ratings for these nonsovereign borrowers did not "pierce the ceiling" of the sovereign rating. Although departures from this practice have increased, it is still a relatively rare phenomenon, and some research suggests that in the case of developing countries, sovereign ratings continue to exert a strong influence on the ratings assigned to nonsovereign borrowers (Ferri and Liu 2003). The ratings also affect the functioning of the banking system through the Basle international bank standards use of ratings to assign risk scores to lending to emerging market sovereigns.

Cantor and Packer (1996) provided the first quantitative analysis of the determinants of sovereign ratings, finding that income per capita, GDP growth, inflation, the central government fiscal balance relative to GDP, the current account balance relative to GDP, external debt relative to exports, a dummy variable for "industrialized country," and a dummy for a history of prior default explained roughly 90 percent of sample variation. Monfort and Mulder (2000) in an ensuing paper identified a somewhat different set of robust explanators for sovereign ratings: external debts relative to exports, a history of rescheduling, the terms of trade, the growth rate of exports, the general government balance relative to GDP, the growth rate of output, the share of investment in GDP, and inflation.

These traditional macroeconomic indicators used by the ratings agencies did not do a particularly good job of predicting the Asian financial crisis, which had important roots in the functioning of local financial systems. The ratings agencies scrambled to revise their ratings in the face of a crisis that emerged for reasons significantly unrelated to traditional macro imbalances, and in its aftermath announced broader, more systematic criteria for assigning ratings. In the case of Moody's, the list of indicators was expanded to include indicators such as the external liabilities of local bank systems relative to their external assets, while S&P actually tried to devise estimates of contingent liabilities.[15] For the purposes of statistical analysis, the Moody's foreign currency sovereign debt ratings for April 30, 2004, were assigned ordinal values ranging from 18 (for Aaa) to 0 (for Caa3). Responses to four of the eight previously identified Pew questions were significantly correlated with the ratings, with the expected signs at the 10

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[15] See Moody's (2001 and 2004) and for S&P, Bhatia (2002).

percent level or better: support for closing inefficient factories, opposing protecting against foreign influence, support for international economic organizations, and acceptance of homosexuality. The issue is whether these correlations yield additional information beyond that contained in the standard model.

OLS and ordered logit regressions were estimated on the basis of a specification search involving more than 50 potential explanatory variables identified by Cantor and Packer (1996), Monfort and Mulder (2000), and Moody's (2004). Regressions of the sovereign rating as a function of dummy variables for "industrial country," membership in the OECD, and a previous history of default, GDP per capita, inflation, the ratio of total external debts to official foreign reserves, the dollarization ratio defined as the ratio of total foreign currency deposits to total deposits in domestic banks, the investment share of GDP, and the liquidity ratio defined as the ratio of liabilities to BIS banks due within one year to total assets held in BIS banks are reported in table 5.[16]

Regressions 5.1, 5.3, 5.5, and 5.6 are alternative estimations of "fundamentals" models for the maximum sample of 93 countries. The OLS and ordered logit regressions generate similar results, though the industrial country and default history dummies, which are significant in the OLS regressions, are not significant in the ordered logit regressions. Regressions 5.2, 5.4, and 5.7 reproduce these specifications for the smaller (n=31) Pew-response constrained sample (the ordered logit equivalent regression to 5.2 did not converge). When the same regressions are estimated for the smaller sample of countries, the coefficients on the OECD, industrial country, and default history dummies, as well as the dollarization ratio and liquidity ratio, become insignificant.

In table 6, responses to the four Pew questions that were significantly correlated with the ratings are added one at a time to the baseline fundamentals model, dropping statistically insignificant variables. (In principle, any of the other four attitudinal variables that exhibited no significant simple correlation with the ratings could turn out to have a controlled (partial) correlation in the regressions with the fundamentals. In this exercise we constrain the explanations to those that revealed significant direct unconditional correlation to ward against spurious results.) Of the included four responses, only the one on homosexuality is statistically

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[16] The distinction between "industrial countries" versus the OECD is essentially based on the financial market concept of 'emerging markets'—i.e., Hong Kong and Singapore are "industrial countries" that are not members of the OECD. Emerging market economies that are members of the OECD but not counted as industrial countries by Moody's are the Czech Republic, Hungary, South Korea, Mexico, Poland, Slovakia, and Turkey.

significant once the fundamentals are taken into account, and only in the OLS estimation, though it is nearly significant at the 10 percent level in the ordered logit regression.

To get a sense of the magnitude of the estimated coefficient, the impact of moving to the non-OECD "best practice" standard was computed. In the first column of table 7, the step-change in ratings associated with the attainment of the "best practice" standard derived from regression 6.4 is reported. So, for example, if Jordan achieved the "best practice" standard, statistically speaking one would expect a single step upgrade in Jordan's sovereign debt rating. For a number of countries in the sample, a two-step or notch upgrade would be expected. The second column, derived from regression 6.8, reports the odds on an upgrade of one or more notches associated with attaining the best practice standard. So, for example, the odds of Jordan receiving at least a one-notch upgrade would be 2.5 to 1 if it attained the best practice standard. For some countries in the sample, the odds are more than 3 to 1.

A natural way of thinking about the implicit costs associated with these public attitudes would be directly through the impact on sovereign debt spreads. Unfortunately, the paucity of available data makes it difficult to investigate this directly. Only 17 countries appear in both the Pew sample and the J.P. Morgan EMBI Global Bond Index in April 2004, and Argentina is an extreme outlier, completely dominating the correlations. Excluding Argentina leaves at most 16 countries, and most of the correlations are statistically insignificant. The exceptions are opposition to factory closings and antipathy to international economic organizations, which are correlated with higher sovereign debt spreads.

Alternatively, one can look at the impact of the sovereign debt rating itself. In a simple regression of the Moody's rating on the EMBI Global Bond Index spreads, the coefficient on the rating is −65 with a t-statistic of more than 7.0 explaining 68 percent of variance, with the caveat that there is some evidence that the impact of the decisions is nonlinear in the sense that the change in borrowing costs is greater for a shift between the "investment grade" and subinvestment grade ranks than for changes in ratings within those categories (Ferri, Liu, and Stiglitz 1999). Applying this estimate to the figures in table 7 implies that Jordan, for example, would experience a 65 basis point improvement in sovereign borrowing costs by attaining the non-OECD "best practice" standard with respect to societal acceptance of homosexuality, or whatever social attitudes for which it is a proxy.

