HARVARD BUSINESS SCHOOL SURVEY ON U.S. COMPETITIVENESS (2011): METHODOLOGY

INTRODUCTION

The Harvard Business School Survey on U.S. Competitiveness was conducted with approximately 10,000 HBS alumni in October 2011. This report is designed to document the methods used to conduct the survey. We begin by providing a brief overview of the survey. Core sections discuss the survey questionnaire, the sample design, field protocols, final sample dispositions and outcome rates, analysis of nonresponse, weighting, and a short discussion of the precision of estimates. Appendices detail the survey questionnaire and final outcome rates.

I. OVERVIEW OF SURVEY

The survey is part of a larger research-led effort to understand and improve the competitiveness of the United States—that is, the ability of firms operating in the U.S. to compete successfully in the global economy while supporting high and rising living standards for Americans. This survey was designed to tap the perceptions and experiences of alumni of Harvard Business School's MBA and longer executive education programs. These individuals are typically well-informed, influential, active participants on the front lines of the global economy. In many organizations, they decide when to hire, where to locate businesses, what to export, how to outsource or offshore, how to cope with regulation, which products to develop, which customers to serve, and so on.

The Harvard Business School Survey on U.S. Competitiveness was sponsored by HBS and designed and conducted by HBS faculty and researchers in conjunction with Abt SRBI, a leading survey research firm. It was conducted from October 4, 2011 through November 4, 2011, and was designed to be completed by web, paper, or telephone. The sample targeted all alumni (slightly more than 50,000) for whom the school has working email addresses. A total of 12,256 alumni completed at least part of the survey. The reported findings are based on 9,750 surveys that were fully complete by the end of the field period. Although the survey targeted all living alumni, a random sample of alumni were targeted for an especially rigorous field protocol.

II. SURVEY QUESTIONNAIRE

The survey questionnaire was developed as part of the larger U.S. Competitiveness Project at HBS, and drew upon the unique strengths of the HBS faculty leading the project as well as the

HBS requests that if you use the survey instrument, in whole or in part, please ensure that you cite HBS' original work as with any academic publication. We would also very much appreciate your sharing your survey's progress and data so that we may research cross-country comparisons and optimize the learning for the whole community. For all queries please contact mraman@hbs.edu.



expertise of survey methodologists in developing the survey items and questionnaire. Topics and questions were developed by HBS researchers based on numerous in-depth interviews with corporate and business leaders. All items were evaluated by a panel of HBS faculty with expertise in different substantive specialties. Cognitive interviews were conducted in person and by telephone to ensure that respondent interpretations of survey items matched the expectations of researchers, and a web-based pilot test was conducted to further evaluate and develop the survey instrument.

The opening three sections of the survey instrument gathered background information on respondents; asked alumni to assess America's standing on 17 elements of the business environment; and posed questions on the overall competitiveness of the U.S. A fourth section probed the location decisions of businesses—concrete choices between the U.S. and other locations in which the alumni were personally involved. A brief fifth section examined the activities firms undertake to benefit their local communities. A final, open-ended section asked alumni to pinpoint the most important impediments to investing in the United States and sought advice for government officials and business leaders. Full Questionnaire text appears in **Appendix A**.

The survey was designed as a multi-mode survey to be completed by web, paper, or telephone. Question text was identical across all modes, items were designed to minimize mode effects, and care was taken to ensure that measurements were comparable across different modes of administration. Questionnaire formatting and field protocols were optimized for the specific method by which the survey was administered. Customized paper surveys were generated automatically for respondents if requested.

III. SAMPLE DESIGN

The Survey on U.S. Competitiveness was designed to include all HBS alumni. HBS defines alumni as graduates of its degree-awarding programs, as well as its longer and more comprehensive executive education programs.¹ Also included were former participants in the HBS New CEO Workshop, an invitation-only program for newly appointed chief executives of significant organizations. All living alumni were considered to be eligible for the survey, regardless of their retirement status or field of employment. Both alumni living in the U.S. (69.5%) and alumni living in other countries (30.5%) were included in the sample.

¹ Degrees: Doctor of Business Administration (DBA); Doctor of Commercial Science (DCS; no longer offered); Doctor of Philosophy (Ph.D.); Master of Business Administration (MBA). Programs: Advanced Management Program (AMP); Central and Eastern European Teachers' Program (ETP; no longer offered); General Management Program (GMP); Industrial Administrator (IA; no longer offered); International Teachers' Program (ITP; no longer offered); Middle-Management Program (MMP; no longer offered); Mid-Officer Certificate (MOC; no longer offered); Naval Supply Corps School (NSC); Owner/President Management Program (OPM); Presidents' Program in Leadership (PPL); Program for Global Leadership (PGL; no longer offered); Programs for Health Systems Management (PHSM; no longer offered); Program for Leadership Development (PLDA); Program for Management Development (PMD; no longer offered); Senior Executive Program for Africa (SEPSA; no longer offered); Senior Executive Program for the Middle East (SEPME; no longer offered); Senior Managers Program (SMP); Strategic Human Resources Program (HRP); The General Manager Program (TGMP; no longer offered); Veterans' Certificate (VC); Visitor for Individual Studies (VIS).



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The sample frame was based on alumni contact information as maintained by HBS. This file is based on original matriculation and graduation records and is actively managed and regularly updated. The file was fully processed for address standardization, address and telephone verification, reverse address and telephone matching, and identification of deceased alumni. After cleaning, the sample frame contained a total of 72,928 records, which was presumed to be a census of HBS alumni.

