Roadmap for Commodity Sourcing Strategy

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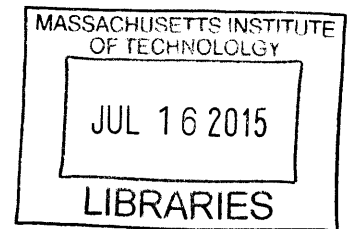IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

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Abstract

The procurement and sourcing group of OG company was tasked to systematically forecast, design and develop the future state of the company's next generation supply base. The main objective is to anticipate the preferred locations to source commodities such as machine parts from in the near future. In response to that objective, the purpose of this thesis is to identify the relevant group decision drivers that consist of political, economic, social, technological, environmental, legal and business internal factors that the procurement and sourcing group are evaluating. These drivers were then utilized to develop a tool that is able to quantify, balance and combine the specified drivers so as to determine the overall alignment to the company's procurement and sourcing strategy. This tool also seeks to predict the near-term global competitiveness of oilfield services equipment manufacturing by country.

Through on-site interviews, literature review, public data collection and statistical analysis, we were able to identify and specify top drivers that were most relevant to the decision-making process of managers in procurement and sourcing group for an oil & gas company. Based on the specified drivers, our analysis identified the top ranked countries using a hierarchical analytical process which was then used to validate the company's current sourcing strategy.

Building on this analysis, we propose a framework that determines OG company's next generation supply base. The framework proposed can serve as an organizational development approach and decision-making tool which is useful in uncovering the underlying motivations of the procurement and sourcing managers. The tool also provides qualitative recommendations through a quantitative stepwise approach. The methodology of identifying and quantifying drivers as described in our thesis is especially relevant to industrial manufacturing companies with a global manufacturing footprint. We conclude with the limitations of the framework and potential avenues for future research.

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1. Introduction

OG company is a worldwide service provider in the oil and gas industry with a 2015 market cap of more than $40 billion, employing 30,000 people that represent 60 nationalities in more than 50 countries. The company provides a wide range of products and services which are critical to oil and gas exploration and production activities across the world. OG company currently spends $10 billion in procurement of reservoir characterization, drilling and production from external vendors. The scale of spend highlights an opportunity for processes, strategy and savings within the procurement and sourcing group. In addition, the company has undergone tremendous growth over the past 10 years, partly fueled by acquisition and consolidation. This organizational legacy has prompted the procurement and sourcing group to proactively focus on integration, rationalization and centralization of their supply chain processes across the acquired autonomous and disjointed companies, business units and business segments. The intended outcome of this integration initiative was to capture the company's synergies and achieve economies of scale. The move to consolidate the procurement and sourcing function across the various companies was in part due to a larger initiative of the organization to have a common pool of shared services such as human resources, health, safety and environment (HSE), finance and supply chain management.

Yet, in OG's pursuit to integrate and synchronize across the acquired portfolio of companies and execute daily operations, the proactive planning and strategizing of the end state of OG company's integrated global supply chain had been deemphasized. As a result, the company currently runs a portfolio of 50 manufacturing assets ranging from research, engineering and integrated manufacturing centers in eight countries of which to support. More recently, as the company has shifted from the integration and implementation phase to the steady

state operations phase of its shared services evolution, the organization has initiated plans to find opportunities to leverage its modern integrated capabilities and scale of operations. The procurement and sourcing group has been tasked to systematically forecast, design and develop the future state of OG's next generation supply base so as to meet the needs of its manufacturing portfolio of the future. Even as OG's current supply base is large and extensive, the Company's intention is to be able to anticipate the preferred locations to source machine parts from in the mid to long term based on a variety of competing and complementary drivers. This myriad of drivers might originate from supply factors, customer demand considerations, economic megatrends, general market conditions, regulatory, political and even business considerations.

This challenge is not idiosyncratic to OG company. Many industrial manufacturing organizations are often confronted by the same drivers which dictate where they procure and how much they can procure from each geographical location or region. For example, industrial manufacturing companies as a group are often influenced by price volatility relating to raw material prices, political sanctions imposed by western countries and other drivers which have to be taken into consideration in any procurement strategy. OG company's current procurement portfolio is extensive and geographically dispersed. It is a result of legacy supply bases inherited from the acquired organizations and ad-hoc suppliers which were developed in response to emergent product requirements.

This thesis is OG company's systematic initiative to develop a comprehensive framework that proactive considers all relevant internal or external drivers that will impact the company's procurement strategy. The framework attempts to be able to quantify, balance and combine specified drivers to determine the overall complementarity to OG's procurement and sourcing strategy while also determining the competitiveness of oilfield services manufacturing

internationally over the middle to long term. By creating this tool, the company would then be able to holistically assess the competitiveness of manufacturing in a particular country and consequently determine its supply chain strategy such as whether it should develop a supplier locally or within the region, onshore, nearshore offshore, outsource or insource a particular component to its supplier.

This tool will aim to provide as close as possible approximation as to where the company should be sourcing from. It provides an objective yardstick for the company to determine if its current supply portfolio is relatively aligned with its intended supply base portfolio. The tool aims to remove subjectivity, individualized judgment, circumstantial evidence and spontaneous decision-making. It systematically and comprehensively determines, in stepwise fashion, the ranking and weight of competing drivers within a group by ascertaining the consensus of varied perspectives. The tool provides both insightful recommendations and general guidelines as to where to procure from. The intention is to have the tool incorporated with a pragmatic and rational business decision making process so as to determine the most measured and optimal procurement strategy.

Specifically, the tool is applicable across commodities as it incorporates collective and conventional procurement drivers which were represented during the initial interview process. During the research process, the machine parts, raw materials and electronics commodity groups is interviewed and analyzed. However, in order to increase granularity and customization, a specific commodity group, machine parts is selected as a use case so as to determine the specific drivers that respondents might consider important. The drivers are then ranked and tailored across the machine parts commodity team as part of a consensus decision-making process. The thesis also leverages the group's broad operational background and diverse work experience.

The model utilizes publically available information and business insights to develop a robust, realistic and reliable framework that encapsulates all pertinent internal and external factors that seeks to capitalize on significant long-term megatrends and proactively plan long range procurement and sourcing decisions while mitigating significant risks within commodity sourcing strategy. The model will serve as a seamless and user-friendly framework for procurement and sourcing teams to holistically and explicitly evaluate all applicable factors, optimize qualitative and quantitative considerations, methodically appraise and rank trade-offs and provide predictive insights and actionable recommendations.

To this end we intend to answer the following research questions: **How do we develop a comprehensive system or framework that considers and ranks macro and long term factors towards the development of an internal procurement strategy? How do we rank countries on their overall manufacturing competitiveness based on the company's predetermined and preferred procurement strategy and preferences?**

This thesis is organized in chronological fashion. The first section chronicles the literature review performed prior to the initiation of our research process. This is followed by the findings of preliminary interviews, survey and results to illustrate the challenges and decision drivers deemed important by the procurement and sourcing group. A follow-up user survey was then designed and interviews conducted so as to determine the variance across the respondent's answers. The results, such as ranking of drivers and countries are elaborated with explanations, analysis and limitations provided within the discussion section. The thesis then concludes with a summary of findings and areas for future study.

2.   Literature Review

The section begins by providing a brief explanation of the suitability of the balanced scorecard in combination with the PESTLE framework to determine a long-term commodity sourcing strategy. It then proceeds to give a historical background of the BSC and how this tool has evolved over time. However, with any business tool, there are limitations and this is highlighted in a separate section. Alternative frameworks for multiple criteria decision making are then discussed in contrast to the selected framework of a balanced scorecard. Lastly, the application of PESTLE and BSC within a procurement function will then be elucidated.

2.1   Utilizing Balanced Scorecards within the PESTLE Framework for Long-Term Commodity Sourcing Strategic Planning

In order to develop and implement an effective, long-term commodity sourcing strategy, procurement and sourcing teams often have to consider multiple variables prior to arriving at a decision on the final procurement plan. These variables may take into consideration a variety of factors ranging, for example, from financial to non-financial, qualitative to quantitative, tangible to intangible, internal to external, lagging to leading or operational to tactical and more. To address these overlapping issues, several decision-making frameworks have developed and evolved over time.

The concept of a balanced scorecard (BSC) has predominated since its inception in a 1992 *Harvard Business Review* article by Kaplan and Norton (cited in Niven, 2014). The longevity of this framework has been highlighted for its effectiveness in linking corporate mission to daily operations, fostering joint language and holistically combining an array of complex trade-offs so as to seamlessly target efforts towards achieving the organization's vision (Ramanan, 2002).

In addition to the BSC, the "Political, Economic, Social and Technological" framework or also referred to as the PEST has been utilized as an effective tool in business environment scanning where political, economic, social and technological considerations are considered in totality for business planning purposes (Aguilar, 1967). This framework has since been updated to PESTLE where the legal and environmental considerations are also factored in so as to reflect the modern day parameters to which businesses must conform (Dcosta, 2011). We hypothesize that a combination of the BSC and PESTLE frameworks will enable an evaluation and ranking of all relevant drivers toward the development of a long-term commodity sourcing strategy across industries. The following literature review demonstrates and supports this hypothesis by first providing a background and historical progress of BSC, considering areas for improvement, evaluating other decision-making tools, performance management systems and a discussion of research where BSC and PESTLE have been applied to procurement decisions.

2.2   Background and Iterative Advancement of BSC

In Ramanan (2002), the balanced scorecard is defined as a performance measurement system that develops clear targets and results that clearly defines the organization's performance and the corresponding objectives for each of its stakeholders. It is stated that the balanced scorecard effectively concentrates resources, balances competing needs and provides a methodology to develop insightful metrics of intended outcomes that will support the company's vision and finally allow for comparison of plans to reality in feedback loop. This methodology has since advanced from a simplistic corporate scorecard to a BSC which measures four balanced perspectives of financial, customer, internal processes and innovation. The article then provides an eight step process to systematically develop a BSC that takes the process from preparation, interview, workshop, implementation and periodic review. This step wise process

effectively identifies gaps within existing capabilities and maintains a shortlist of balanced metrics in leading or lagging indicators, which business leaders can monitor. The author highlights that BSCs surpass benchmarking as environments and strategies vary from firm. However, they caution users of BSCs that in order for it to be effective, the practices need to be quickly implemented and continually reviewed.