DOMESTIC ENTREPRENEURSHIP

The evidence presented thus far indicates that public attitudes toward globalization are strongly correlated with inward FDI, which requires a physical presence, and less strongly correlated with

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sovereign debt ratings, which are a measure of financial risk. Yet another way to examine the issue as to whether the data on public opinion confer information on security risk would be to examine the behavior of local investors (which could differ from foreigners). The Global Entrepreneurship Monitor (GEM) project reports data on "total entrepreneurial activity" (TEA), defined as the prevalence rate among individuals aged 18 to 64 active in either the start-up phase or in managing a new business. These data were derived from more than 100,000 interviews conducted in 31 countries in 2003 (Reynolds et al. 2003).[17] This index is correlated with a number of country characteristics (Reynolds et al. 2003, tables 17 and 18). These include demographic characteristics (the level of per capita income and the adult population shares of the 25 to 34 and 55- to 64-year-old cohorts). Macroeconomic correlates include the rate of per capita income growth over the previous five years and the level of unemployment. There are also a set of correlates that would appear to represent implicit and explicit opportunity costs associated with involvement in a new business, including the level of public sector employment (possibly representing the availability of low-risk employment), collected tax revenue, employer contributions to social security, and total social security costs. Lastly, there is a set of variables that could be interpreted as implicit entry barriers to new firms: a measure of the cost of registering a new firm and an index of "economic freedom."

Many of these variables are highly collinear, with the male (female) older (younger) adult population shares being the most obvious example. Three parsimonious regression specifications are reported in table 8. Across countries, the TEA prevalence rate is robustly inversely correlated with the level of per capita GDP and the growth rate of per capita income over the previous five years. It is also highly positively (negatively) correlated with the share of younger (older) male or female adults in the population.[18] TEA prevalence was also inversely correlated, though less robustly, with the unemployment rate over the previous three years and the costs of registering a new business and positively associated with "economic freedom." The regressions explain a bit less than two-thirds of sample variation.

Table 9 reports regressions of the level of per capita income and the eight Pew survey questions on the TEA prevalence rate. Two things are quite noticeable. First, the overlap between the GEM and Pew samples is small—18 countries maximum. Second, there appears to be little correlation between the Pew survey responses and the TEA index. In table 9, only the response to

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[17] Interviews were conducted in 41countries over 2000–03.

[18] Of these four variants, the younger adult female share was often slightly more correlated, and these regressions are reported. The choice of these four variables made no material difference in the results.

the question on whether globalization is good is statistically significant (regression 9.6). In addition to public attitudes with respect to globalization and conditional on the fundamentals, however, , support for free markets and support for cross-border business ties are correlated with the TEA index when entered into the regressions singly, though not jointly (table 10). To address the lack of joint significance of the attitudinal variables, a variable formed from the first principal component of each of the three Pew variables was calculated.[19] This principal component variable is statistically significant in all specifications.

Again, to get a sense of the magnitude of the coefficients on the public attitude variables, "best practice" standards were calculated for the predominately non-OECD regions. For "free market support" the best practice standard was 70 percent (Venezuela, 63 percent; Ukraine, 64 percent; Nigeria, 80 percent; Vietnam, 95 percent; and Pakistan, 50 percent); for "globalization is good" it was 77 percent (Venezuela, 77 percent; Czech Republic, 69 percent; Nigeria, 90 percent; Korea, 84 percent; and Bangladesh, 63 percent); and for "growing business ties are good" it was 93 percent (Honduras, 93 percent; Ukraine, 93 percent; Senegal, 98 percent; Vietnam, 98 percent; and Bangladesh, 84 percent).[20] Table 11 displays the implied increases in TEA prevalence for countries in predominately non-OECD regions associated with attaining the non-OECD best practices standard.

The implied changes vary enormously. The largest projected effects are in Argentina, where the combined effect of achieving the best practice standard implies more than 10 percent of the labor force becoming involved with start-ups or new firms. It is possible that the relatively negative Argentine attitudes toward market economics and cross-border integration were accentuated by the Argentine crisis, ongoing when the Pew survey was undertaken. After Argentina, the next largest effects are in India and Poland. One would be tempted to ascribe this result to a combination of a socialist economic tradition and possibly risk aversion associated with weak protection of property rights, except that China—which shares the socialist tradition, lack of transparency in governance, and until recently had no constitutionally enshrined property rights—at the other end of the spectrum exhibits no positive projected response. The other countries exhibiting no positive response are Korea, Uganda, and South Africa. It is hard to come up with a simple explanation of what the Pew responses are picking up that could explain this odd pattern of extreme observations, other than reflecting some basic promarket attitudes among the

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[19] The weights in this variable are free markets (35 percent), globalization (33 percent), and cross-border business ties (32 percent).

[20] There were no Middle Eastern countries in the GEM sample.

populations of East Asia and Africa, though even this broad generalization is inadequate given the large response implied for Japan.[21]

CONCLUSION

Globalization is typically defined as an expansion of cross-border economic interaction, though the term also embodies less precise though important noneconomic meanings, and opposition to globalization may be interpreted, perhaps mistakenly, as xenophobia or hostility to market economics. In this regard, popular attitudes toward globalization may act as a signal of country risk, specifically the degree of security risk—the possibility that local staff or facilities could be subject to harassment or attack.

This paper has integrated the Pew Global Attitudes data into a series of economic models on foreign direct investment, sovereign debt ratings, and entrepreneurship, and it finds that responses to the Pew questions robustly correlate with economic variables of interest and convey information about outcomes beyond what can be explained through standard economic models. Crudely put, the results indicate countries with better attitudes toward globalization attract more FDI, obtain better debt ratings, and exhibit more local entrepreneurship. That said, the results are not particularly robust—in each application most of the coefficients on the Pew responses are statistically insignificant, and the causal linkage between the attitudes revealed in the survey data and the economic outcomes is speculative. Nevertheless, at least one of the coefficients on at least one of the Pew survey variables is always significant, and the magnitudes of the estimated coefficients are large in the sense that plausible changes in Pew sample values imply economically meaningful changes in FDI, debt ratings, and entrepreneurship. These data appear to contain some new and important information, however inchoate.

These results suggest that there could be real economic payoffs to transforming public perceptions toward globalization. The problem, of course, from the standpoint of public policy, is that it is not obvious how one encourages the public to take a more positive view of change, especially change emanating from foreign or nontraditional sources. Presumably the starting point would be political commitment to constructive engagement with the outside world coupled with public campaigns to overcome xenophobia or intolerance.

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[21] Table 11 reports changes in the TEA index itself. If these responses are converted to percentage changes, one obtains an even wider dispersion due to the correlation between low observed TEA values with relatively antiglobalization attitudes. So for example, the combined-effect percentage increase is more than 200 percent for Russia and Japan and nil for Korea and Uganda.