Embedded Core Sample

A common criticism of surveys that target entire populations is that these studies fail to devote adequate resources to obtain meaningful response rates and that they may be biased by non-response. To counteract this, and to test for potential differences between survey respondents and non-respondents, the sample was divided into two parts: a core sample and a non-core sample. Although all alumni received multiple contact attempts by email, a random "core sample" of 4,000 alumni was selected to receive a more methodologically rigorous survey approach. The core sample was designed to include alumni for whom no email address was available (thus increasing the coverage of the sample) as well as including measures intended to increase response rates. The core sample was designed to be sufficiently large to permit meaningful analysis of non-response bias as well as replication of substantive findings.

The core sample was drawn in advance of the survey for a more methodologically rigorous sequence of contact attempts (detailed below). The core sample was stratified by age and location (see Table 3) to ensure that it was representative of the pool of alumni on these dimensions. Each of the 10 age x location cells was sampled in proportion to its representation in the alumni population: no strata were over- or under-sampled. Alumni without available email addresses (approximately 20% of the alumni list) were included in the fielded core sample while they were not included in the non-core (email contact) sample.² In total, the survey was fielded among the 4,000 alumni included in the core sample as well as the 53,368 remaining alumni with available email addresses.

III. FIELD PROTOCOLS

The core and non-core samples differed with respect to use of a paper pre-notification letter, number of contact attempts, and use of live telephone interviewers. Alumni in the core sample received a paper invitation letter, an invitation email, two email reminders, and additional reminders and interviews via telephone. Alumni in the noncore sample received an invitation email, and two reminders. All alumni received an initial email contact on October 4 or 5. At least two additional email communications were designed to be varied in tone and style. The core sample also received a paper reminder letter (on official letterhead and signed by HBS Dean Nitin Nohria) as well as telephone reminders, and telephone interviews.

Telephone follow-up and interviewing for the core sample were conducted by senior executive interviewers on the staff of Abt SRBI from a central calling center between October 19 and October

² In a very small number of cases, an alumnus who did not have an email address on the HBS alumni list learned of the survey and contacted HBS to participate in the survey.



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26, 2011. The telephone number called was assigned by preferences recorded in the HBS alumni file: where contact preference was recorded as business, calls were made to the business number; where contact preference was recorded as home, calls were made to the home number. Calls were made to business numbers between 9 am to 5 pm local time and home numbers between 5 pm and 9 pm local time. International alumni were called at appropriate local times.

IV. FINAL DISPOSITIONS AND OUTCOME RATES

A total of 9,750 surveys were completed by HBS alumni: 905 from the core sample and 8,845 from the noncore sample. **Table 1** provides details of completion rates by mode and type of sample.

Table 1. Completion Rates by Mode and Type of Sample

Mode	Core	Noncore	Total
Telephone	185	0	185
Web	612	8,827	9,439
Paper	108	18	126
Total	905	8,845	9,750

The core sample includes all members of the sample frame, including those for whom no contact information is available, while the sample that was fielded for other alumni did not include alumni for whom no email address was available. Final dispositions and outcome rates are calculated according to standards developed by the American Association for Public Opinion Research (2011) (see **Table 2**). The response rate to the core sample can be conservatively calculated at 22.6 percent (American Association for Public Opinion Research RR1). In the noncore sample, the response rate (AAPOR RR1) was 16.6 percent, excluding alumni who were not contacted because no email address was on file. Including those without email addresses, the response rate for the noncore group was 12.8%. Final dispositions and outcome rates described in Table 2, below, exclude these cases for the core sample. Final dispositions and outcomes including the entire sample frame are included in **Appendix B**.

Table 2. Final Dispositions and Outcome Rates – Fielded Sample³

Code	Disposition	Core	Noncore	Total
1.0	Interview	981	11,275	12,256
<u>1.1</u>	Completed interview	<u>905</u>	<u>8,845</u>	9,750
1.2	Partial interview	<u>76</u>	2,430	<u>2,506</u>
2.0	Eligible, noninterview	1,312	290	1,602
2.10	Refusal and Break-off	<u>172</u>	<u>290</u>	<u>462</u>
2.11	Refusal	116	37	153
2.111	Household-level refusal	7	0	7
2.112	Known-respondent refusal	109	37	146
2.12	Break-off	56	253	309
2.12	Telephone break-off	48	0	48
2.121	Implicit refusal	8	253	261
<u>2.20</u>	<u>Noncontact</u>	<u>1,101</u>	<u>0</u>	<u>1,101</u>
2.20	Telephone noncontact (appointments)	310	0	310
2.21	Respondent never available	30	0	30
2.22	Telephone answering device	761	0	761
<u>2.30</u>	Other, nonrefusals	<u>39</u>	<u>0</u>	<u>39</u>
2.32	Physically/mentally unable/incompetent	34	0	34
2.33	Language problem	5	0	5
2.331	Household-level language problem	5	0	5
3.0	Unknown eligibility, noninterview	1,707	41,801	43,508
<u>3.10</u>	Nothing known about respondent	<u>1,434</u>	<u>0</u>	<u>43,235</u>
3.11	No invitation sent	343	0	343
3.12	Always busy	170	0	170
3.13	No answer	171	0	171
3.16	Technical phone problems	2	0	2
3.19	Nothing returned	748	41,801	42,549
<u>3.30</u>	<u>Unknown whereabouts</u>	<u>263</u>	<u>0</u>	<u> 263</u>
3.31	Uncontactable	149	0	149
3.3131	Disconnected/not in service	122	0	122
3.3141	Fax/data line	26	0	26
3.3142	Cell phone	1	0	1
3.32	Wrong telephone number	103	0	103
3.34	Temporarily out of service	11	0	11
<u>3.40</u>	<u>Updated contact information</u>	<u>10</u>	<u>0</u>	<u>10</u>
3.41	New contact number provided	10	0	10
4.0	Ineligible	0	2	2
<u>4.10</u>	Out of sample	$\frac{0}{0}$	<u>1</u> 1	<u>1</u> <u>1</u>
<u>4.70</u>	No eligible respondent	<u>0</u>	<u>1</u>	<u>1</u>
	<u>Total All List Cases</u>	<u>4,000</u>	53,368	<u>57,368</u>
	Response Rate 1	22.6%	16.6%	17.0%
	Cooperation Rate 1	75.9%	76.5%	76.4%
	Refusal Rate 1	4.3%	0.5%	0.8%
	Contact Rate 1	29.8%	21.7%	22.2%

³ Fielded sample includes all alumni in core sample and alumni with e-mail addresses in non-core sample.