In the seminal paper written by Kaplan and Norton on BSC (1992), the authors stated that financial performance was sufficient in the industrial era; however, due to an increasingly complex business environment, managers needed to consider financial and operational issues while balancing the need to streamline information flows to critical measures. The BSC considers competing factors within a company's vision while reducing the risk of sub-optimization that enables managers to effectively consider the trade-offs between all factors. In the same vein, the BSC attempts to look at external factors (customer), internal factors (processes and competencies), innovation (internal technological capabilities and innovation trends) and financial factors (sales growth and market share) in order to determine the best strategy to implement the evaluative criteria. The paper also identifies several limitations to BSCs. Firstly, having an exceptional set of measures in BSC does not guarantee a successful outcome as the BSC is limited to translating the strategy into measurable objectives and factors. Kaplan and Norton also recognize that the senior management sponsorship and contribution is critical to success as performance measurement systems are often designed and administered by financial professional only. Additionally, BSC focuses on providing a future state outlook for how organization should be but does not emphasize organizational control.

Building on the BSC developed by Kaplan and Norton, Coe and Letza (2014) have stated that the methodology for filtering and clustering has improved with the implementation of

the BSC by allowing for clearer explanation of the vision, linkage to and alignment of performance while providing for feedback and iterative improvement of performance. It has also allowed for increased clarity and more logical cause and effect chains to be created and mapped to leading and lagging indicators. BSC has thus far evolved to become more robust. The evolved version of the BSC provides for a meticulous choice of category that allows a more customized set of perspectives to be identified by the individual organization rather than four rigid considerations as stated previously. For example, a triangle scorecard with three individual considerations, was cited as a transition away from a simple adhoc performance measurement tool to key managerial tool to unify the organization towards a common goal with increased functionality and relevance. The authors end with the conclusion that they foresee an increased deviation and specialization between various balanced scorecard models used for strategic performance, operational performance, monitoring and evaluation of activities and personal recognition purposes.

2.3   Potential Areas of Improvement to the BSC

Youngblood and Collins (2003) have investigated the development of a quantitative technique to compare trade-offs between the desired metrics when developing the BSC. They suggest the use of multi-attribute utility theory (MAUT) to address trade-offs and better evaluate alternatives for purposes of resource allocation, capital investments and initiatives ranking, an attribute which BSC does not include. The article suggests metrics are derived from strategy, elaborated by teamwork for activities and business processes. MAUT provides a step-by-step process to quantifying strategic thrust and to a specific utility function to weight different compromises and perspectives. The MAUT allows for a stepwise methodology to develop a quantitative procedure in evaluating trade-offs. Specifically, they recommend the scorecard

development, metrics quantification, model development and evaluation. The authors recommend that MAUT should be utilized as an enabler to facilitate discussions among stakeholders. One of the key characteristics of the MAUT is found in the metric quantification phase where the author recommends the development of a utility function which showcases best and worst case scenarios using continuous function to determine the decision makers risk profile. Additionally, a relative scaling factor (k) is incorporated so as to understand the factor relative to each other so as to decide how much influence one factor will impact the other. However, this is a subjective process with special attention paid to factors with increased volatility. Thereafter, an aggregate utility function will allow for the composition of each individual scaled value while incorporating the relative scaling factor that allow for a composite score. When a dependency between factors occurs, a multiplicative function must be utilized so as to reflect its dependency. This scorecard will then have to be validated with sample scenarios and compared with forecasted rankings. If discrepancies are to occur, iterative revisions are required to optimize the model. This process allows for sensitivity analysis to be ran more effectively to allow for significant insights to be gleaned on critical aspects of the analysis. However, the MAUT technique is not without limitations. The MAUT technique as cited in the paper does not reflect the results over time. The authors advocate the continuous review of metrics so as to reduce the risk that adjustment of metrics for results in an increase in composite score while in reality, producing a less optimal strategic outcome.

2.4 Alternative frameworks for multiple criteria decision making

As part of a deeper study into decision making frameworks, alternative frameworks for multi criteria decision making were examined including:. Dockalikova and Klozikova (2014) elucidated other frameworks which have been used to evaluate multiple factors. Specifically, the

authors suggest the use of decision-making trial and evaluation laboratory (DEMATEL), analytical hierarchy process (AHP) and analytical network process (ANP) to apply for enterprise business planning. In addition, they consider the use of the PESTLE factors as the inputs for multi-criteria evaluation matrix so as to evaluate the impact of variants and criteria. The authors go on to describe the AHP methodology as a widely used multiple decision framework. The shortfall of the AHP, however, is that it assumes that the criteria are independent and impractical. Dockalikova and Klozikova then stated that in 1996, this the framework had been extended and improved upon by developing the ANP by incorporating considerations in interdependency, feedback loops and criterion hierarchy, alternatives and determinants in a networked and systematic manner. The author also highlights that DEMATEL, a graph theory offshoot to visually solve problems by separating cause and effect groups so as to clarify causal relationships. Utilizing the above methods, the author then breaks down the PESTLE factors into sub factors and considers both the local and global weights of each factor to form a paired comparison matrix. Using a combination of DEMATEL and ANP, causal relationships are determined first and interdependency weights are then calculated by multiplying the local weights in matrix format. The results displayed that interdependency considerations provided greater accuracy by balancing the relationship of criteria and the criteria itself to reveal deeper insights into the impact each PESTLE factor had rather than considering the criteria independently.

In a separate research paper, Frank, Souza de Souza, Ribeiro and Echeveste (2013) proposed an alternative simplistic multiple criteria decision making framework for investments decisions. Specifically, they analyze strategy, quality and economic perspectives in totality using conventional management frameworks to make investment decisions. The rationale for creating a

separate framework is that other methods such as fuzzy multi criteria analysis (FMCA) and AHP require experienced decision makers that make involved analysis and data collection which often require extended periods to implement. The authors attempts to quantify the strategic relevance of each strength, weakness, opportunity and threat (SWOT) by creating varying grades the subsequent summation of grades into a SWOT matrix in each quadrant to determine the final result. From the quality perspective, the quality function deployment (QFD) matrix is a qualitative management technique which links market research info into a comprehensive quality matrix. Finally, from the economic perspective, the traditional financial metrics of Net Present Value (NPV) and simple payback are utilized to rank profitability. The Frank et al. (2013) then proceed to incorporate all the factors using the MAUT analytical method to design a framework for the ranking of the composite criteria weights. This methodology was then utilized to compare three investment alternatives in addition to a simulation which incorporated various scenarios and conditions reflecting the different weights in each criterion. This model proposes a different model for multi criteria decision making but limits its perspectives to strategy, quality and economic perspectives. In addition, it is also serves as a user-friendly model which incorporates widely adopted frameworks by business managers. The framework's ease of use allows practitioners more time to understand the results but might come at the expense of accuracy and ambiguity.

2.5   Application of PESTLE within a Procurement Function

In a review of the PESTLE and BSC combination model, only an application of the PESTLE model in Lu, Liu and Wang (2013) in the procurement of public construction projects in China was available. In current literature, at this time no PESTLE and BSC combination model has been documented to date. In the article, the PESTLE model is utilized to understand

the overall milieu surrounding the market environment for the procurement of public construction projects in China. The authors then segue into the discussion of two different procurement models, mainly the agent construction system (ACS) or the public private partnership (PPP). The ACS model is clearly defined and focuses on the hiring of a professional construction management unit (CMU) to serve as the end-to-end focal point to manage the construction project from bidding to completion. In contrast, the PPP's definition varies significantly across the world but a commonality remains in that it focuses on the a legal pact between a public sector entity and a private sector entity of which ACS can be considered a subset or distinct group depending on interpretation. However, PPP projects often include state-owned enterprises which have an element of privatization considered. The authors then proceeds to utilize the PESTLE-Procurement Innovation framework to evaluate the effectiveness of each procurement model and its link to the macro environmental conditions. They found that the ACS model was more widespread in the current procurement model while the PPP is not an attractive methodology for procurement in China. The main takeaway was the recognition of a procurement systems within external PESTLE conditions which derived value for its end users.

2.6   Summary

In summary, the available body of research has well defined the balanced scorecard as a successful framework which incorporates multiple criteria into a holistic decision making matrix while considering the PESTLE framework in the macro environment. However, the methodology requires areas for improvement. Specifically, it can consider the use of MAUT to improve the accuracy of the decision outcomes. The BSC is however not the only framework which considers multiple variables holistically and quantitatively; the DEMATEL and ANP combination also allows for an effective comparison. The multiple criteria decision making framework which

considers strategy, quality and economics provides for a separate methodology to making strategic decisions. However, all the above do not effectively combine the PESTEL framework into a BSC format within a long-term commodity sourcing strategy. The closest that the PESTEL framework has been utilized in a procurement setting is in the Chinese public construction projects arena which fails to consider a procurement strategy by utilizing a balanced scorecard methodology. Therefore, it is our intention to consider all relevant external PESTLE factors and effectively categorizing them into the separate groups within the BSC so as to obtain a holistic decision outcome.

3. Methodology

PESTEL and BSC lay the foundation of framework to design a commodity-sourcing strategy. The BSC was embedded in a preliminary survey by incorporating drivers in both the internal and external environment. In addition, PESTEL principles were used to categorize 100 drivers identified through literature review, industrial reports and interview with the procurement managers in the oil and gas company. The insights from the interview were categorized under a new category "Business". The survey was then conducted with the procurement managers in the oil and gas company to investigate importance of the 100 drivers. The preliminary survey results were analyzed using statistical methods, including central tendency and variance analysis. Follow-up interviews were then conducted to investigate the reasons behind the drivers that had disparity among users. Afterwards, the most important drivers were selected based on the survey analysis. Last, countries' rankings at each driver level were gathered from public resources. Countries' overall rankings were calculated from their individual rankings at each driver level. The section is composed of these parts: preliminary interview and survey, preliminary survey analysis, user profile survey, follow-up interview, ranking of drivers and ranking of countries.

3.1 Preliminary Interview and Survey

The interview and the survey were the first steps in developing an analytical process to select the top sourcing countries. To understand the drivers that determine sourcing decisions in the oil and gas company, an interview was conducted with management in the procurement function. In addition, insights were derived from industry reports and literature. Building on this information, a survey was designed for management in the procurement function to identify the most important drivers.

3.1.1 Preliminary Interview

Exploratory interviews with management individuals in the procurement function identified the drivers utilized in business decisions in the company. Interviewees cited that analogous industry analysis could provide insights into drivers in external environments. For example, the defense and aerospace industries were recommended because complexity of machine parts procured in these industries was similar. In its daily functions, benchmarks against the aerospace and defense industry in terms of manufacturing process design. At the procurement level, managers believed that procurement decision-making process in analogous industries was transferrable.

3.1.2 Survey Design

As discussed, drivers were identified through literature review, industrial reports and interview with the procurement managers in the oil and gas company The 100 drivers were categorized in the PESTELB categories. The complete list of drivers is attached in Appendix A-1.Drivers are defined as "the attributes of a business function that drives the behavior and implementation of that business function in order to achieve the strategic business objective of the company" (Office of Government Commerce, 2002). Drivers are the main attribute that

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drives decision-making behavior of managers and choice of sourcing countries in order to achieve the objective of strategic sourcing in the procurement function. The objective of strategic sourcing was to leverage on economics of scale, integrate with suppliers and improve technological capabilities.