Figure 1
Opinion on Closing Large Inefficient Factories*
(% who responded 'hardship but necessary')
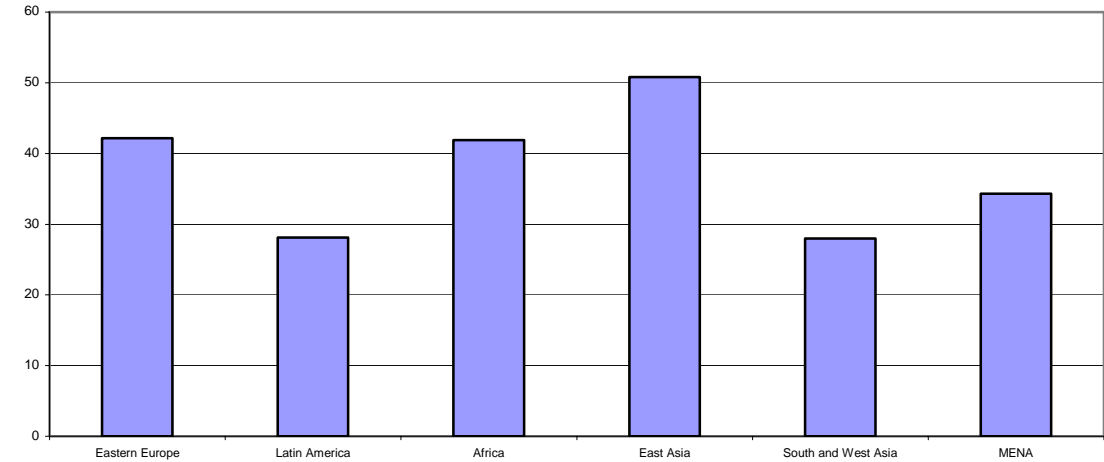
Question not asked in North America and Western Europe.
Source: The Pew Global Attitudes Project (2003).

Figure 2
Way of Life "Needs to be Protected against Foreign Influence"
(% of respondents who disagreed)
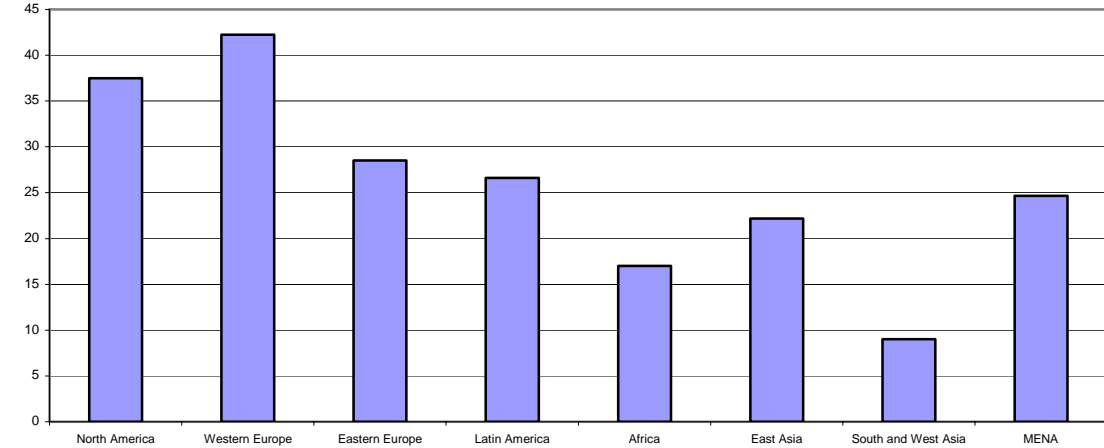
*Source: T*he Pew Global Attitudes Project (2003).