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Notes:

Codes in left-hand column refer to American Association for Public Opinion Research (AAPOR) disposition codes.

- 2.121 Includes telephone survey cases where respondent claimed to have completed survey but this could not be verified, telephone survey cases where respondent said would complete survey via web and did not do so, and web survey cases where respondent clicked on link but did not answer the first substantive question (Q1a);
- 3.11 No email address available. This only applies if no phone calls were made;
- 3.19 For the core sample, this applies only if no phone calls were made;
- **3.3131** Disconnected/not in service coded by analogy to AAPOR "no such number" disposition for mail surveys of specifically named persons;
- **3.3141** Fax/data line coded by analogy to AAPOR "not deliverable as addressed" disposition for mail surveys of specifically named persons;
- **3.3142** Cell phone coded by analogy to AAPOR "outside delivery limits" disposition for mail surveys of specifically named persons;
- 3.32 Telephone cases where the telephone number was determined to be incorrect or cases of business numbers where the alumnus/a was no longer an employee, the firm was no longer a business, or it was not a firm. This coding is by analogy to the AAPOR "moved no address" disposition for mail surveys of specifically named individuals;
- 3.41 This coding is by analogy to the AAPOR "returned with forwarding information: returned unopened—address correction provided" disposition for mail surveys of specifically named individuals;
- 4.10 Respondent had taken courses at HBS but was not an HBS alumnus;
- **4.70** Respondent was deceased.

V. ANALYSIS OF NONRESPONSE

Responses of alumni in the core sample were compared to those in the non-core sample. Any difference between core and noncore respondents indicates the potential existence of bias in the sample. Adjusting for multiple testing with a Šidák correction, significant differences were found on Q7 (ability of the U.S. to support high wages and benefits) and Q9 (ability of respondent's company to compete in the global marketplace while maintaining current employment levels). After cell weights that adjusted the core and noncore samples separately to population age x location parameters were applied (see below for description of weighting), a significant difference remained in only Q7. Since this difference was not considered substantively significant by the researchers, the final dataset combines and weights data from both samples.



VI. WEIGHTING

Data are cell-weighted to the age x location parameters for the population. Cell weights are calculated as the proportion of the population found in a given age x location cell divided by the proportion of the sample (i.e., completed surveys) in the same age x location cells. Where the proportion of the sample in the cell is lower than the proportion in the population, weights are greater than one, adjusting for the cell's under-representation. Where the proportion of the sample in the cell is higher than the proportion in the population, weights are less than one, adjusting for the cell's over-representation. As the proportion of the sample in the cell approaches the proportion of the population in the cell, weights tend toward one. Proportions and weights are shown in **Table 3** below.

Table 3. Weighting Calculations

			Age		
	18–39	40–49	50–59	60–69	70+
All Alumni					
U.S.	12.1%	10.9%	12.1%	12.5%	21.9%
Overseas	4.4%	5.1%	5.6%	5.1%	10.3%
Sample					
U.S.	17.1%	9.9%	13.7%	12.9%	18.0%
Overseas	5.4%	4.4%	5.3%	4.1%	5.4%
Weight					
U.S.	.708	1.101	.883	.969	1.217
Overseas	.815	1.159	1.057	1.244	1.907

Note: Display of weights truncated at three decimal places.

For analysis of nonresponse, weights were calculated on an identical basis for the completed interviews from the core sample and completed interviews from the noncore sample. These two weights were then combined into a single weight.

VII. PRECISION OF ESTIMATES

The Survey on U.S. Competitiveness was a census, in that it attempted to contact all HBS alumni. Although the census fell short of full response (see Final Dispositions and Outcome Rates), the resulting observations do not form a random sample drawn from a specified population. As such, sampling error (the extent to which responses to a survey may be expected to differ from those of the population from which the survey sample was drawn due to the sampling process) does not apply. The weights described previously adjust for systematic (i.e., nonsampling) errors between the population of HBS alumni and the respondents to the survey on known characteristics (age and location).

APPENDIX A: SURVEY INSTRUMENT

Harvard Business School U.S. Competitiveness Survey

Instrument

Welcome Page

Thank you for taking the Harvard Business School U.S. Competitiveness Survey. This survey focuses on understanding the ability of firms operating in the United States to compete in the global marketplace. All HBS alumni have been invited to participate in this study. It is being conducted by Abt SRBI, a business research firm. The research will contribute to understanding and improving U.S. competitiveness. The survey will take approximately 15 minutes and consists of three to five sections, depending on your answers. Many people find the questions very interesting. Participation in this survey is entirely voluntary, and you can stop at any time. This survey is confidential.

If you have any questions about this study, please contact:

Abt SRBI Harvard Business School [CONTACT NAME] [CONTACT NAME]

Analyst/Project Manager Program Manager and Senior Researcher

U.S. Competitiveness Project

Phone: +1-646-xxx-xxxx Phone: +1-617-xxx-xxxx

Email: xxxxx@srbi.com Email: xxxxx@hbs.edu

Paper vs. Web Choice

Press 'continue' without selecting the checkbox to begin the web survey. If you prefer a paper copy of the survey, select the checkbox and press continue.