3.1.3 Survey Layout

The survey form includes 100 drivers gathered from these sources, as attached in Appendix A-2. Additional rows were left in the end of the survey for users to fill in additional drivers if needed.

Subject continuum scales were discussed in book Survey Design Methods (Fowler, 2009). Typical subject continuum scales assume that a dimension goes from the most negative feelings to the most positive feelings. Six-category scale was modified based on the five-category scale in the book by adding "no opinion" to the feelings.. In our survey, "0," "1," "2," "3" "4," and "5" indicate "no opinion," "not important at all, " "slightly important," "important," "fairly important," and "very important" respectively, as shown in Table 1. Users are required to consider the feelings represented by the scale, their own feelings and place themselves in the proper category.

Table 1 Six-Category Survey Scale, from Zero to Six

LEGEND	RANKING (based on Importance)
0	No Opinion
1	Not Important at All
2	Slightly Important
3	Important
4	Fairly Important
5	Very Important

Each user was asked to allocate a score between the range of zero and five based on the perception of the importance level of each driver. In addition, users were required to complete

the survey independently. No limitations were given on the total numbers of 0s, 1s, 2s, 3s, 4s and 5s. There was also no constraint on individual's total scores of all drivers. Drivers were arranged in order of political, economic, social, technological, environmental, legal and business categories. The description of drivers was included in survey form to ensure clarity and accuracy. Surveys were distributed to five procurement managers in the machine parts category and three in the electronics category.

The balanced scorecard principles were applied in the survey design. First, the survey incorporated both financial and nonfinancial aspects of company's performance as well as internal and external perspectives. Second, the survey covered both the external and internal perspectives of the company. The external perspectives were gained through evaluation of the macro environment, such as general manufacturing and transportation capabilities in a country. Internal perspectives were gained through assessment of the company's supply chain, such as supply of raw materials to its plant in a country. Third, users represented a mix of backgrounds and experiences.

Five surveys were received from managers in the machine parts category and three responses were received from managers in the electronics category. Surveys from managers in the machine parts category were used in the following analysis. The two commodities have different procurement strategies and a single framework can't satisfy the objectives of two commodity sourcing strategies. Thus, the paper used responses from the machine parts category only.

3.2 Preliminary Survey analysis

The purpose of the preliminary survey analysis was to analyze central tendency, variability and distribution of scores across users and across drivers. In addition, follow-up

interviews were conducted to understand the reasons behind the drivers that had biggest range of scores across users. The following subsections cover central tendency across all drivers, central tendency across all users and survey variance.

3.2.1 Central Tendency of Drivers and Users

Absolute value of mean, mode and median measured the central tendency across different users (Appendix B-1). However, central tendency of a small sample could not represent central tendency of a larger population. In addition, it was hard to distinguish the most important drivers from the least important drivers by central tendency because variability was not measured. The analysis is attached in Appendix B-1.

Frequency distribution across all users is shown in Table 2. The numbers represent the quantity of drivers with scores that fell within each interval in the frequency column. The analysis showed that the frequency of allocation in each bin was widely different across users. The difference in frequency was caused by differences in perception of importance level of the drivers. The Absolute value in Table 2 was transformed to percentage value in Table 3. Frequency of zero was excluded because zero indicated that user had no opinion on importance level of driver.

Table 2 Selection Frequency[1]

Frequency	User 1	User 2	User 3	User 4	User 5
0	0	0	0	0	0
1	39	11	3	1	28
2	9	23	19	29	8
3	14	14	62	44	18
4	18	13	16	24	17
5	15	4	0	2	12
Sum (1~5)	95	65	100	100	83

Table 3 Cumulative Distributions

Bin(excluding 0)	User 1	User 2	User 3	User 4	User 5
0	0.00	0.00	0.00	0.00	0.00
1	0.41	0.17	0.03	0.01	0.34
2	0.51	0.52	0.22	0.30	0.43
3	0.65	0.74	0.84	0.74	0.65
4	0.84	0.94	1.00	0.98	0.86
5	1.00	1.00	1.00	1.00	1.00
Sum Product	59.85	40.43	72.35	66.79	51.17

The cumulative distribution graph among users is shown in Figure 1. The Horizontal axis are bins [1], [2,] [3], [4] and [5]. By observing the graph, score "1" had the most controversy over its importance level, while bin "5" was perceived to have no difference in importance level among users.
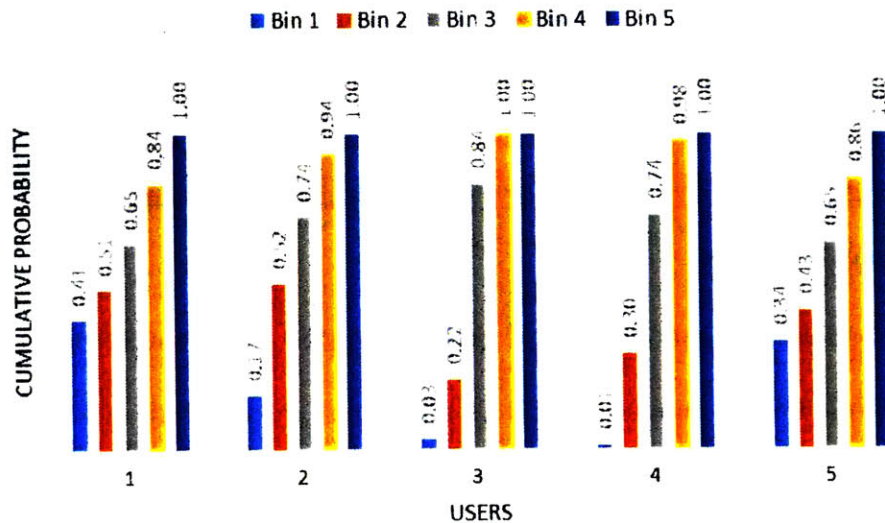
Figure 1 Cumulative Distribution Graphs

Cumulative density method adjusted differences in survey users' perception of importance level. By adjusting importance level of "5" to the same level across users, relative importance level of "0," "1," "2," "3," and "4" were adjusted to the same level. Cumulative

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[1] Selection frequency is number of drivers given a "zero," "one," "two," "three," "four," or "five" by a user

density was a better measure of the importance level than scale. It normalizes the differences in total number of drivers per user and total number of scores per user. Cumulative density was reallocated to each driver – user pair based on the score, shown in table below. The full table is attached in Appendix B-2.

Table 4 Cumulative Density, by User and Driver

#	DRIVER CATEGORY	DRIVERS	User 1	User 2	User 3	User 4	User 5
1	Political	Governmental Effectiveness	0.65	0.74	0.22	0.74	0.34
2	Political	Social Policies	0.41	1.00	1.00	1.00	
3	Political	Entry Mode Regulations	0.65	0.74	1.00	0.30	0.65
4	Political	Tax Policies	0.51	0.17	1.00	0.98	0.86
5	Political	Trade compliance	1.00	1.00	1.00	0.98	0.86
6	Political	Implementation of Sanctions	1.00	1.00	1.00	0.98	
7	Political	Availability of FDI tax incentives	0.41	0.74	1.00	0.30	
8	Political	Exit Mode Regulations	0.51	0.74	1.00	0.74	0.43
9	Political	Governmental Relationship with USA	0.84	0.52	0.84	0.74	0.34
10	Political	Governmental Relationship with EU	0.84	0.52	0.84	0.74	0.34
11	Political	Control of Corruption	1.00	0.74	0.84	0.30	
12	Political	Regulatory Quality	0.65	0.74	0.84	0.30	0.34
13	Political	Conduciveness of business environment	0.84	0.74	0.84	0.98	0.86
14	Political	Governmental funding for Industries	0.51		0.84	0.30	0.34
15	Political	Availability of Export rebates	0.41	0.17	0.84	0.74	

3.2.3 Survey Variance

Table 5 summarizes users' individual tendency to give a high and a low score. Number of highest incidences indicated number of drivers that a user gave highest score among all users. Similarly, number of lowest incidences indicated number of drivers that a user gave the lowest score among all users. User 1 had six highest incidences, or there were six drivers which user 1's score was highest among all users. User 5 had three lowest incidences, or there were three drivers which his score was lowest among all users.

Table 5 Number of High and Low Incidences, by User

User	User 1	User 2	User 3	User 4	User 5
# of Highest Incidences	6	1	0	0	1
# of Lowest Incidences	2	0	2	1	3

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Variance was indicated by range, or difference between highest score and lowest score. Variance of "0" inferred that all users had consensus over importance of a driver. A variance of "4" indicated a disparity existed, where one user gave a "5", while another user gave a "1". Distribution of absolute range is shown in Table 6. There was 44 drivers with a range of "2," followed by 28 drivers with a range of "3" and eight drivers with a range of "4."

Table 6 Distribution of Absolute Range[2]

Abs Range	4	3	2	1	0
(# of Drivers / Bin)	8	28	44	16	4

Table 7 includes all of the drivers with a range of "4." Number of maximum users and number of min users identified the highest score and the lowest score for each driver. More maximum and minimum users showed that a higher degree of consensus among them. One highest user and one lowest user were shown in last two columns respectively. For example, "conflict mineral disclosure" had a range of 4 and there were three users who gave a score of 5. "Conflict mineral disclosure" was seen to be most important by three users, except for user 3.

Table 7 Survey Variance, Number of Maximum and Minimum Users, Highest and Lowest User

Rank	#	DRIVER CATEGORY	DRIVERS	Abs Range	# of Max Users (for Abs Rg = 4)	# of Min Users (for Abs Rg = 4)	Highest User #1	Lowest User #1
1	2	Political	Social Policies	4	2	1	User 2	User 1
2	29	Economic	GDP allocation for Defense	4	1	1	User 1	User 4
3	45	Economic	Integration with China (Electronics)	4	1	1	User 1	User 5
4	48	Economic	Steel price (machinery)	4	1	1	User 5	User 1
5	81	Environmental	Risk of Natural disasters	4	1	1	User 1	User 5
6	84	Environmental	Conflict mineral disclosures	4	3	1	User 1	User 3
7	87	Legal	Competitive regulations	4	1	1	User 1	User 5
8	92	Legal	Protectionism (anti-dumping laws)	4	2	1	User 1	User 3

Interviews were conducted to investigate the reasoning behind high and low incidences. Highest users and lowest users were interviewed to investigate three reasons that a particular driver was "most important" or "not important at all".

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[2] Distribution of absolute range gives number of drivers with a range of "four," "three," "two," "one'" and "zero"

3.3 User Profile Survey

A second survey was designed to gather information about respondents' age, years of experience, familiarity with driver categories within each region and background. As shown in Table 8, a seven-category scale was developed to measure users' familiarity with driver categories. "1" stood for "extremely unfamiliar" and "7" stood for "extremely familiar".