Figure 3
Influence of International Organizations like the WTO, IMF,
and the World Bank on Country
(% who responded they are a 'good influence')
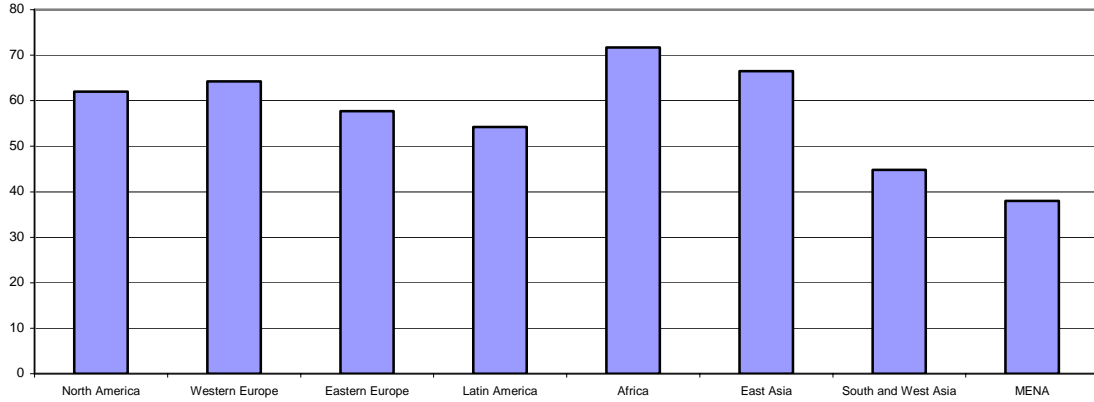
Figure 4
Opinion of Growing Trade and Business Ties
(% who responded 'good for country')
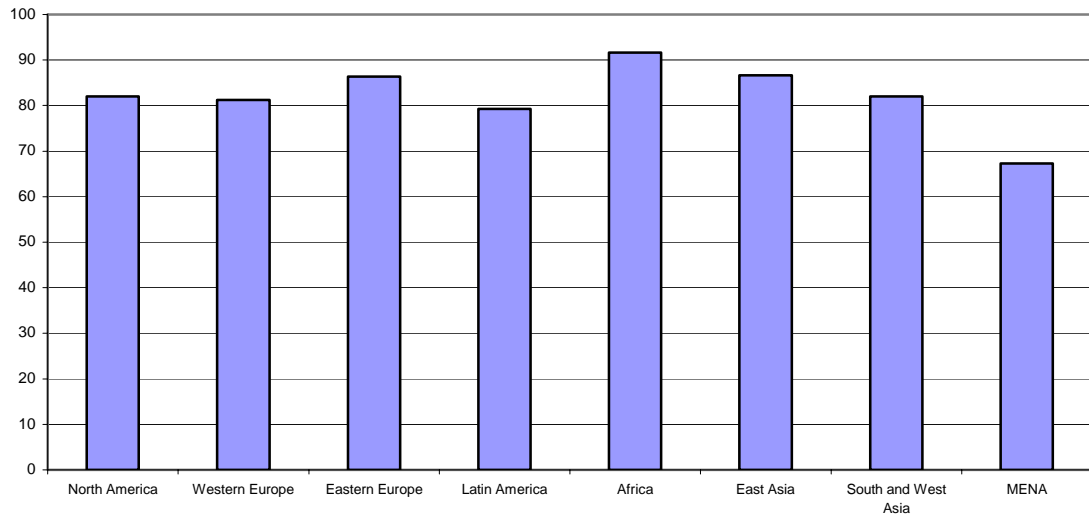
Figure 5
Influence of Multinational Corporations
(% who responded they are a "good influence")
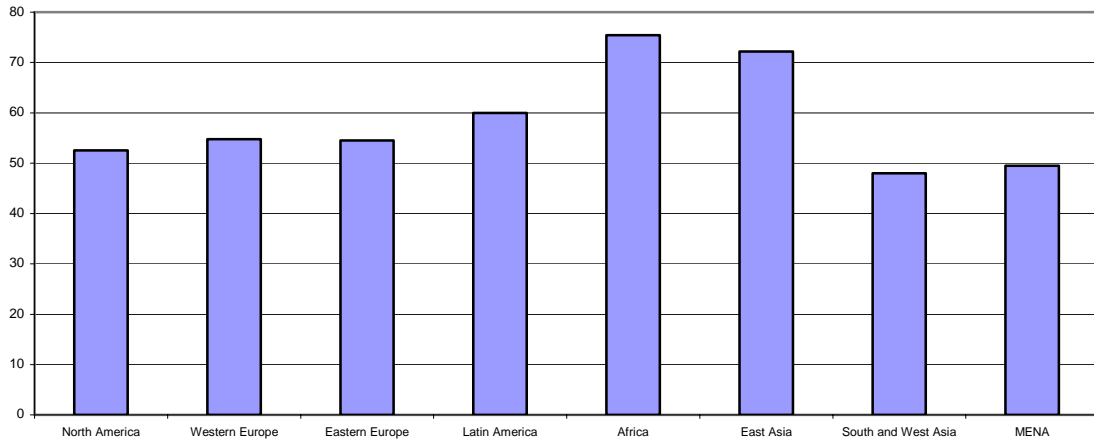
Figure 6
Opinion on Free Market Economy
(% who agreed 'People are better off in a free market economy')
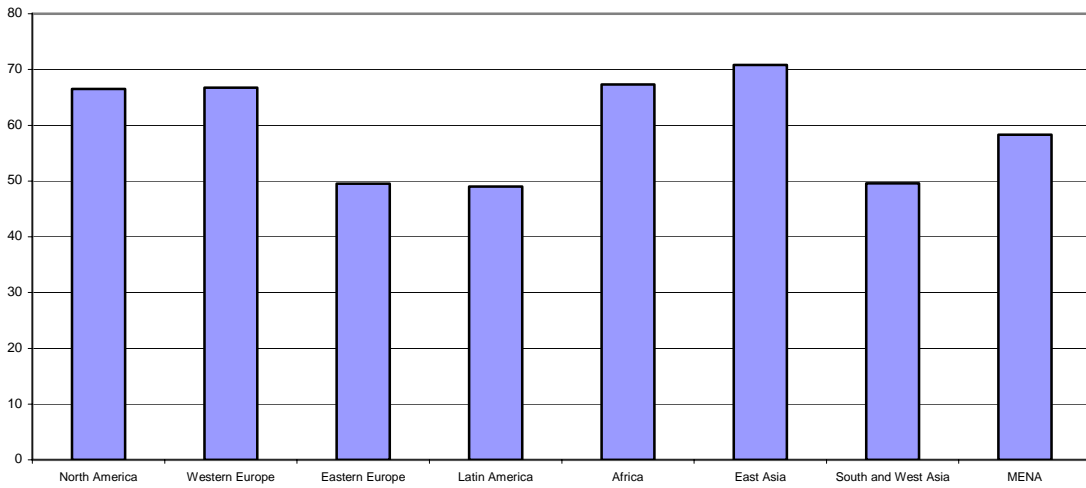
Figure 7
Opinion of Globalization*
(% who responded it is 'good')
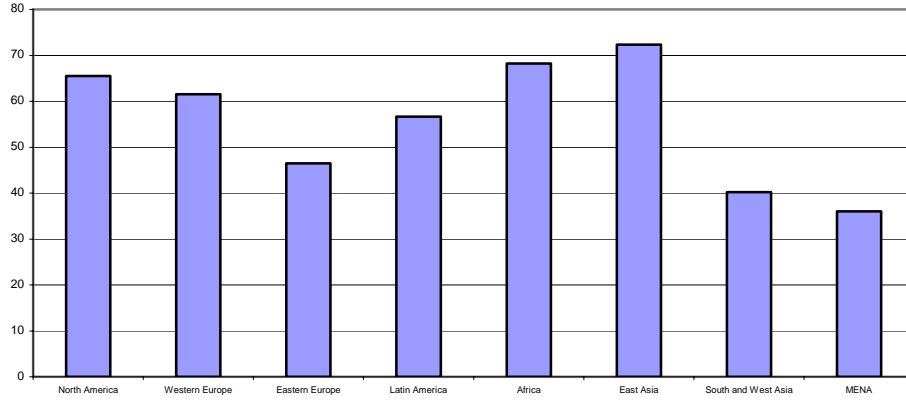
· Responses for Kuwait, Morocco, and the Palestinian Authority are to the question, "All in all, how do you feel about the world becoming more connected through greater economic trade and faster communication?" with possible responses of, it is a "very good", "somewhat good", "somewhat bad", and "very bad" thing for our country. Taken from the 21 Population Survey (2003)
Source: The Pew Attitude Project (2003).