[Single check box for "I prefer a copy of the paper survey"] [SKIP TO S1 IF BOX NOT SELECTED]

To determine what version of the survey to send to you, we need to ask a few questions about yourself and firms at which you have worked.

HBS requests that if you use the survey instrument, in whole or in part, please ensure that you cite HBS' original work as with any academic publication. We would also very much appreciate your sharing your survey's progress and data so that we may research cross-country comparisons and optimize the learning for the whole community. For all queries please contact mraman@hbs.edu.



You are listed in the HBS alumni database as a [PIPE IN JOB TITLE] at [PIPE IN COMPANY NAME] in [LOCATION]. Is this information up-to-date and correct?

If you would like to update any information select "no" below, and click continue.

- 1 Yes [SKIP TO B10]
- 2 No, the information should be updated
- B3 Are you currently working?
 - 1 Yes
 - 2 No [SKIP TO B14]
- B4 What is your current job title?
- B5 At what company do you currently work?
- B6 Are you located in the U.S.?
 - 1 Yes
 - 2 No [SKIP TO B8]
- B7 In which state are you located?

[DROP-DOWN LIST OF 50 STATES + DC]

[SKIP TO B9]

B8 In which country are you located?

[DROP-DOWN LIST OF 208 COUNTRIES]

- B9 HBS would like to update your information in the alumni database. May we send your updated information to HBS External Relations?
 - 1 Yes (send my updated information to HBS)
 - 2 No (do not send my updated information to HBS)

[IF B6=1 SKIP TO B11]



- B10 Does your firm have any business activities in the U.S.?
 - 1 Yes
 - 2 No

[IF B6=2 SKIP TO B12]

- B11 Does your firm have any business activities outside the U.S.?
 - 1 Yes
 - 2 No
- B12 Is your firm exposed to international competition?
 - 1 Yes
 - 2 No
- B13 In what sector do you work?
 - 1 Finance and Insurance
 - 2 Professional, Scientific, and Technical Services
 - 3 Information: Media, Telecom, and Data Processing
 - 4 Construction and Real Estate
 - 5 Wholesale and Retail Trade
 - 6 Manufacturing: Food and Beverage
 - 7 Manufacturing: Textile and Apparel
 - 8 Manufacturing: Wood, Paper, and Printing
 - 9 Manufacturing: Petroleum, Chemicals, and Plastics
 - 10 Manufacturing: Metal and Machinery
 - 11 Manufacturing: Computer, Electrical, and Appliance
 - 12 Other Manufacturing
 - 13 Accommodation and Food Services
 - 14 Health Care and Social Assistance
 - 15 Arts, Entertainment, and Recreation
 - 16 Transportation and Logistics
 - 17 Mining and Oil & Gas Extraction
 - 18 Utilities
 - 19 Agriculture, Forestry, and Fishing
 - 20 Educational Services
 - 21 Other Services
 - 22 Public Administration

[SKIP TO B21]



B14	Wh	at job title did you last hold?
B15	At v	what company did you last work?
B16	Wh	en did you last work?
	1	One year ago or less
	2	More than one year ago [SKIP TO V1 DOWNLOAD VERSION]
B17	Did	the firm at which you worked have any business activities in the U.S.?
	1	Yes
	2	No
B18	Did	your firm have any business activities outside the U.S.?

- B19 Was your firm exposed to international competition?
 - 1 Yes

Yes

No

1

2

- 2 No
- B20 In what sector did you work?

[DROP-DOWN LIST OF 22 SECTORS]

- B21 In the past 12 months, has your company or a company you advised made any decisions about where to locate its activities? This includes relocating existing activities, developing new facilities, or considering such changes.
 - 1 Yes
 - 2 No [SKIP TO V2a DOWNLOAD INSTRUMENT IF B6=1 OR B10=1 OR B17=1; SKIP TO V2b IF B6=2 AND (B10=2 OR B17=2)]

- B22 Did any of these decisions involve potentially moving activities into or out of the United States or locating new activities in the United States?
 - 1 Yes
 - 2 No [SKIP TO V2a DOWNLOAD INSTRUMENT IF B6=1 OR B10=1 OR B17=1; SKIP TO V2b IF B6=2 AND (B10=2 OR B17=2)]
- B23 Did you personally take part in making in any of these location decisions?
 - 1 Yes
 - 2 No [SKIP TO V2a DOWNLOAD INSTRUMENT IF B6=1 OR B10=1 OR B17=1; SKIP TO V2b IF B6=2 AND (B10=2 OR B17=2)]
- Please think about the most recent location decision in which you took part that involved the United States. Was that location decision about...
 - Potentially moving existing activities *from the U.S. to another country* [SKIP TO V3a DOWNLOAD INSTRUMENT IF B6=1 OR B10=1 OR B17=1; SKIP TO V3b DOWNLOAD INSTRUMENT IF B6=2 AND (B 10=2 OR B17=2)]
 - Potentially moving existing activities *from another country to the U.S.* [SKIP TO V4a DOWNLOAD INSTRUMENT IF B6=1 OR B10=1 OR B17=1; SKIP TO V4b IF B6=2 AND (B10=2 OR B17=2)]
 - Potentially *locating new activities in the U.S.* [SKIP TO V5a DOWNLOAD INSTRUMENT IF B6=1 OR B10=1 OR B17=1; SKIP TO DOWNLOAD V5b IF B6=2 AND (B10=2 OR B17=2)]

Demographic Items

You are listed in the HBS alumni database as a [PIPE IN JOB TITLE] at [PIPE IN COMPANY NAME] in [OFFICE LOCATION]. Is this information up-to-date and correct?

If you would like to update any information select "no" below, and click continue.