Table 8 Seven-Category Scale, from Zero to Seven

LEGEND	RANKING (based on Familiarity)
1	Extremely Unfamiliar
2	Moderately Unfamiliar
3	Slightly Unfamiliar
4	Neither
5	Slightly Familiar
6	Moderately Familiar
7	Extremely Familiar

3.4 Follow-up Interview

Follow-up interviews were conducted with maximum users and minimum individually to investigate reasons why a driver was regarded as "very important" or "not important at all". Users were required to give three reasons for giving a maximum score or minimum score.

3.5 Ranking of drivers

The Ranking of Drivers describes how the most important drivers were selected based on survey analysis. By using average cumulative density to rank drivers, top drivers were selected. Other methods such as mean, median and mode were not used to rank drivers. The first subsection, ranking by statistical methods, provides the ranking results using statistical methods. The second subsection "selection of top drivers" discusses how the top percentile of drivers were selected based on the ranking.

3.5.1 Ranking by Statistical Methods

Drivers were ranked according to absolute mean, absolute mode and absolute median respectively. The ranking results are summarized in Appendix D-2.

In addition drivers are also ranked based on average of cumulative density across users. Average of cumulative density among users indicated importance level of each driver from all the users' point of view. Assuming cumulative density for driver i rated by user j is X_{ij}, the adjusted cumulative density is $\Sigma X_{ij}/\max(j)$. The result is shown in Table 9.

Table 9 Average Cumulative Density, in Descending Order, by Driver

RANK	#	DRIVER CATEGORY	DRIVERS	AVERAGE CUMULATIVE SCORE
1	6	Political	Implementation of Sanctions	1.00
2	98	Business	Raw material cost	0.98
3	5	Political	Trade compliance	0.97
4	66	Technology	High tech manufacturing capacity	0.96
5	90	Legal	Intellectual property protection	0.95
6	93	Business	Global presence of suppliers	0.92
7	96	Business	Timeliness of deliveries	0.91
8	97	Business	Rivalry between market suppliers	0.90
9	21	Economic	Growth rate of wages	0.88
10	69	Technology	Perceived quallity & reputation of components / products	0.87
11	26	Economic	Currency Fluctuation and Volatility	0.85
12	2	Political	Social Policies	0.85
13	13	Political	Conduciveness of business environment	0.85
14	45	Economic	Integration with China (Electronics)	0.85
15	94	Business	Criticality of component (technology)	0.84
16	99	Business	Logistics cost	0.83
17	20	Economic	Inflation rates of Major Economies	0.81
18	71	Technology	Technological Maturity of Specific Industry	0.81

3.5.2 Selection of Drivers

The subsection illustrates the methods used to analyze distribution of drivers and the choices of appropriate number of drivers. To segment drivers by cumulative density, bins of size 0.1 were created. As a result, users can select number of drivers that make the framework specific to procurement of machine parts. As shown in Table 10, 10 bins were created and 7 bins were non-empty. Number of top drivers selected was sum of drivers in bins that are larger or equal to 1, 0.9, 0.8, 0.7, 0.6, 0.5 and 0.4. Therefore, the number of top drivers was among "8", "20", "36", "60", "83", "95", and "100".

Table 10 Cumulative Distribution (Bin Size = 0.1)

Bin #	Bin Size	0.1	
	BIN (< #)	DRIVERS / BIN	CUMULATIVE PROBABILITY
1	0.1	0	0
2	0.2	0	0
3	0.3	0	0
4	0.4	5	0.05
5	0.5	12	0.17
6	0.6	23	0.4
7	0.7	24	0.64
8	0.8	16	0.8
9	0.9	12	0.92
10	1	8	1

As seen in Figure 2, distribution of drivers was skewed to the right, with most drivers falling into interval [0.6, 0.7].
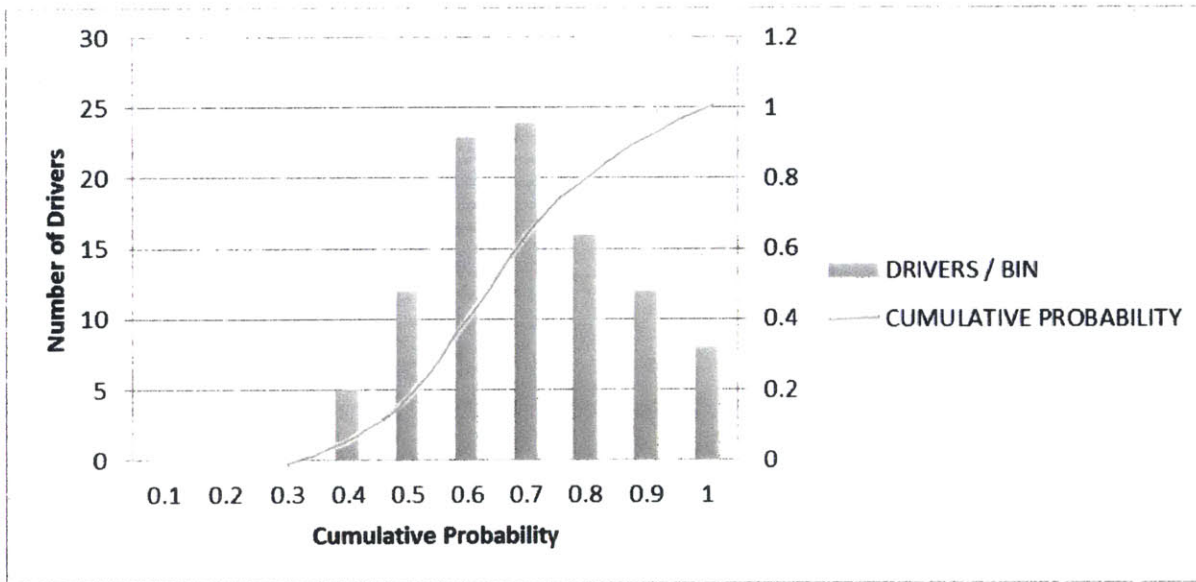
Figure 2 Distribution of Drivers (Bin Size= 0.1)

When the size of the bins was increased to 0.25, four bins were created. Number of top drivers selected was the sum of drivers in bins that are larger or equal to0.75, 0.5 and 0.25. The sum of drivers in bins that are larger than or equal to "0.75", "0.5" and "0.25" are "27", "83",

and "100" respectively. As can be seen in Figure 3, most drivers were concentrated in the intervals of [0.5, 0.75].

The choice of number of drivers was to strike a balance between generality and specificity. To one extreme, 100 drivers generated a general result. To the other extreme, eight drivers generated a specific result. The desired level of specificity by users in the research was high, hence 27drivers were selected.

Table 11 Cumulative Distribution (Bin Size=0.25)

	Bin Size	0.25	
Bin #	BIN (< #)	DRIVERS / BIN	CUMULATIVE PROBABILITY
1	0.25	0	0
2	0.5	17	0.17
3	0.75	56	0.73
4	1	27	1

As can be seen in Figure 3, most drivers were concentrated in [0.5, 0.75] interval.
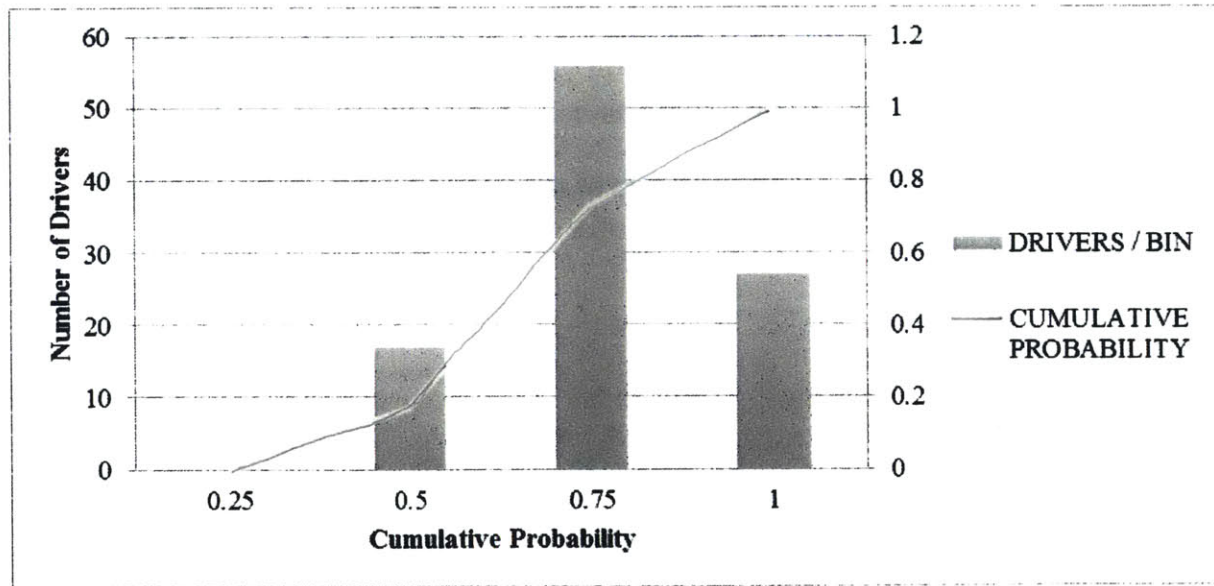
Figure 3 Distribution of Drivers (Bin Size=0.25)

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3.6 Ranking of countries

The follow section discusses a hierarchical process to rank countries on an aggregate level of the top drivers. Drivers were selected from a top percentile, or number of drivers from all. The first subsection explains briefly the process that led to ranking of countries. The second subsection illustrates the steps taken, including compiling countries' ranking at individual driver level, calculating values of driver-country pairs, and eventually consolidating countries' composite score in aggregate driver level.

3.6.1 Hierarchical Process to Rank Countries

The process to rank countries is briefly illustrated in Figure 4. Ranking of countries were developed on the basis of country composite score. Country composite score was to assess competitiveness of country on an aggregate level. On a level below the aggregate level, a country had a score of individual drivers. Scores of individual drivers were weighed to get a composite score. Scores of individual drivers were measured by percentage value, value and rankings. Percentage value was selected as the best measure. At the bottom of the hierarchy chart, examples are provided to show available resources of ranking of countries in some drivers.