Figure 8
"Homosexuality Should be Accepted by Society"
(% of respondents who agreed)
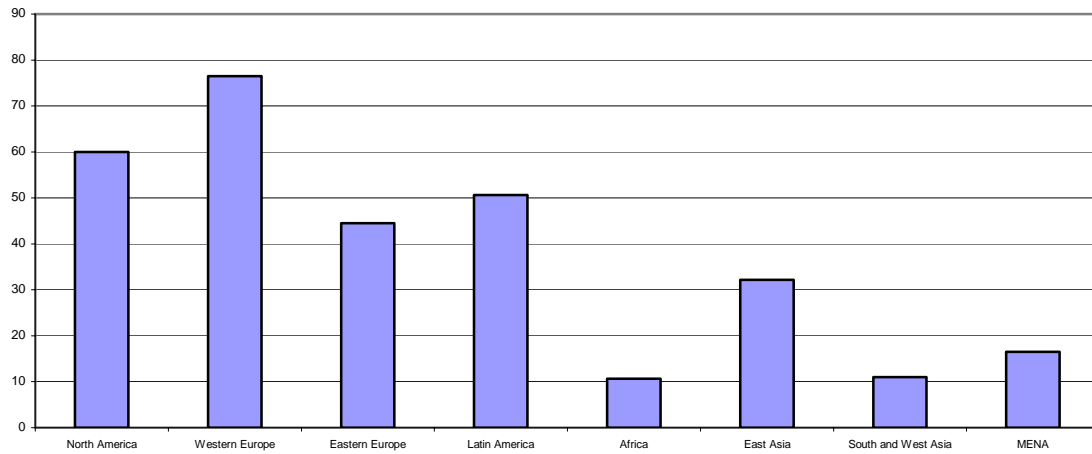
Source: The Pew Global Attitudes Project (2003).

DATA APPENDIX

Variable Definitions and Sources:

Corporate taxes: The corporate tax rate derived from PriceWaterhouseCoopers' *Worldwide
  Summaries*. Source: Park and Lippoldt (2003).

Control of corruption: A measure of perceptions of corruption. Source: Kaufmann et al. (2003),
  www.worldbank.org/wbi/governance/wp-governance.htm.

FDI inflows share GDP: Inflows of foreign direct investment as a share of GDP in either 2002 or
  as an average over the period 1997–2002. Source: UNCTAD (2003) and World Bank's
  World Development Indicators (2003).

GDP per capita: GDP per capita in current US dollars. Source: World Bank's *World Development
  Indicators* (2003).

GDP per capita growth: Average annual growth rate in GDP per capita over the specified period.
  Source: World Bank's *World Development Indicators* (2003).

Index of Economic Freedom: The Heritage Foundation's *Index of Economic Freedom*. Source:
  O'Driscoll Jr. et al. (2002).

Inflation: Annual rate of change in consumer prices. Source: World Bank's *World Development
  Indicators* (2003).

Life expectancy: World Bank, *World Development Indicators*, 2004.

New firm costs as a share of GNP per capita: Total cost to register a new firm as a share of GNP
  per capita. Source: Djankov et al. (2000).

OECD dummy: An indicator for OECD membership as of end-2001 or 1996. Source:
  www.oecd.org.

Openness: The sum of exports and imports as a share of GDP. Source: *Penn World Tables*,
  version 6.1.

Privatizations: A dummy variable indicating positive privatization revenues during the specified
  period, either 1996–99 or 1993–96. Derived from Albuquerque et al. (2003).

Share of young women: The share of women age 25 to 34 in the population of women age 20 to
  64. Source: US Census Bureau, http://www.census.gov/ipc/www/idbsprd.html

TEA2003: Total Entrepreneurial Activity Index, defined as the prevalence of individuals among
  the total population age 18 to 64 involved in either the "start-up" or "new firm" phases of
  creating a firm. Source: Reynolds et al. (2003).

TI: The Corruption Perceptions Index. Data for 2001 and 1996. Source: Transparency
  International, www.transparency.org.

Unemployment: The share of the total labor force unemployed, averaged over the period 1999–2001. Source: World Bank's *World Development Indicators* (2003).

Variables from Moody's (2004) for Tables 5, 6, and 7

Note: Each variable was constructed from the most recent data available as reported in Moody's (2004). The published data cover the period 1997–2002 and provide an estimate for 2003 and a forecast for 2004.

Dollarization ratio: The share of total foreign currency deposits to total deposits in domestic banks. Data were only available for a subset of the nonindustrial countries, so missing values for the other nonindustrial countries as well as the industrial countries are replaced by a zero.

External debt / foreign reserves: Total external debt as a share of official foreign exchange reserves. Data were only available for nonindustrial countries, so missing values for the industrial countries in the sample are replaced by the minimum value in the data.

GDP per capita: GDP per capita in current US dollars.

Industrial country dummy: An indicator for "industrial" countries as defined by Moody's. See explanation in text.

Inflation: Annual percent change in the consumer price index (Dec/Dec).

Investment / GDP: Gross investment as a share of GDP.

Liquidity ratio: The ratio of liabilities to BIS-reporting countries' banks to total assets held in BIS banks. Data were available for nonindustrial countries only, so missing values for industrial countries are replaced by a zero.

Moody's April04: A variable representing the foreign currency–denominated sovereign debt ratings assigned by Moody's as of April 30, 2004. Ranges from 0 (Caa3) to 18 (Aaa) with a one-notch increase in the rating equal to an increase of one in the variable. Source: Moody's (2004).

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Table 1

	(1.1)	(1.2)	(1.3)	(1.4)	(1.5)	(1.6)	(1.7)
	ln FDI inflows share GDP 02	ln FDI inflows share GDP AVG 1997-02	ln FDI inflows share GDP 02	ln FDI inflows share GDP 02	ln FDI inflows share GDP 02	ln FDI inflows share GDP AVG 1997-02	ln FDI inflows share GDP AVG 1997-02
Observations	33	33	33	33	34	33	40
R-squared	0.44	0.60	0.59	0.52	0.47	0.66	0.49
Constant	-3.749	-1.395	0.057	2.149	1.300	0.449	3.139
	$(1.85)^c$	(1.04)	(0.03)	(1.29)	(0.99)	(0.28)	$(4.31)^a$
ln GDP per capita*			-0.707	-0.606	-0.445	-0.353	-0.554
			$(2.85)^a$	$(2.67)^b$	$(2.37)^b$	$(1.94)^c$	$(4.55)^a$
Close factories	0.028	0.015	0.037	0.050	0.039	0.018	
	(1.19)	(0.97)	$(1.81)^c$	$(2.64)^b$	$(2.98)^a$	(1.26)	
Do not protect against foreign influence	0.027	0.039	0.040	0.027		0.046	0.043
	(1.24)	$(2.74)^b$	$(2.04)^c$	(1.55)		$(3.30)^a$	$(3.27)^a$
Accept homosexuality	0.019	0.013	0.041	0.032	0.034	0.024	0.024
	$(2.07)^b$	$(2.08)^b$	$(3.67)^a$	$(3.32)^a$	$(3.87)^a$	$(2.93)^a$	$(3.38)^a$
International orgs., good	-0.011	-0.005	-0.035	-0.010		-0.018	
	(0.59)	(0.42)	$(1.85)^c$	(0.89)		(1.31)	
Growing business ties, good	0.025	0.001	0.033			0.005	
	(0.90)	(0.08)	(1.35)			(0.30)	
Multinational corps., good	0.023	0.024	0.019			0.023	
	(0.91)	(1.47)	(0.88)			(1.49)	
Support free markets	-0.002	-0.004	0.013			0.005	
	(0.13)	(0.36)	(0.85)			(0.40)	
Globalization good	-0.010	-0.009	-0.008			-0.008	
	(0.78)	(1.08)	(0.74)			(0.98)	

a. Significant at 1 percent level.
b. Significant at 5 percent level.
c. Significant at 10 percent level.