- 1 Yes [SKIP TO S9]
- 2 No, the information should be updated
- S2 Are you currently working?
 - 1 Yes
 - 2 No [SKIP TO S13]



- S3 What is your current job title?
- S4 At what company do you currently work?
 - -----
- S5 Are you located in the U.S.?
 - 1 Yes
 - 2 No [SKIP TO S7]
- S6 In which state are you located?

[DROP-DOWN LIST OF 50 STATES + DC]

[SKIP TO S8]

S7 In which country are you located?

[DROP-DOWN LIST OF 208 COUNTRIES]

- S8 HBS would like to update your information in the alumni database. May we send your updated information to HBS External Relations?
 - 1 Yes (send my updated information to HBS)
 - 2 No (do not send my updated information to HBS)

[IF S5=1 SKIP TO S10]

- S9 Does your firm have any business activities in the U.S.?
 - 1 Yes
 - 2 No

[IF S5=2 SKIP TO S11]

- S10 Does your firm have any business activities outside the U.S.?
 - 1 Yes
 - 2 No



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S11	Is your firm exposed	l to international compe	tition?
	1 Yes 2 No		
S12	In what sector do yo	ou work?	
	[DROP-DOWN LIST	T OF 22 SECTORS]	
	[SKIP TO Q1]		
S13	What job title did yo	ou last hold?	
S14	At what company d	id you last work?	
S15	When did you last w	vork?	
	 One year ago More than on 	or less e year ago [SKIP TO Q1]
S16	Did the firm at which	h you worked have any	business activities in the U.S.?
	1 Yes2 No		
S17	Did your firm have	any business activities o	utside the U.S.?
	1 Yes 2 No		
S18	Was your firm expo	sed to international com	petition?
	1 Yes2 No		
S19	In what sector did y	ou work?	
	[DROP-DOWN LIST	T OF 22 SECTORS]	
	[SKIP TO Q1]		



U.S. Competitiveness

The next set of questions asks about various elements of the U.S. business environment, elements that affect how well firms in the United States can compete in the global marketplace. For each element, please rate the U.S. compared to other advanced economies like Western Europe, Japan, and Canada.

		Much worse than average	Somewhat worse than average	About average	Somewhat better than average	Much better than average
Q1a	Logistics infrastructure High-quality highways, railroads, ports, and air transport	1	2	3	4	5
Q1b	Communications infrastructure High-quality and widely available telephony, Internet and data access	1	2	3	4	5
Q1d	Complexity of the national tax code	1	2	3	4	5
Q1e	Education system through high school Universal access to high-quality education; curricula that prepare students for productive work	1	2	3	4	5
Q1f	High quality universities with strong linkages to the private sector	1	2	3	4	5
Q1g	Context for entrepreneurship Availability of capital for high-quality ideas; ease of setting up new businesses; lack of stigma for failure	1	2	3	4	5
Q1h	Availability of skilled labor	1	2	3	4	5
Q1q	Flexibility in hiring and firing of workers	1	2	3	4	5
Q1i	Innovation infrastructure High-quality scientific research institutions; availability of scientists and engineers	1	2	3	4	5
Q1j	Regulation Effective and predictable regulations without unnecessary burden on firms	1	2	3	4	5

		Much worse than average	Somewhat worse than average	About average	Somewhat better than average	Much better than average
		Muck	Some	Abou	Some	Muck
Q1k	Strength of clusters: Geographic concentrations of related firms, suppliers, service providers, and supporting institutions with effective collaboration	1	2	3	4	5
Q11	Quality of capital markets Ease of firm access to appropriate capital; capital allocated to most profitable investments	1	2	3	4	5
Q1m	Macroeconomic policy Soundness of government budgetary, interest rate, and monetary policies	1	2	3	4	5
Q1c	Effectiveness of the political system Ability of the government to pass effective laws	1	2	3	4	5
Q1n	Protection of physical and intellectual property rights and lack of corruption	1	2	3	4	5
Q1o	Efficiency of legal framework Modest legal costs; swift adjudication	1	2	3	4	5
Q1p	Sophistication of firm management and operations Use of sophisticated strategies, operating practices, management structures, and analytical techniques.	1	2	3	4	5

- Q2 Compared to other advanced economies, would you say that the U.S. business environment, overall, is...
 - 1 Much worse than average
 - 2 Somewhat worse than average
 - 3 About average
 - 4 Somewhat better than average
 - 5 Much better than average



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Over time, is each element of the U.S. business environment falling behind, keeping pace with, or pulling ahead of the same element in other advanced economies?

		Falling behind	Keeping pace	Pulling ahead
Q3a	Logistics infrastructure High-quality highways, railroads, ports, and air transport	1	2	3
Q3b	Communications infrastructure High-quality and widely available telephony, Internet and data access	1	2	3
Q3d	Complexity of the national tax code	1	2	3
Q3e	Education system through high school Universal access to high-quality education; curricula that prepare students for productive work	1	2	3
Q3f	High quality universities with strong linkages to the private sector	1	2	3
Q3g	Context for entrepreneurship Availability of capital for high-quality ideas; ease of setting up new businesses; lack of stigma for failure	1	2	3
Q3h	Availability of skilled labor	1	2	3
Q3q	Flexibility in hiring and firing of workers	1	2	3
Q3i	Innovation infrastructure High-quality scientific research institutions; availability of scientists and engineers	1	2	3
Q3j	Regulation Effective and predictable regulations without unnecessary burden on firms	1	2	3
Q3k	Strength of clusters: Geographic concentrations of related firms, suppliers, service providers, and supporting institutions with effective collaboration	1	2	3
Q31	Quality of capital markets Ease of firm access to appropriate capital; capital allocated to most profitable investments	1	2	3
Q3m	Macroeconomic policy Soundness of government budgetary, interest rate, and monetary policies	1	2	3



		Falling behind	Keeping pace	Pulling ahead
Q3c	Effectiveness of the political system Ability of the government to pass effective laws	1	2	3
Q3n	Protection of physical and intellectual property rights and lack of corruption	1	2	3
Q3o	Efficiency of legal framework Modest legal costs; swift adjudication	1	2	3
Q3p	Sophistication of firm management and operations Use of sophisticated strategies, operating practices, management structures, and analytical techniques.	1	2	3

Overall, over time is the U.S. business environment falling behind, keeping pace with, or pulling ahead of the business environments in...