Figure 4 Hierarchy Chart of Country Ranking

Country
Composite
Score

Weighted
Scores of
Drivers

Percentage
Values

Values

Rankings

Social
Progress
Index

Social
Policies
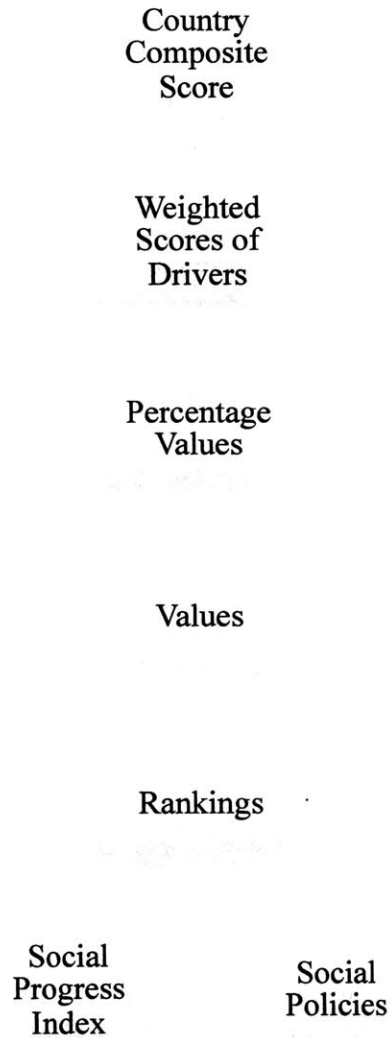
3.6.2 Step-by-step Illustration of the Hierarchical Process

First, drivers were quantified using indices from public resources. Where such indices were not available, "proxies" were derived and were assumed to rank the countries in the same way as indices did. Then, the original data was cleaned and normalized to facilitate further analysis as described in the next section.

Indices were developed by entities to rank countries in a particular aspect. Where there was a match between indices and drivers, indices were referenced to quantify drivers. However, there were circumstances when such indices were not available, a "proxy" was then developed to

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rank countries. "Proxy" was a very close metric in the context of those drivers. An illustration of available indices was given in Figure 5.

Driver 1: Social Policies	Driver 2: Tax Policies	Driver 3: High Technology Manufacturing Capacity
• **Proxy: Social Progress Index** • **Measurement: Value**	• **Proxy: Ease of Paying Taxes Ranking** • **Measurement: Ranking**	• Proxy: High Technology Exports in $ • Measurement: Value

Figure 5 Illustration of Quantification of Drivers

However, some indices had limited data to inform rankings. For example, "Issuance of Exploration Permits" was among drivers where there were no available data to match. The reason was that companies or government authorities made information confidential. Therefore, efforts were spent to explore data on number of rigs by country, which was a good indication of number of permits issued to drill oil. Unfortunately, data on the number of rigs was not complete, so data on the number of wells was used instead. Complete list of indices and proxies is attached in Appendix D-3. In addition, original data of individual drivers created a challenge for analysis at an aggregate level because of inconsistency in data formatting, country name and inclusion of unnecessary data. Therefore, original data were cleaned and normalized to prepare for analysis.

Second, after data were normalized, all data were compiled on a master sheet. Then, values of all indices and proxies were standardized to country's ranking in descending order., ranking in descending order was converted from an integer value to a percentage value.

Information on driver number, driver ranking, order, metric and entity were put on top of each driver as illustrated in Table 12. Countries and country codes were listed vertically. Driver number was the same with the sequence of drivers in the survey. Driver ranking could be

referred to results in Table 9. The order is either ascending ("AS") or descending ("DE"), determined by sequence of countries arranged in original data source. If a higher value was assigned to a more competitive country, value would descend if countries were ranked from the best to the worst. At the bottom of the master sheet, a count indicated the number of countries included in the analysis by the entity. Average indicated the average of values across all countries. Sum was the total of all countries' values.

Table 12 Country Comparison, by Individual Indices

COUNTRY COMPARISON		#	1	2	3	4	5	6
by Individual Ranking Indices		RANKING	73	12	47	40	3	1
		ORDER	DE	DE	DE	AS	DE	AS
		METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index
		ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions
1	Aruba	ABW	1.21					
2	Andorra	AND	1.53					
3	Afghanistan	AFG	(1.43)		93.54	79.00	9.21	8.53
4	Albania	ALB	(0.33)	69.13	91.86	131.00	72.48	5.54
5	Algeria	DZA	(0.50)	59.13	74.07	176.00	64.21	6.61
6	Angola	AGO	(1.26)	39.93	56.56	144.00	40.96	6.66
7	Argentina	ARG	(0.29)	70.59	72.58	170.00	65.11	6.71
8	Armenia	ARM	0.07	65.03	97.77	41.00	68.81	4.86
9	American Samoa	ASM	0.48					
10	Antigua and Barbuda	ATG	0.48		83.28	159.00	73.58	
11	Australia	AUS	1.62	86.10	96.47	39.00	80.53	5.01
12	Austria	AUT	1.57	85.11	83.42	72.00	87.66	5.47
	AVERAGE		(0.02)	63.67	80.41	94.98	67.16	5.87
	SUM		(4.50)	8,404.72	15,198.16	17,951.00	12,424.16	945.09

Examples were given to show the difficulty to conduct analysis on data with incompatible measures on aggregate level. For example, "Social Progress Index" measured countries' social policies on a scale of 100. Ease of paying taxes of a country was suggested by rankings. Therefore, all values were converted to ranking. As seen in

Table 13, Albania ranked 85th after conversion with a social progress index of 69.13.

Table 13 Country Comparison, by Normalized Score and Rank

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions
1	Aruba	ABW	172					
2	Andorra	AND	188					
3	Afghanistan	AFG	16		166	111	6	2
4	Albania	ALB	91	85	149	59	92	94
5	Algeria	DZA	67	46	49	14	56	45
6	Angola	AGO	23	6	16	46	21	43
7	Argentina	ARG	93	91	44	20	59	39
8	Armenia	ARM	121	73	186	149	77	129
9	American Samoa	ASM	143					
10	Antigua and Barbuda	ATG	143		88	31	98	
11	Australia	AUS	193	123	183	151	138	122
12	Austria	AUT	189	122	89	118	167	98
13	Azerbaijan	AZE	81	60	178	157	22	51
	AVERAGE		102.49	66.49	94.96	94.98	92.98	80.85
	SUM		20,907.00	8,777.00	17,948.00	17,951.00	17,202.00	13,017.00

Then, rankings of all indices, either in ascending order or descending order, were standardized to ranking in descending order. The ranking in descending order was renamed as "points" to distinguish from previous step. When measuring countries' competitiveness on aggregate level, points of different drivers could be easily summed up later; more points would be allocated to more competitive countries. The basis of allocating points was based on ranking in descending order. For example, if "Albania" ranked 85th among 135 countries, where first country was the best country. "Albania" ranked 48th after flipping the order of ranking, where 135th country was the best country.

Table 14 Country Comparison, by Normalized Score and Rank, in Descending Order

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions
1	Aruba	ABW	32					
2	Andorra	AND	17					
3	Afghanistan	AFG	189		24	79	180	160
4	Albania	ALB	114	48	41	131	94	67
5	Algeria	DZA	138	87	141	176	130	117
6	Angola	AGO	182	127	174	144	165	119
7	Argentina	ARG	112	42	146	170	127	123
8	Armenia	ARM	84	60	4	41	109	32
9	American Samoa	ASM	61					
10	Antigua and Barbuda	ATG	61		102	159	88	
11	Australia	AUS	12	10	7	39	48	39
12	Austria	AUT	16	11	101	72	19	64
13	Azerbaijan	AZE	124	73	12	33	164	110
	AVERAGE		102.49	66.49	94.96	94.98	92.98	80.85
	SUM		20,907.00	8,777.00	17,948.00	17,951.00	17,202.00	13,017.00

Eventually, rank in points was converted to rank in percentage value to ensure fairness in comparison across different drivers. Assume X_i was points of country i, the percentage value was calculated by taking X_i over total number of countries. To explain unfairness of using ranking to measure countries' performance, "Australia" ranked in "trade compliance" and

"implementation of sanctions" as "138th" and "122th" respectively. By intuition, Australia was performing better in "trade compliance" than "implementation of sanctions". However, the reality was the opposite. The unfairness in measurement was caused by the different number of countries included in ranking. There were 185 countries and 161 countries ranked in "trade compliance" and "implementation of sanctions" respectively. As can be seen in Table 15, "Australia" had slightly higher scores in "implementation of sanctions" than "trade compliance", which was above 76 percentile and 75 percentile respectively.

Table 15 Country Comparison, by Fraction of Countries Index Ranked

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions
1	Aruba	ABW	0.84					
2	Andorra	AND	0.92					
3	Afghanistan	AFG	0.08		0.88	0.59	0.03	0.01
4	Albania	ALB	0.45	0.64	0.79	0.31	0.50	0.58
5	Algeria	DZA	0.33	0.35	0.26	0.07	0.30	0.28
6	Angola	AGO	0.11	0.05	0.08	0.24	0.11	0.27
7	Argentina	ARG	0.46	0.69	0.23	0.11	0.32	0.24
8	Armenia	ARM	0.59	0.55	0.98	0.79	0.42	0.80
9	American Samoa	ASM	0.70					
10	Antigua and Barbuda	ATG	0.70		0.47	0.16	0.53	
11	Australia	AUS	0.95	0.93	0.97	0.80	0.75	0.76
12	Austria	AUT	0.93	0.92	0.47	0.63	0.90	0.61
13	Azerbaijan	AZE	0.40	0.45	0.94	0.84	0.12	0.32
	AVERAGE		0.50	0.50	0.50	0.51	0.50	0.50
	SUM		102.49	66.49	94.96	95.48	92.98	80.85

Third, countries were ranked based on selected drivers. The following paragraphs will explain the weighted average method to calculate a composite score. The composite score was then used to rank the top countries.

Table 16 is a summary of individual percentage value of all drivers in all countries. The percentage values were multiplied by weights of drivers to get the composite score.

Table 16 Ranking Driver Comparison, by Fraction of Countries Index Ranked

RANKED DRIVER COMPARISON
by fraction of countries index ranked

			NO.	11	12
			COUNTRY NAME	Australia	Austria
			COUNTRY CODE	AUS	AUT
RANK	#	DRIVER CATEGORY	DRIVERS		
1	6	Political	Implementation of Sanctions	0.76	0.61
2	98	Business	Raw material cost	0.24	
3	5	Political	Trade compliance	0.75	0.90
4	66	Technology	High tech manufacturing capacity	0.74	0.74
5	90	Legal	Intellectural property protection	0.89	0.90
6	93	Business	Global presence of suppliers	0.64	0.95
7	96	Business	Timeliness of deliveries	0.84	0.86
8	97	Business	Rivalry between market suppliers	0.95	0.91
9	21	Economic	Growth rate of wages	0.17	0.69
10	69	Technology	Perceived quallity & reputation of components / products	0.91	0.88
11	26	Economic	Currency Fluctuation and Volatility	0.26	0.49
12	2	Political	Social Policies	0.93	0.92
13	13	Political	Conduciveness of business environment	0.95	0.90
14	45	Economic	Integration with China (Electronics)	0.90	0.83
15	94	Business	Criticality of component (technology)	0.82	0.94
16	99	Business	Logistics cost	0.52	0.72
17	20	Economic	Inflation rates of Major Economies	0.68	0.78
18	71	Technology	Technological Maturity of Specific Industry	0.85	0.89
19	75	Technology	Manufacturing flexibility (Electronics)	0.22	0.82
			COUNT	64.000	60.000
			AVERAGE	0.687	0.709
			SUM	43.964	42.557

This paragraph explains why weighted average of the percentage values was used instead of summing up the percentage values. The weighted average method facilitated comparison of results across different driver portfolios. For example, a country's composite score based on 36 drivers would be lower than the composite score if the percentage values were summed up. In the next paragraph, the methods to calculate the weights were introduced.