* 2001 value for regressions 1.1, 1.3, 1.4, and 1.5; 1996 value for regressions 1.2, 1.6, and 1.7.

Table 2

	(2.1)	(2.2)	(2.3)	(2.4)
	ln FDI inflows share GDP 02	ln FDI inflows share GDP AVG 97-02	ln FDI Inflows Share GDP 02	ln FDI inflows share GDP AVG 97-02
Observations	35	39	33	24
R-squared	0.67	0.53	0.70	0.52
Constant	8.59	8.10	7.16	3.12
	$(4.24)^a$	$(3.86)^a$	$(3.33)^a$	(1.03)
OECD indicator*	1.61	0.30	1.31	-0.22
	$(3.98)^a$	(0.73)	$(3.72)^a$	(0.46)
ln 2000 corporate taxes	-2.69	-2.47	-2.38	-1.80
	$(4.90)^a$	$(4.27)^a$	$(4.77)^a$	$(2.32)^b$
Control of corruption*	-0.81	-0.07		
	$(3.55)^a$	(0.25)		
ln transparency int'l*			-1.57	0.36
			$(4.46)^a$	(0.90)
ln inflation*	-0.42	-0.01	-0.51	0.02
	$(2.70)^b$	(0.09)	$(4.10)^a$	(0.19)
ln openness*			0.59	0.68
			$(2.41)^b$	(1.74)
Privatization indicator**	1.34	1.22	1.49	0.99
	$(3.25)^a$	$(3.17)^a$	$(3.90)^a$	$(1.78)^c$

a. Significant at 1percent level.
b. Significant at 5 percent level.
c. Significant at 10 percent level.

* 2001 value for regs. 2.1 and 2.3; 1996 value for regs. 2.2 and 2.4.
** Indicates positive privatization revenues during 1996-99 in Regs. 2.1 and 2.3; during 1993-6 in Regs. 2.2 and 2.4.

Table 3

	(3.1) In FDI Inflows Share GDP 02	(3.2) In FDI Inflows Share GDP AVG 9702	(3.3) In FDI Inflows Share GDP 02	(3.4) In FDI Inflows Share GDP AVG 9702	(3.5) In FDI Inflows Share GDP 02	(3.6) In FDI Inflows Share GDP AVG 9702
Observations	36	37	33	35	33	34
R-squared	0.43	0.43	0.58	0.57	0.59	0.57
Constant	4.42	3.99	5.52	5.21	5.27	4.90
	(1.64)	(1.79)^c	(2.27)^b	(2.60)^b	(2.15)^b	(2.35)^b
ln GDP per capita*	-0.34	-0.17	-0.50	-0.31	-0.56	-0.35
	(2.63)^b	(1.49)	(3.71)^a	(2.55)^b	(3.74)^a	(2.50)^b
ln 2000 corporate taxes	-1.29	-1.37	-1.29	-1.42	-1.11	-1.24
	(1.88)^c	(2.36)^b	(2.17)^b	(2.87)^a	(1.77)^c	(2.24)^b
ln openness*	0.51	0.50	0.51	0.48	0.47	0.42
	(1.98)^c	(2.07)^b	(2.18)^b	(2.22)^b	(1.94)^c	(1.81)^c
Do not protect against foreign influence	0.04	0.03			0.02	0.01
	(2.51)^b	(2.18)^b			(0.91)	(0.67)
Accept homosexuality			0.03	0.02	0.03	0.02
			(4.07)^a	(3.55)^a	(3.45)^a	(3.10)^a

a. Significant at 1 percent level.
b. Significant at 5 percent level
c. Significant at 10 percent level.

* 2001 value in regs. 3.1, 3.3, and 3.5; 1996 values in regs. 3.2, 3.4, and 3.6.

Table 4

Increase in FDI implied by adopting global best practices (percent)

	Foreign Influence	Homosexuality	Combined*
Middle East/North Africa			
Egypt	89	*question not permitted*	n/a
Jordan	0	101	94
Lebanon	54	76	89
Latin America			
Argentina	11	0	4
Bolivia	62	0	22
Brazil	34	0	12
Guatemala	50	12	28
Honduras	62	20	40
Mexico	50	0	18
Peru	0	9	8
Venezuela	11	6	10
Eastern Europe			
Bulgaria	42	31	44
Czech Republic	7	0	3
Poland	15	23	26
Russia	58	73	88
Slovak Republic	3	0	1
Ukraine	0	87	81
Sub-Saharan Africa			
Angola	0	51	47
Cote d'Ivoire	50	93	104
Ghana	85	124	144
Kenya	77	132	149
Mali	85	127	147
Nigeria	58	124	135
Senegal	81	129	148
South Africa	73	42	65
Tanzania	73	*question not permitted*	n/a
Uganda	85	124	144
East Asia/Pacific			
China	11	*question not permitted*	n/a
Indonesia	85	121	142
Korea, Rep.	69	65	85
Philippines	66	0	23
Vietnam	n/a	99	n/a
South and West Asia			
Bangladesh	101	115	142
India	116	115	148
Pakistan	108	110	140
Turkey	105	73	105
Uzbekistan	54	107	118

Source: Author's calculations, Pew Global Attitudes Project (2003), UNCTAD (2003).

* Represents percent increase in FDI implied by adopting global best practices in both responses.