		Falling	Keeping	Pulling
		behind	pace	ahead
Q4a	Other advanced economies like Western	1	2	2
	Europe, Japan, and Canada	1	Δ	3
Q4b	Emerging economies like Brazil, India, China,	1	2	2
	and Eastern Europe	1		3

- Q5 Please think about firms operating in the United States—whether or not they are U.S.-owned. Overall, how successful are these firms at competing in the global marketplace against firms operating in other advanced economies?
 - 1 Not at all successful
 - 2 Not very successful
 - 3 Somewhat successful
 - 4 Very successful
 - 5 Extremely successful

- Q6 Three years from now, do you expect the ability of firms operating in the United States to compete successfully in the global marketplace to be...
 - 1 Much worse than today
 - 2 Somewhat worse
 - 3 The same
 - 4 Somewhat better
 - 5 Much better than today
- Q7 Three years from now, do you expect firms operating in the U.S. to be...
 - 1 Much less able to support high wages and benefits
 - 2 Somewhat less able
 - 3 Neither less nor more able
 - 4 Somewhat more able
 - 5 Much more able to support high wages and benefits

[SKIP TO I1 IF RESPONDENT HASN'T WORKED IN THE PAST YEAR, COMPANY WORKED AT IN PAST YEAR HAS NO U.S. OPERATIONS, OR CURRENT COMPANY HAS NO U.S. OPERATIONS—Q9 to be asked if: S5=1 or S9=1 or S16=2]

- Q9 Can *your firm's* U.S. operations compete successfully in the global marketplace *and* maintain current employment levels...
 - 1 While supporting *rising* wages and benefits for an average employee
 - 2 While supporting *stable* wages and benefits
 - Only with *declining* wages and benefits for an average employee
 - 4 Your firm does not compete in the global marketplace

Location Decisions

- L1 In the past 12 months, has your company or a company you advised made any decisions about where to locate its activities? This includes relocating existing activities, developing new facilities, or considering such changes.
 - 1 Yes
 - 2 No [SKIP TO C1]



- L2 Did any of these decisions involve potentially moving activities into or out of the United States or locating new activities in the United States?
 - 1 Yes
 - 2 No [SKIP TO C1]
- L3 Did you personally take part in making in any of these location decisions?
 - 1 Yes
 - 2 No [SKIP TO C1]
- L4 Please think about the most recent location decision in which you took part that involved the United States. Was that location decision *primarily* about...
 - Potentially moving existing activities from the U.S. to another country
 - Potentially moving existing activities *from another country to the U.S.* [SKIP TO L11]
 - 3 Potentially locating new activities in the U.S. [SKIP TO L18]
- L5 What country or countries other than the U.S. were considered as potential new locations for these activities?

[DROP-DOWN LIST OF 208 COUNTRIES]

- L8 What type of activities did the location decision concern? (Please choose all that apply.)
 - 1 Production
 - 2 Customer service support
 - 3 Back office support
 - 4 Research, development, and/or engineering
 - 5 Other (please specify:
- L10 Approximately how many jobs were associated with this location decision?
 - 1 Fewer than 100
 - 2 100 to fewer than 1,000
 - 3 1,000 or more



- L6 Were these activities ultimately moved out of the United States?
 - Yes [IF ONLY ONE COUNTRY SELECTED, SKIP TO L9; ELSE CONTINUE]
 - 2 No [SKIP TO L9a]
 - 3 No decision has been made yet [SKIP TO C1]
- L7 To which country or countries were the activities moved?

[ALPHABETICAL CHECK BOX LIST OF COUNTRIES CHECKED IN L5]

What characteristics of [FILL IN SELECTED COUNTRY] played a major role in its selection over other potential locations? (Please choose all that apply.)

[LOOP THROUGH FIRST TWO MENTIONS OF COUNTRIES CHECKED IN L7 IF > 1 COUNTRY MENTIONED IN L7]

Laws, regulations, and safety

- 1 Greater safety for people and property
- 2 Less corruption
- 3 Stronger intellectual property protection
- 4 Fewer or less expensive regulations
- 5 Faster regulatory approval
- 6 More responsive or accessible government officials

Infrastructure

- 7 Better transportation infrastructure (e.g., roads, rails, ports)
- 8 Cheaper or more reliable energy

Market factors

- 9 Larger market
- 10 Faster growing market
- 11 Higher import barriers
- 12 Proximity to customers
- 13 Proximity to home market

Labor factors

- 14 Higher productivity of labor
- 15 Better access to skilled labor
- 16 Lower wage rates
- 17 Better managerial talent



Location factors

- 18 Proximity to suppliers
- 19 Better access to natural resources
- 20 Lower transport costs to final markets
- 21 Proximity to export markets
- 22 Proximity to other company operations
- 23 Similar language and/or culture

Other cost factors

- 24 Lower tax rates
- 25 More generous incentives from local authorities (e.g., tax breaks or subsidies)
- 26 More favorable exchange rates

Other factors

27 Other (please specify: _____

[SKIP TO C1]

L9a What characteristics of the United States played a major role in its selection over other potential locations? (Please choose all that apply.)