The two principles of calculating weights are: 1) the sum of weights was always one; 2) weight of individual driver was inversely related to number of drivers selected because the managers treated the top drivers as equally important. As seen in Table 17, each driver carried a weight of 1/36 if 36 drivers were selected. And each driver carried weight of a 1/27 if 27 drivers were selected. In this way, users would include drivers that were most relevant to research. Top

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percentile was equal to share of cumulative number of drivers out of all the drivers. As seen in Table 17, if bin size was equal to 0.25, top percentile was among "27", "83" and "100" percentile. When bin sizes was equal to 0.1, top percentile was among "8", "36", "60", "83", "95" and "100" percentile.

Table 17 Distribution of Drivers (Bin Size =0.1 and 0.25), Weights of Drivers

Bin Size	Bin #	BIN (< #)	DRIVERS / BIN	CUMULATIVE PROBABILITY	TOP PERCENTILE	# OF DRIVERS	WEIGHTAGE
0.25	4	1	27	1	27%	27	1/27
0.25	3	0.75	56	0.73	83%	83	1/83
0.25	2	0.5	17	0.17	100%	100	1/100
0.25	1	0.25	0	0			
0.1	10	1	8	1	8%	8	1/8
0.1	9	0.9	12	0.92	20%	20	1/20
0.1	8	0.8	16	0.8	36%	36	1/36
0.1	7	0.7	24	0.64	60%	60	1/60
0.1	6	0.6	23	0.4	83%	83	1/83
0.1	5	0.5	12	0.17	95%	95	1/95
0.1	4	0.4	5	0.05	100%	100	1/100
0.1	3	0.3	0	0			
0.1	2	0.2	0	0			
0.1	1	0.1	0	0			

A short summary of top percentile, corresponding number of drivers and weight of individual drivers are included in Table 18.

Table 18 Weights of Drivers, by Top Percentile of Drivers

NO.	TOP PERCENTILE	# OF DRIVERS	WEIGHTAGE
1	8%	8	1/8
2	20%	20	1/20
3	27%	27	1/27
4	36%	36	1/36
5	60%	60	1/60
6	83%	83	1/83
7	95%	95	1/95
8	100%	100	1/100

Last, results of weighted composite score were displayed.

Table 19 shows composite score and country ranking based on 27 drivers.

Table 19 Country Ranking Based on 27 Drivers

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 27	RANKINGS 27
3 Afghanistan		AFG	0.06	186
11 Australia		AUS	0.71	14
12 Austria		AUT	0.73	8
13 Azerbaijan		AZE	0.32	93
14 Bangladesh		BGD	0.27	102
15 Belarus		BLR	0.23	115
16 Belgium		BEL	0.72	10
17 Benin		BEN	0.13	164
18 Bolivia		BOL	0.26	109
19 Bosnia and Herzegovina		BIH	0.24	112
20 Bahrain		BHR	0.48	54
21 Bahamas, The		BHS	0.19	134
22 Botswana		BWA	0.25	110
23 Brazil		BRA	0.52	44
24 Belize		BLZ	0.18	141
25 Bermuda		BMU	0.02	195

As shown in Table 20, the ranking of countries based on 36 drivers were slightly different from the ranking based on 27 drivers.

Table 20 Country Ranking Based on 36 Drivers

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 36	RANKINGS 36
3 Afghanistan		AFG	0.07	185
11 Australia		AUS	0.67	12
12 Austria		AUT	0.67	15
13 Azerbaijan		AZE	0.34	85
14 Bangladesh		BGD	0.26	103
15 Belarus		BLR	0.24	114
16 Belgium		BEL	0.68	11
17 Benin		BEN	0.13	163
18 Bolivia		BOL	0.25	109
19 Bosnia and Herzegovina		BIH	0.23	115
20 Bahrain		BHR	0.47	54
21 Bahamas, The		BHS	0.20	126
22 Botswana		BWA	0.26	104
23 Brazil		BRA	0.54	36
24 Belize		BLZ	0.18	140
25 Bermuda		BMU	0.02	198

4. Results

The purpose of Results section is to show the most important findings of the analysis, follow-up interviews and user profile survey, ranking of drivers, and ranking of countries. "Implementation of Sanctions" is used to illustrate the preliminary analysis and ranking of drivers. The follow-up interviews with the minimum and maximum users summarize the insights into the circumstances and situations where the drivers are important or not important. The calculations and analysis leading to the ranking of countries are illustrated step by step. Eventually, countries are ranked based on the composite score.

4.1 Preliminary Survey Results and Analysis

As can be seen in Table 21, user 1 and 2 evaluated "Implementation of Sanctions" as "most important" and user 3 and 4 evaluated it as "very important". User 5 did not enter any values, thus the score was ignored.

Table 21 Survey Result of "Implementation of Sanctions"

#	DRIVER CATEGORY	DRIVERS					
6	Political	Implementation of Sanctions	1.00	1.00	1.00	0.98	

Section 3.2.2 explains the process of converting scale to cumulative density. The scores of "4" and "5" were converted to cumulative density values, as shown in the table below. Cumulative density of scores by user 1, 2, 3 and 4 were 1.00, 1.00, 1.00 and 0.98 respectively. The average of cumulative density across all users was: (1.00+1.00+1.00+0.98)/4=1.00.

Table 22 Cumulative Density of Driver "Implementation of Sanctions"

#	DRIVER CATEGORY	DRIVERS					
6	Political	Implementation of Sanctions	1.00	1.00	1.00	0.98	

Variance among five users was the difference between the maximum score the minimum score. The variance of "Implementation of Sanctions" was 1, proving that all users had consensus on importance of the driver.

4.2 User Profile

User 1 was between 36 and 40 years old. They had six to ten years' experience within the company. The regions they were familiar with included North America, Latin America, Asia, Middle East and Europe. User 2 was over 50 years old. They had more than 25 years' experience within the company. The regions the individual were familiar with included North America, Latin America, Asia, Middle East, Europe and Africa. User 3 was between 31 and 35 years old. They had 11 to 15 years' experience within the company. The regions User 3was familiar with included North America, Asia and Europe. User 4 was between 31 and 35 years old. They had less than five years' experience within the company. The regions he was familiar with included North America, Latin America, Asia, Middle East and Europe. User 5 was between 31 and 35 years old. He/she had six to ten years' experience within the company. The regions they was familiar with included North America, Latin America, Asia, Middle East and Europe.

Table 23 User Profiles

USER	AGE	YEARS OF EXPERIENCE WITH THE COMPANY	FAMILIARITY WITH PESTEL+B WITHIN RESPECTIVE REGION						
			North America	Latin America (CA & SA)	Asia	Middle East	Europe	CIS	Africa
1	36 - 40	6 - 10	6	5	5	3	6	1	1
2	>50	>25	6	4	6	4	6	2	4
3	31 - 35	11 - 15	5	2	7	1	6	1	1
4	31 - 35	0 - 5	6	3	5	4	4	1	2
5	31 - 35	6 - 10	6	4	6	4	4	1	1

Brief Back (Please give a brief description of geographical experience based on the previous work experience)
User 1: Experience in supplier development in China, India, Canada & US. Currently oversees the machined parts category worldwide
User 2:Have previous work experience in North America including Canada, Africa, Europe and Asia. Field exposure for over 15 years. Current oversee the complete downhole drilling categories that encompass machined parts, electronics, motors, acquistion sub categories.
User 3: Worked in Sourcing in Asia and Supplier Manangement in India. Managed suppliers based in UK, Canada and USA
User 4: Have previous work experience in North America and Asia. Passive experience working with European organizations.
User 5: Have working experience in North America & Asia. In previous profiles managing a sub category of machined parts and sourcing manager for well service equipments was involved in developing suppliers in China, Argentina, Mexico apart from overseeing sourcing efforts in Eastern Europe.

4.3 Follow-up Interview

Follow-up interviews were conducted to investigate reasons behind highest and lowest incidences of drivers with a range equal to four. There was a chance that one of the minimum or maximum users were wrong, which distorted the rating of the drivers. After the follow-up interviews, rating of some drivers was adjusted to be more accurate. The key findings from the interview are summarized below.

- Social policies:
  a. High incidence: The maximum user interpreted "social policies" as regulations and standards that regulates provision of safe working environment and bans abuse of human rights of workers in the company's factories. According to the user, the company strictly conformed to labor standards and human rights regulations and bind its suppliers in contract. Therefore, "social policies" was regarded as "very important".
  b. Low incidence: The minimum user interpreted social policies as social welfare of local population and gave "1" to "social policies". After recalling that abuse of

child labor was clearly banned in quality, health, safety and environment (QHSE) policy, the user gave a score of "3" after the interview.

- GDP allocation for defense:

  a. High incidence: The maximum user suggested a positive correlation between defense and manufacturing capability in defence aircraft, submarines and boats. A country with high defense budget would have better manufacturing capability compared to a country with low defense budget. In addition, a country's safety was an indicator of security of a company's assets in the country. Therefore, the country would be favored by OG company.

  b. Low incidence: The minimum user changed his score from "1" to "3"

- Integration with China:

  a. High incidence: For electronics category, raw materials and sub components were mainly sourced from China. In addition, the sub components were shipped to Europe and United States and processed there because coating technology was not available in China. Therefore, the respondent felt integration with suppliers were important to cut down lead time.

  b. Low incidence: For machine parts category, integration with China was less of a concern. Price of raw material and machine parts was not determined by the integration between the company and suppliers, but influenced by factors in the macro environment such as labor cost and raw materials cost. In addition, sourcing of machine parts is global with China as a source.

- Steel price:

a. High incidence: 20% to 80% of final product cost in machine parts category was attributed to raw material price. In addition, volatile fluctuation in steel price made OG company to "buy long", which ranged from one year to three years depending on the variation in price. Certain raw material are sourced majorly from one country, which has left OG company to have less control over the price. For example, tungsten carbides were mainly sourced from China.

b. Low incidence: The minimum user claimed that the OG company sourced steel alloy rather than raw steel. Therefore, steel price was not important at all.