Table 5

	(5.1) moodysapril04	(5.2) moodysapril04	(5.3) moodysapril04	(5.4) moodysapril04	(5.5*) moodysapril04	(5.6*) moodysapril04	(5.7*) moodysapril04
Observations	93	31	93	31	93	93	31
R-squared	0.89	0.90	0.89	0.91			
Constant	7.34388	5.99375	8.11515	6.52227			
	$(7.46)^a$	$(2.76)^b$	$(7.59)^a$	$(2.03)^c$			
Industrial country dummy	2.18468	-0.73377			2.25793		
	$(2.34)^b$	(0.20)			(1.56)		
OECD dummy			1.43116	2.11294		1.24483	1.08415
			$(2.27)^b$	(1.56)		$(1.70)^c$	(0.63)
Default history			-1.03757	-0.08183		-0.55465	1.28461
			$(1.75)^c$	(0.05)		(0.89)	(0.78)
GDP per capita	0.00017	0.00031	0.00018	0.00021	0.00030	0.00031	0.00050
	$(5.86)^a$	$(2.61)^b$	$(7.18)^a$	$(2.87)^a$	$(5.45)^a$	$(5.84)^a$	$(2.14)^b$
Inflation	-0.21517	-0.16849	-0.20523	-0.16998	-0.17972	-0.19336	-0.32558
	$(4.57)^a$	$(2.43)^b$	$(4.19)^a$	$(2.55)^b$	$(3.16)^a$	$(3.08)^a$	$(2.58)^a$
External debt / foreign reserves	-0.00362	-0.00466	-0.00368	-0.00411	-0.00481	-0.00499	-0.00759
	$(4.92)^a$	$(2.42)^b$	$(5.04)^a$	$(2.13)^b$	$(4.47)^a$	$(4.63)^a$	$(2.31)^b$
Dollarization ratio	-0.03964	-0.02853	-0.02843	-0.02327	-0.03182	-0.02599	-0.01159
	$(4.64)^a$	(1.59)	$(2.95)^a$	(1.29)	$(3.49)^a$	$(2.49)^b$	(0.62)
Investment share in GDP	0.11357	0.13617	0.09453	0.11805	0.13665	0.13072	0.19599
	$(3.22)^a$	$(2.15)^b$	$(2.56)^b$	(1.39)	$(3.63)^a$	$(3.37)^a$	$(2.04)^b$
Liquidity ratio	0.01472	0.00784	0.01005	-0.00250	0.01671	0.01387	0.00120
	$(3.41)^a$	(0.59)	$(2.37)^b$	(0.19)	$(3.63)^a$	$(3.07)^a$	(0.09)

a. Significant at 1percent level.
b. Significant at 5percent level
c. Significant at 10 percent level.

* Ordered logit regression.

Table 6

	(6.1) moodysapril04	(6.2) moodysapril04	(6.3) moodysapril04	(6.4) moodysapril04	(6.5*) moodysapril04	(6.6*) moodysapril04	(6.7*) moodysapril04	(6.8*) moodysapril04
Observations	25	31	31	31	25	31	31	31
R-squared	0.66	0.90	0.90	0.90				
Constant	6.81405	5.19880	5.16606	8.74857				
	$(3.62)^a$	$(2.72)^b$	$(2.29)^b$	$(7.90)^a$				
GDP per capita	0.00066	0.00028	0.00027	0.00020	0.00056	0.00056	0.00062	0.00049
	$(3.94)^a$	$(6.58)^a$	$(6.71)^a$	$(4.46)^a$	$(2.65)^a$	$(2.99)^a$	$(3.00)^a$	$(2.55)^b$
Inflation	-0.15831	-0.16149	-0.18151	-0.20895	-0.22171	-0.30820	-0.28668	-0.25913
	$(2.23)^b$	$(2.57)^b$	$(2.77)^b$	$(3.27)^a$	$(2.73)^a$	$(2.57)^b$	$(2.82)^a$	$(3.02)^a$
External debt / foreign reserves	-0.00434	-0.00524	-0.00379	-0.00586	-0.00574	-0.00728	-0.00599	-0.00637
	$(2.25)^b$	$(3.04)^a$	$(2.03)^c$	$(3.25)^a$	$(2.71)^a$	$(2.75)^a$	$(2.39)^b$	$(2.60)^a$
Dollarization ratio			-0.03202	-0.03436			-0.00950	-0.01332
			$(1.87)^c$	$(2.08)^b$			(0.56)	(0.76)
Investment share in GDP		0.17565	0.12199			0.18767	0.15086	
		$(2.88)^a$	$(1.95)^c$			$(2.44)^b$	$(1.96)^c$	
Liquidity ratio								
Close factories	0.00707				0.01491			
	(0.17)				(0.43)			
Do not protect against foreign influence		0.00776				-0.01690		
		(0.21)				(0.46)		
International orgs., good			0.02825				0.03103	
			(1.24)				(1.33)	
Accept homosexuality				0.03974				0.02493
				$(1.99)^c$				(1.12)

a. Significant at 1 percfent level.
b. Significant at 5 percent level.
c. Significant at 10 perecent level.

* Ordered logit regression.

Table 7

Increase in Moodys Rating implied by adopting global best practices in homosexuality response

	Spec. 4 (notches)	Spec. 4 (odds)*
Middle East/North Africa		
Egypt	*question not permitted*	*question not permitted*
Jordan	1	2.5 : 1
Lebanon	1	2.0 : 1
Latin America		
Argentina	0	1.0 : 1
Bolivia	0	1.0 : 1
Brazil	0	1.0 : 1
Guatemala	0	1.1 : 1
Honduras	0	1.2 : 1
Mexico	0	1.0 : 1
Peru	0	1.1 : 1
Venezuela	0	1.1 : 1
Eastern Europe		
Bulgaria	0	1.3 : 1
Czech Republic	0	1.0 : 1
Poland	0	1.2 : 1
Russia	1	1.9 : 1
Slovak Republic	0	1.0 : 1
Ukraine	1	2.2 : 1
Sub-Saharan Africa		
Angola	1	1.6 : 1
Cote d'Ivoire	1	2.3 : 1
Ghana	2	3.0 : 1
Kenya	2	3.2 : 1
Mali	2	3.1 : 1
Nigeria	2	3.0 : 1
Senegal	2	3.2 : 1
South Africa	1	1.5 : 1
Tanzania	*question not permitted*	*question not permitted*
Uganda	2	3.0 : 1
East Asia/Pacific		
China	*question not permitted*	*question not permitted*
Indonesia	2	2.9 : 1
Korea, Rep.	1	1.8 : 1
Philippines	0	1.0 : 1
Vietnam	1	2.4 : 1
South and West Asia		
Bangladesh	2	2.8 : 1
India	2	2.8 : 1
Pakistan	2	2.7 : 1
Turkey	1	1.9 : 1
Uzbekistan	2	2.6 : 1

Source: Author's calculations, Pew Global Attitudes Project (2003), Moody's (2004).

* Reported ratio represents the odds of having a higher sovereign credit rating.