Laws, regulations, and safety

- 1 Greater safety for people and property
- 2 Less corruption
- 3 Stronger intellectual property protection
- 4 Fewer or less expensive regulations
- 5 Faster regulatory approval
- 6 More responsive or accessible government officials

Infrastructure

- 7 Better transportation infrastructure (e.g., roads, rails, ports)
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- 21 Proximity to export markets
- 22 Proximity to other company operations
- 23 Similar language and/or culture

Other cost factors

- 24 Lower tax rates
- More generous incentives from local authorities (e.g., tax breaks or subsidies)
- 26 More favorable exchange rates

Other factors

27 Other (please specify: ______

[SKIP TO C1]

L11 In which country or countries were these activities originally located?

[DROP-DOWN LIST OF 208 COUNTRIES]

- L12a Were any other countries besides the U.S. considered as potential locations for these activities?
 - 1 Yes [CONTINUE]
 - 2 No [SKIP TO L15]
- L12 What country or countries other than the U.S. were considered as potential locations for these activities?

[DROP-DOWN LIST OF 208 COUNTRIES]



- L15 What type of activities did the location decision concern? (Please choose all that apply.)
 - 1 Production
 - 2 Customer service support
 - 3 Back office support
 - 4 Research, development, and/or engineering
 - 5 Other (please specify: ______
- L17 Approximately how many jobs were associated with this location decision?
 - 1 Fewer than 100
 - 2 100 to fewer than 1,000
 - 3 1,000 or more
- L13 Were these activities ultimately moved?
 - Yes [IF L12a = 2, SKIP TO L16 and pipe "United States" into selected country; ELSE CONTINUE]
 - 2 No [SKIP TO C1]
 - 3 No decision has been made yet [SKIP TO C1]
- L14 To which country or countries were the activities moved?

[ALPHABETICAL CHECK BOX LIST OF COUNTRIES CHECKED IN L12 PLUS U.S.]

L16 What characteristics of [FILL IN SELECTED COUNTRY] played a major role in its selection over other potential locations? (Please choose all that apply.)

[IF > 1 COUNTRIES SELECTED IN L14, LOOP THROUGH FIRST TWO MENTIONS]

Laws, regulations, and safety

- 1 Greater safety for people and property
- 2 Less corruption
- 3 Stronger intellectual property protection
- 4 Fewer or less expensive regulations
- 5 Faster regulatory approval
- 6 More responsive or accessible government officials



Infrastructure

- 7 Better transportation infrastructure (e.g., roads, rails, ports)
- 8 Cheaper or more reliable energy

Market factors

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Location factors

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- 19 Better access to natural resources
- 20 Lower transport costs to final markets
- 21 Proximity to export markets
- 22 Proximity to other company operations
- 23 Similar language and/or culture

Other cost factors

- 24 Lower tax rates
- More generous incentives from local authorities (e.g., tax breaks or subsidies)
- 26 More favorable exchange rates

Other factors

27 Other (please specify: _____

[SKIP TO C1]

L18 What country or countries were considered as potential locations for these new activities?

[DROP-DOWN LIST OF 208 COUNTRIES]



- L21 What type of activities did the location decision concern? (Please choose all that apply.)
 - 1 Production
 - 2 Customer service support
 - 3 Back office support
 - 4 Research, development, and/or engineering
 - 5 Other (please specify: _____
- L23 How many jobs were associated with this location decision?
 - 1 Fewer than 100
 - 2 100 to fewer than 1,000
 - 3 1,000 or more
- L19 Did your company go ahead and establish these new activities?
 - Yes [IF L18 = U.S. AND NO OTHER SELECTED SKIP TO L22; ELSE CONTINUE]
 - 2 No [SKIP TO C1]
 - 3 No decision has been made yet [SKIP TO C1]
- L20 In what country or countries were the activities placed?

[ALPHABETICAL CHECK BOX LIST OF COUNTRIES CHECKED IN L18]

L22 What characteristics of [FILL IN SELECTED COUNTRY] played a major role in its selection over other potential locations? (Please choose all that apply.)

[IF > 1 COUNTRY MENTIONED IN L20 LOOP THROUGH FIRST TWO MENTIONS]

Laws, regulations, and safety

- 1 Greater safety for people and property
- 2 Less corruption
- 3 Stronger intellectual property protection
- 4 Fewer or less expensive regulations
- 5 Faster regulatory approval
- 6 More responsive or accessible government officials

Infrastructure

- 7 Better transportation infrastructure (e.g., roads, rails, ports)
- 8 Cheaper or more reliable energy



Market factors

- 9 Larger market
- 10 Faster growing market
- 11 Higher import barriers
- 12 Proximity to customers
- 13 Proximity to home market

Labor factors

- 14 Higher productivity of labor
- 15 Better access to skilled labor
- 16 Lower wage rates
- 17 Greater managerial talent

Location factors

- 18 Proximity to suppliers
- 19 Better access to natural resources
- 20 Lower transport costs to final markets
- 21 Proximity to export markets
- 22 Proximity to other company operations
- 23 Similar language and/or culture

Other cost factors

- 24 Lower tax rates
- 25 More generous incentives from local authorities (e.g., tax breaks or subsidies)
- 26 More favorable exchange rates

Other factors

27 Other (please specify: _____

Investment in Local Communities

- C1 If your company undertook more activities to benefit the local community, would the company be...
 - 1 *More successful* than it is today
 - 2 As successful as it is today
 - 3 Less successful than it is today
- C2 Does your company have an innovative approach to activities to benefit the local community?
 - 1 Yes
 - 2 No [SKIP TO I1]



HARVARD BUSINESS SCHOOL

	Yes No	
Natio	onal Suggestion Box	
maker	ard Business School faculty members are engaged in discussions we rs and business leaders. As part of this effort, HBS faculty are estab onal Suggestion Box" about changes that could make the U.S. mor	olishing a
I1	Would you like to submit responses to the National Suggestion B	lox?
	 Yes [IF S15=2 SKIP TO I2a, ELSE CONTINUE] No [SKIP TO TERMINATE] 	
I2	For your company (or those you advise), what is the <i>single greates</i> investing and creating jobs in the U.S.?	at impediment to
	[SKIP TO I3]	
I2a	In your opinion, what is the single greatest impediment to invest jobs in the U.S.?	ing and creating
13	What one specific change to improve U.S. competitiveness—such a particular regulation or law—would you recommend to <i>federal</i> , <i>government officials</i> ?	_

May HBS researchers contact you to learn more about your approach?