- Risk of natural disaster:

  a. The minimum user wanted to change the original score to three.

  b. High incidence: the maximum user thought supply disruption in upstream would affect the whole supply chain. An example was given that a disruption in suppliers in Japan caused a shutdown of plant in France. However, the user felt natural disasters in a country would not directly remove the country from its sourcing countries, but OG company would have limited choice of suppliers when disasters really happen. In addition, OG company proactively built strategic relationship with multiple suppliers to diversify risks.

  c. Low incidence: Risk of natural disaster was inherent in decision-making process because the company implemented sourcing policies. The dual sourcing policy reduced the company's exposure to supply disruptions arisen from natural disaster. In this way, the user felt risk of natural disaster was low because of diversification of supply sources. In addition, the lengthy qualification process of

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parts led OG company to purchase three, six months or more than 12 months in advance.

- Conflict mineral disclosure:

    a. High incidence: conflict mineral disclosure was a critical reporting process in the OG company's operations to United States government. The government required the company to track the production process of tin, titanium, tungsten and gold to certify that there was no exploitation of human rights. OG company therefore monitored its supply chain from the very beginning.

- Competitive regulations:

    a. High incidence: the user felt that intervention of government would affect procurement of certain commodities. The regulations banned import of drill pipes from China since late 2012. The user stressed that the company abided by the regulations.

    b. Low incidence: competitive landscape of the machined shops globally was not a concern to regulatory parties. The machined shops were large in number and there were 20,000 machined shops in US only. In addition, there was no major machined shops which controlled critical technology. As a result, it was impossible to scale up volume and each of machined shops held a small market share.

- Protectionism(anti-dumping laws)

    a. High incidence: the user claimed that the company abided by laws strictly to avoid any operations that may violate anti-dumping laws.

4.4 Ranking of Drivers

Average cumulative density was used to rank drivers, instead of ranking by mean, mode and median. Table 24 arranges the drivers in descending order accordingly to the average cumulative density. As shown in Table 24, "implementation of sanctions" ranked as number one among drivers.

Table 24 Average Cumulative Density Drivers, with "Implementation of Sanctions" Highlighted

RANK	#	DRIVER CATEGORY	DRIVERS	AVERAGE CUMULATIVE SCORE
1	6	Political	Implementation of Sanctions	1.00
2	98	Business	Raw material cost	0.98
3	5	Political	Trade compliance	0.97
4	66	Technology	High tech manufacturing capacity	0.96
5	90	Legal	Intellectural property protection	0.95
6	93	Business	Global presence of suppliers	0.92
7	96	Business	Timeliness of deliveries	0.91
8	97	Business	Rivalry between market suppliers	0.90
9	21	Economic	Growth rate of wages	0.88
10	69	Technology	Perceived quallity & reputation of components / products	0.87
11	26	Economic	Currency Fluctuation and Volatility	0.85
12	2	Political	Social Policies	0.85
13	13	Political	Conduciveness of business environment	0.85
14	45	Economic	Integration with China (Electronics)	0.85
15	94	Business	Criticality of component (technology)	0.84
16	99	Business	Logistics cost	0.83
17	20	Economic	Inflation rates of Major Economies	0.81
18	71	Technology	Technological Maturity of Specific Industry	0.81

To one extreme, selection of 100 drivers generated a general result that was applicable to all commodity categories. To the other extreme, selection of a few drivers generated a specific result that was applicable to machine parts category. Top 36 percentile and top 27 percentile gave appropriate level of specificity to procurement of the machine parts category.

4.5 Ranking of Countries

The Ranking of Countries subsection uses two countries to illustrate the calculations and analysis leading to ranking of countries. "Afghanistan" and "Australia" were chosen because "Afghanistan" is one among underdeveloped countries and "Australia" represents developed countries.

4.5.1 Compilation of Countries' Ranking at Individual Driver Level

"Implementation of sanctions" was quantified using an index. Basel Governance published Basel AML index measuring risk of 164 countries using a scale of 10 (see Appendix D). Country with score of 10 was the most risky and a score of zero indicated that the country was the least risky among 164 countries. In theory, countries with no exposure to implementation of sanctions would have a score of zero. If all countries were arranged from no exposure to maximum exposure, values of Basel AML index would increase. Thus, the order was labeled as "AS". For illustration, "Afghanistan" and "Australia" had a score of "8.53" and "5.01" respectively, showing "Australia" had less exposure to implementation of sanctions.

Table 25 Proxy for "Implementation of Sanctions"

				Implementation of Sanctions
		6		
		Order :		AS
		Metric :		Basel AML Index
		Entity :		Basel Governance

No.	Country	2014 Public Basel AML Index Scores	Overall scores (10 (high risk) - 0 (low risk))
1	AFGHANISTAN		8.53
2	ALBANIA		5.54
3	ALGERIA		6.61
4	ANGOLA		6.66
5	ARGENTINA		6.71
6	ARMENIA		4.86
7	AUSTRALIA		5.01
8	AUSTRIA		5.47
9	AZERBAIJAN		6.46
10	BAHAMAS, THE		6.01

4.5.2 Calculation of Values of Driver-Country Pairs

First, data of individual indices are compiled on a master sheet in Table 26. Drivers, driver number, driver ranking, order, metric and entity were arranged horizontally and countries and country codes were listed vertically. At the bottom of column "implementation of sanctions", a count of "161" indicated that 161 countries' data points were

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included. An average of "5.87" was the average of scores of 161 countries and sum of "945.09" was the sum of 161 countries' scores.

Table 26 Country Comparison, by Individual Ranking Index, "Implementation of Sanctions"

NO.	COUNTRY NAME	COUNTRY CODE	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA
1	Aruba	ABW			1,400.20
2	Andorra	AND			5.00
3	Afghanistan	AFG	8.53	23.60	844.40
4	Albania	ALB	5.54	61.37	120.30
5	Algeria	DZA	6.61	42.74	7,267.80
6	Angola	AGO	6.66	0.00	7,760.10
7	Argentina	ARG	6.71	45.10	15,071.20
8	Armenia	ARM	4.86	48.14	152.60
9	American Samoa	ASM			
10	Antigua and Barbuda	ATG		38.19	220.80
11	Australia	AUS	5.01	81.60	37,337.60
12	Austria	AUT	5.47	78.84	14,483.10
		AVERAGE	5.87	43.76	19,747.09
		SUM	945.09	8,271.21	3,929,671.00

Then, scores were converted to ranking based on value. Among 164 countries, "Afghanistan" and "Australia" ranked as the 160th country and 39th country in "Implementation of Sanctions.

Table 27 Country Comparison, by Normalized Score and Rank, "Trade Compliance" and "Implementation of Sanctions"

NO.	COUNTRY NAME	COUNTRY CODE	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA
1	Aruba	ABW			88
2	Andorra	AND			195
3	Afghanistan	AFG	160	159	102
4	Albania	ALB	67	44	158
5	Algeria	DZA	117	97	54
6	Angola	AGO	119	170	53
7	Argentina	ARG	123	83	38
8	Armenia	ARM	32	69	151
9	American Samoa	ASM			
10	Antigua and Barbuda	ATG		114	140
11	Australia	AUS	39	14	25
12	Austria	AUT	64	16	41
13	Azerbaijan	AZE	110	94	82
	AVERAGE		80.85	93.98	100.00
	SUM		13,017.00	17,763.00	19,900.00

Next, ranking of all indices were converted to points, or ranking in descending order. A higher index score indicated that a country had a higher density to be imposed on sanctions, which was not favorable to OG company. However, the scores of individual drivers would be easily summed up. Thus, countries with higher composite score would be more competitive. The standardization in this step made a less favorable country have fewer points. After conversion, Table 28 shows that "Australia" had 122 points and "Afghanistan" had two points. Points indicated "Australia" ranked as the 122nd and "Afghanistan" ranked as 2nd

Table 28 Country Comparison, by Normalized Score and Rank in Descending Order, "Trade Compliance" and "Implementation of Sanctions"

NO.	COUNTRY NAME	COUNTRY CODE	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU
1	Aruba	ABW			112	33
2	Andorra	AND			5	74
3	Afghanistan	AFG	2	31	98	55
4	Albania	ALB	94	146	42	109
5	Algeria	DZA	45	93	146	157
6	Angola	AGO	43	1	147	133
7	Argentina	ARG	39	107	162	137
8	Armenia	ARM	129	121	49	66
9	American Samoa	ASM				3
10	Antigua and Barbuda	ATG		76	60	43
11	Australia	AUS	122	176	175	153
12	Austria	AUT	98	174	159	
13	Azerbaijan	AZE	51	96	118	136
	AVERAGE		80.85	93.98	100.00	84.98
	SUM		13,017.00	17,763.00	19,900.00	14,362.00

In addition, to facilitate comparison across different drivers, rank in absolute value was converted to rank in percentage value. Table 29 shows that "Australia" had a value of 0.75 in "trade compliance" and 0.76 in "implementation of sanctions". The value indicated that "Australia" performed above 75 percentile of countries in "trade compliance" and 76 percentile of countries in "implementation of sanctions".

Table 29 Country Comparison, by Fraction of Countries Index Ranked, "Trade Compliance" and "Implementation of Sanctions"

NO.	COUNTRY NAME	COUNTRY CODE	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA
1	Aruba	ABW			0.56
2	Andorra	AND			0.03
3	Afghanistan	AFG	0.01	0.16	0.49
4	Albania	ALB	0.58	0.77	0.21
5	Algeria	DZA	0.28	0.49	0.73
6	Angola	AGO	0.27	0.01	0.74
7	Argentina	ARG	0.24	0.57	0.81
8	Armenia	ARM	0.80	0.64	0.25
9	American Samoa	ASM			
10	Antigua and Barbuda	ATG		0.40	0.30
11	Australia	AUS	0.76	0.93	0.88
12	Austria	AUT	0.61	0.92	0.80
13	Azerbaijan	AZE	0.32	0.51	0.59
	AVERAGE		0.50	0.50	0.50
	SUM		80.85	93.98	100.00

4.5.3 Consolidation of Countries' Composite Scores

First, on aggregate level of 100 drivers, countries were compared by number of data points, average of percentage value and sum of percentage value of individual drivers.

Table 30 summarizes countries' scores on an aggregate level. There were 78 instances where data of "Afghanistan" were not available and 36 instances where data of "Australia" were

not available. By summing up percentage value of individual values, "Australia" got 43.96 and "Afghanistan" got 7.28. Average of percentage value of individual values of "Australia" and "Afghanistan" was 0.33 and 0.68.