Table 8

	(8.1) tea2003	(8.2) tea2003	(8.3) tea2003
Observations	40	40	38
R-squared	0.63	0.65	0.64
Constant	23.24 (1.17)	27.09 (1.41)	24.29 (1.33)
ln GDP per capita 2002	-4.60 $(2.67)^b$	-3.45 $(2.67)^b$	-3.29 $(2.51)^b$
GDP per capita growth 1998-02	-0.68 $(2.05)^b$	-0.96 $(2.83)^a$	-0.88 $(2.83)^a$
Share of young women	0.85 $(2.81)^a$	0.81 $(2.77)^a$	0.87 $(3.18)^a$
Index of economic freedom	2.97 $(1.83)^c$		
Unemployment 1999-2001		-0.36 $(2.46)^b$	-0.23 (1.62)
New firm costs as a share of GNP per capita			-8.50 $(2.41)^b$

a. Significant at 1 percent level.
b. Significant at 5 percent level.
c. Significant at 10 percent level.

Table 9

	(9.1) tea2003	(9.2) tea2003	(9.3) tea2003	(9.4) tea2003	(9.5) tea2003	(9.6) tea2003	(9.7) tea2003	(9.8) tea2003
Observations	10	18	18	18	18	18	18	17
R-squared	0.21	0.42	0.42	0.39	0.39	0.52	0.39	0.41
Constant	43.00	34.99	31.42	38.03	39.93	29.43	39.56	43.36
	(1.31)	(3.36)˘	(2.44)ˇ	(3.66)˘	(3.74)˘	(3.00)˘	(2.27)ˇ	(3.46)˘
ln GDP per capita 2002	-3.71	-3.50	-3.07	-3.43	-3.38	-3.43	-3.33	-3.81
	(1.30)	(3.28)[a]	(2.81)[b]	(3.09)[a]	(2.09)[c]	(3.57)[a]	(3.07)[a]	(2.04)[c]
Do not close factories	0.00							
	(0.01)							
Support free markets		0.10						
		(0.98)						
Multinational corps., good			0.10					
			(0.93)					
International orgs., good				0.05				
				(0.39)				
Do not protect against foreign influence					0.01			
					(0.04)			
Globalization, good						0.19		
						(2.04)[c]		
Growing business ties, good							0.00	
							(0.01)	
Accept homosexuality								0.02
								(0.15)

a. Significant at 1 percent level.
b. Significant at 5 percent level
c. Significant at 10 percent level.

Table 10

	(10.1) tea2003	(10.2) tea2003	(10.3) tea2003	(10.4) tea2003	(10.5) tea2003	(10.6) tea2003	(10.7) tea2003	(10.8) tea2003	(10.9) tea2003	(10.10) tea2003	(10.11) tea2003	(10.12) tea2003
Observations	18	18	18	18	18	18	18	18	17	17	17	17
R-squared	0.74	0.77	0.70	0.75	0.86	0.84	0.80	0.86	0.83	0.80	0.79	0.83
Constant	52.87	57.30	15.35	60.59	88.00	77.72	35.66	94.26	65.59	48.42	19.44	70.09
	(1.32)	(1.51)	(0.37)	(1.50)	$(2.87)^b$	$(2.38)^b$	(1.05)	$(2.97)^b$	(1.72)	(1.27)	(0.59)	(1.74)
ln GDP per capita 2002	-6.99	-7.19	-5.56	-6.86	-8.35	-7.33	-5.58	-7.61	-6.86	-5.24	-4.30	-6.27
	$(2.27)^b$	$(2.49)^b$	(1.76)	$(2.30)^b$	$(3.92)^a$	$(3.30)^a$	$(2.45)^b$	$(3.69)^a$	$(2.46)^b$	$(1.96)^c$	(1.74)	$(2.36)^b$
GDP per capita growth 1998-02	-1.47	-1.24	-1.22	-1.44	-2.44	-1.86	-2.23	-2.35	-2.07590	-1.56	-1.79	-2.00
	$(2.37)^b$	$(2.36)^b$	$(1.89)^c$	$(2.43)^b$	$(4.75)^a$	$(3.77)^a$	$(3.57)^a$	$(4.63)^a$	$(3.39)^a$	$(2.92)^b$	$(2.74)^b$	$(3.33)^a$
Share of young women	0.29	0.13	0.74	0.33	-0.18	-0.13	0.39	-0.08	0.30	0.43	0.90	0.37
	(0.45)	(0.21)	(1.17)	(0.53)	(0.37)	(0.24)	(0.74)	(0.18)	(0.48)	(0.65)	(1.64)	(0.62)
Index of economic freedom	2.01	2.29	3.64	2.63								
	(0.67)	(0.82)	(1.15)	(0.91)								
Unemployment 1999-01					-0.64	-0.49516	-0.67	-0.62	-0.52	-0.39	-0.48	-0.51
					$(3.47)^a$	$(2.52)^b$	$(2.93)^b$	$(3.38)^a$	$(2.46)^b$	$(1.87)^c$	$(2.03)^c$	$(2.40)^b$
New firm costs as a share of GNP per capita									-8.68	-9.00	-13.05	-8.72
									(1.34)	(1.24)	$(2.02)^c$	(1.33)
Support free markets	0.20				0.26				0.20			
	$(2.05)^c$				$(3.75)^a$				$(2.16)^c$			
Globalization, good		0.21				0.21					0.14	
		$(2.48)^b$				$(3.15)^a$					(1.63)	
Growing business ties, good			0.23				0.33					0.23
			(1.39)				$(2.43)^b$					(1.45)
Combined Pew Response*				2.01				2.52				1.93
				$(2.20)^b$				$(3.68)^a$				$(2.09)^c$

* Represents the first principal component of the free markets, globalization, and growing business ties survey responses.

a. Significant at 1 percent level.

b. Significant at 5 percent level.

c. Significant at 10 significant level.

Table 11

Increase in TEA Index implied by adopting global best practices

	PEWFreeMarket Support	PEWGlobalization Good	PEWGrowingBusiness TiesGood	Combined Best Practices*
Latin America				
Argentina	9.9	7.8	8.8	10.1
Brazil	3.2	2.0	5.3	3.6
Mexico	5.7	5.9	3.7	5.4
Venezuela	1.7	0.0	1.9	0.6
Eastern Europe				
Poland	5.9	7.2	4.0	6.1
Russia	5.7	8.5	1.4	5.3
Sub-Saharan Africa				
South Africa	0.0	1.2	1.4	0.0
Uganda	0.0	0.7	0.0	0.0
East Asia/Pacific				
China	0.1	0.1	0.8	0.0
Japan	6.1	4.4	5.6	5.8
Korea, Rep.	0.0	0.0	0.8	0.0
South Asia				
India	5.9	5.9	6.4	6.7

* Represents points increase in TEA Index implied by adopting global best practices in all three responses

Source: Author's calculations, Pew Global Attitudes Project (2003), Reynolds et al. (2004).