C3

[[SKIP TO I5a IF S15=2 OR S16=2 OR S9=2]	
	What one specific action could <i>your firm</i> undertake that would multiple. U.S. operations compete more effectively?	aake your firm's
-		
-		
[[SKIP TO I6]	
	What one specific action could business leaders undertake that w U.S. operations compete more effectively?	rould make their
-		
-		
ľ	May HBS faculty members contact you to discuss this topic furth	er?

- 1 Yes
- 2 No

Termination

Your responses have been recorded. Thank you very much for participating in this important survey.

APPENDIX B: FINAL DISPOSITIONS AND OUTCOME RATES INCLUDING ALL ALUMNI

Code	Disposition	Core	Noncore	Total
1.0	Interview	981	11,275	12,256
<u>1.1</u>	<u>Completed interview</u>	<u>905</u>	<u>8,845</u>	<u>9,750</u>
<u>1.2</u>	<u>Partial interview</u>	<u>76</u>	<u>2,430</u>	<u>2,506</u>
2.0	Eligible, noninterview	1,312	290	1,602
<u>2.10</u>	<u>Refusal and Break-off</u>	<u>172</u>	<u>290</u>	<u>462</u>
2.11	Refusal	116	37	153
2.111	Household-level refusal	7	0	7
2.112	Known-respondent refusal	109	37	146
2.12	Break-off	56	253	309
2.12	Telephone break-off	48	0	48
2.121	Implicit refusal	8	253	261
<u>2.20</u>	<u>Noncontact</u>	<u>1,101</u>	<u>0</u> 0	<u>1,101</u>
2.20	Telephone noncontact (appointments)	310		310
2.21	Respondent never available	30	0	30
2.22	Telephone answering device	761	0	761
<u>2.30</u>	Other, nonrefusals	<u>39</u>	$\frac{0}{0}$	<u>39</u>
2.32	Physically/mentally unable/incompetent	34		34
2.33	Language problem	5	0	5
2.331	Household-level language problem	5	0	5
3.0	Unknown eligibility, noninterview	1,707	57,361	59,068
<u>3.10</u>	Nothing known about respondent	<u>1,434</u>	<u>57,361</u>	<u>58,795</u>
3.11	No invitation sent	343	15,560	15,903
3.12	Always busy	170	0	170
3.13	No answer	171	0	171
3.16	Technical phone problems	2	0	2
3.19	Nothing returned	748	41,801	42,549
<u>3.30</u>	<u>Unknown whereabouts</u>	<u>263</u>	<u>0</u>	<u>263</u>
3.31	Uncontactable	149	0	149
3.3131	Disconnected/not in service	122	0	122
3.3141	Fax/data line	26	0	26
3.3142	Cell phone	1	0	1
3.32	Wrong telephone number	103	0	103
3.34	Temporarily out of service	11	0	11
3.40	<u>Updated contact information</u>	<u>10</u>	<u>0</u>	<u>10</u>
3.41	New contact number provided	10	0	10
4.0	Ineligible	0	2	2
<u>4.10</u>	Out of sample	<u>0</u>	<u>1</u>	<u>1</u>
<u>4.70</u>	No eligible respondent	<u>0</u>	<u>1</u>	<u>1</u>
	<u>Total All List Cases</u>	4,000	<u>68,928</u>	72,928
	Response Rate 1	22.6%	12.8%	13.4%
	Cooperation Rate 1	75.9%	76.5%	76.4%
	Refusal Rate 1	4.3%	0.4%	0.6%
	Contact Rate 1	29.8%	16.8%	17.5%

Notes:

Codes in left-hand column refer to American Association for Public Opinion Research (AAPOR) disposition codes.

- 2.121 Includes telephone survey cases where respondent claimed to have completed a survey but this could not be verified, telephone survey cases where respondent said would complete survey via web and did not do so, and web survey cases where respondent clicked on link but did not answer the first substantive question (Q1a);
- 3.11 No email address available. For core sample, this only applies if no phone calls were made;
- 3.19 For the core sample, this applies only if no phone calls were made;
- **3.3131** Disconnected/not in service coded by analogy to AAPOR "no such number" disposition for mail surveys of specifically named persons;
- **3.3141** Fax/data line coded by analogy to AAPOR "not deliverable as addressed" disposition for mail surveys of specifically named persons;
- **3.3142** Cell phone coded by analogy to AAPOR "outside delivery limits" disposition for mail surveys of specifically named persons;
- Telephone cases where the telephone number was determined to be incorrect or cases of business numbers where the alumnus/a was no longer an employee, the firm was no longer a business, or it was not a firm. This coding is by analogy to the AAPOR "moved no address" disposition for mail surveys of specifically named individuals;
- 3.41 This coding is by analogy to the AAPOR "returned with forwarding information: returned unopened—address correction provided" disposition for mail surveys of specifically named individuals;
- 4.10 Respondent had taken courses at HBS but was not an HBS alumnus;
- **4.70** Respondent was deceased.

REFERENCES

American Association for Public Opinion Research. 2011. "Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys." 7th ed. American Association for Public Opinion Research, Deerfield, IL.