Table 30 Ranked Driver Comparison, by Fraction of Countries Index Ranked, "Afghanistan" and "Australia"

RANKED DRIVER COMPARISON
by fraction of countries index ranked

			NO.	3	11
			COUNTRY NAME	Afghanistan	Australia
			COUNTRY CODE	AFG	AUS
RANK	#	DRIVER CATEGORY	DRIVERS		
1	6	Political	Implementation of Sanctions	0.01	0.76
2	98	Business	Raw material cost		0.24
3	5	Political	Trade compliance	0.03	0.75
4	66	Technology	High tech manufacturing capacity		0.74
5	90	Legal	Intellectual property protection		0.89
6	93	Business	Global presence of suppliers		0.64
7	96	Business	Timeliness of deliveries	0.08	0.84
8	97	Business	Rivalry between market suppliers		0.95
9	21	Economic	Growth rate of wages		0.17
10	69	Technology	Perceived quallity & reputation of components / products		0.91
11	26	Economic	Currency Fluctuation and Volatility		0.26
12	2	Political	Social Policies		0.93
13	13	Political	Conduciveness of business environment	0.04	0.95
14	45	Economic	Integration with China (Electronics)		0.90
15	94	Business	Criticality of component (technology)		0.82
16	99	Business	Logistics cost		0.52
17	20	Economic	Inflation rates of Major Economies	0.52	0.68
18	71	Technology	Technological Maturity of Specific Industry		0.85
19	75	Technology	Manufacturing flexibility (Electronics)		0.22

COUNT	22.000	64.000
AVERAGE	0.331	0.687
SUM	7.279	43.964

Then, weights of drivers were multiplied by percentage value of individual drivers to get a weighted composite score. As can be seen in Table 31 and Table 32, country ranking varied when number of drivers selected changed. If 27 drivers were selected, "Australia" had a composite score of 0.71 and ranked as 14th. "Afghanistan" had a composite score of 0.06 and ranked as 186th.

Table 31 Country Ranking Based on 27 Drivers, "Afghanistan" and "Australia"

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS	RANKINGS
			27	27
3	Afghanistan	AFG	0.06	186
11	Australia	AUS	0.71	14

When 36 drivers were selected, "Australia" had a composite score of 0.67 and ranked as 12th. "Afghanistan" had a composite score of 0.07 and ranked as 185th.

Table 32 Country Ranking Based on 36 Drivers, "Afghanistan" and "Australia"

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS	RANKINGS
			36	36
3	Afghanistan	AFG	0.07	185
11	Australia	AUS	0.67	12

Following the framework presented in the Methodology section, an application of the framework is shown in the Result section in a step-by-step fashion highlighting key results. The key results include ranking of the drivers and the countries which has implications for….. To build on the results a discussion of… The validity and accuracy of the whole framework, the analytical process and the application in the company and wider industries will be examined and discussed in the next section.

5. Discussion

The section begins by explaining the advantages of understanding individual perception and having a diverse background of survey users. A results dashboard is also included to highlight the key research outcomes that related to the research question. Following this discussion, the results are validated against the company's strategy. The validation will show that the results were in line with the strategy generally. The reasons for the unexpected results will be studied and the ways to improve the accuracy of the results will be explained. Following the validation of the results, the limitations of the research will be discussed. Last, the extensions of the framework to other industries, companies or areas will be suggested.

5.1 Individual Perception

The research proved that the differences in individual perception should be studied and understood. On one hand, different opinions by users were encouraged by the survey. On the other hand, disparity may be caused by errors, which should be minimized. The survey was distributed to and completed by individuals to prevent subconscious influence of one over others' thinking. However, individuals had different interpretation of drivers due to cognitive differences. After a follow-up interview, it was clear that users had different interpretation of meanings of some drivers. In other cases, some users realized that a mistake was made when filling out the survey form. In the latter case, users changed their score afterwards.

The advantage of the methods used in the research is that individual perception was studied and documented, which served as useful references for the company. The findings from the follow-up interviews gave valuable insights into decision-making process in procurement of machine parts category. Thus, it was very important to conduct interviews to understand reasons behind large variance. The surveys were an effective method to gather large amount of

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information, but to some extent, the surveys did not reveal errors, or tell fundamental reasons behind survey results. Surveys supplemented with follow-up interviews provided a better result than using only one form.

5.2 Profile of Interviewees

The research was benefited from users with many years of experience within the company, presence in different geographical areas and mixed demographics. Years of experience with the company varied, ranging from 0 – 25 years. Four users among all were within the range of 31 to 40 years old and one user was more than 50 years old. Because the research focuses on procurement planning on corporate level, it was very important that interviewees had a mix of levels of experience and they understood how procurement operates at a high level. The regions that users were familiar with included Asia, Europe, North America and Latin America. Three users were neutral on familiarity with Middle East and one user was neutral on familiarity with Africa. All users were unfamiliar with Communist Independent States (CIS).In addition, experiences with different geographical locations were valuable because the drivers required understanding of differences in countries' political, economic, social, technologic, environmental, legal and business environment.

5.3 Validation of OG Company's Strategy

The first subsection summarizes the company's strategy, an overview of the market segmentations and the objectives of the procurement and sourcing group to achieve the strategy. Following the summary, the results will be validated against the current strategy. The unexpected results and ways to improve the accuracy of the results will be explained.

5.3.1 OG Company's Strategy

The company's strategy has been enhancing technological capabilities, improving reliability and efficiency and increasing integration of production processes. OG company has established presence in 85 countries and will expand in countries with steady economic growth to generate new sources of revenue.

In 2014, North America and Canada markets remained steady. Having North America being the biggest market, the company also has business strength in Middle East, Asia and Latin America. The growth in Middle East was led by Saudi Arabia, followed by Kuwait, Oman and UAE. Asia continues to be the company's focus in the future, but there is a decline in activities in Malaysia, Indonesia and Vietnam. In Latin America, Columbia and Venezuela were the growth engines, but the regional performance was dragged by Mexico, Argentina and Brazil. The company's revenue in Europe decreased significantly, possibly because of slow recovery of European Union from economic downturn. Among European countries, a reduction of revenue in Russia was seen. The company had declining revenue in Africa last year. Overall, the financial performance was resulted from OG company's strategy to be close to emerging markets.

The procurement strategy aligned with overall strategy to enhance competitiveness of the product and services of the company and continue to diversify its global supply base. According to a manager in OG company, the primary objectives are ensuring quality, increasing productivity and managing relationship with suppliers. It was stressed that quality is more important than cost because the company focuses on the long term sustainability and profitability. The project is part of the efforts to increase productivity within the procurement function by strategically planning future supply bases. The procurement and sourcing group has

devoted to drive key performance indicators (KPI) of suppliers to improve service quality to customers, such as on-time delivery of commodities.

5.3.2 Validation

As can be seen in Table 33, the top 50 ranked countries based on top 36 drivers were geographically diverse, which aligned with the objective to source globally to mitigate risk exposure. Two countries from North America, Canada and US were among the top three countries on the list. European countries still had largest share of the top 50 countries. In addition, Asia appeared as an emerging region with 12 countries on the top 50 list. The other regions such as Middle East, Latin America and Africa had 4, 3 and 1 countries respectively on the top 50 list.

Table 33 Geographical Distribution of the Future Generation Supplier Base Portfolio

future generation supply base	
Region	Number of Countries
Africa	1
Asia	12
Europe	28
Latin America	3
Middle East	4
North America	2
Total	50

By comparing Table 33 and Table 34, the future generation supply base had more countries in Europe than OG's current supply base. In contrast to a higher percentage of countries in Europe and Asia, lower percentage of Latin America and Africa were shown in the future generation supply base list.

Table 34 Geographical Distribution of the OG's Current Supplier Base Portfolio

OG's current supply base	
Region	Number of Countries
Africa	5
Asia	13
Europe	17
Latin America	8
North America	2
Middle East	5
Total	50

The increase in Asia's share in top ranked countries is aligned with the company's strategy to diversify portfolio of sourcing countries. However, the increase in Europe's share was unexpected since the company's revenue in Europe declined due to slow recovery of European economy. The unexpected dominance by European countries may be caused by higher availability of data of developed countries compared to emerging countries. Indexes published by Organization for Economic Co-operation and Development (OECD) were a main source used in the research and non-OECD countries were excluded in the ranking of some drivers.

5.4 Limitation of Framework

1) Small sample size:

A large sample size was normally preferable for consensus decision making. A large sample size could generate a more accurate central tendency. In addition, variance of a larger sample would be more meaningful. The follow-up interview effectively addressed issue with the small sample size. The follow-up interview validated or corrected the rating of minimum and maximum users. Thus, the interview facilitated the consensus decision making process.

2) Bias towards OECD countries:

Availability of information from OECD possibly caused bias towards OECD countries. Indexes published by OECD led to exclusion of non-OECD countries in the ranking. As a

result, non-OECD countries were assumed as less favorable in ranking even they were more favorable in reality compared to some OECD countries.

3) Lack of available indexes:

When there were no entities publishing indexes of some drivers, proxies were used to rank countries. The degree of closeness of the proxy with the driver determined the errors in rankings in the driver. When ranking countries in terms of "Trade weighted indexes", the earnings of the oil and gas company were considered as a portfolio of earnings in different currencies. The fluctuation on an aggregate level was calculated from the weighted average of the change in currency exchange rate. The share of the oil and gas company's earnings in each country was the "most accurate" weight. In the end, share of countries in the company's total spending on machine parts was used because data on company's earnings were not available.

4) Users' familiarity with the drivers

If users are not familiar with the drivers, there is a tendency to rate it low. For example, if a user does not understand the role of "social policies" in the company's contract, he / she will give a "zero" or "one". In the latter case, the perceived importance level among all users are compromised. In addition, we cannot control or assess the familiarity with every individual driver unless the results turn out to have a wide range.

5.5 Extensions of Framework

As shown in Figure 6, the framework can be generalized in three dimensions -companies, industries and scope. The framework can be applied to large international companies with global presence. In addition, the framework is suitable for companies who operate business-to-business because integration with other supply chain parties was an important consideration in the

framework. Other than energy and chemical manufacturers, the framework is applicable to heavy industries, such as automobile industry and defense industry. The reason is that the products and services provided by the oil and gas company are highly complicated and customizable. Proof was also found in the survey that technological drivers were one the seven categories used to measure countries' competitiveness. For example, the framework is not suitable for fast moving consumer goods industry because the innovation factor and level of technology required are low. The areas that the model covered include: corporate planning, supply chain design, supplier management, location selection and risk mitigation.

Companies

Scope   **Industries**

Figure 6 Extensions of Framework

6. Conclusion

6.1 Contribution to OG Company's Procurement and Sourcing Group

Historically, OG Company's procurement strategy has been reactively developed due to the acute nature of short-term business requirements such as the successful integration of newly acquired companies. The challenge of successful integration had to be performed in unison with executing daily operations so as to capture the opportunities during a period of growth in the oil and gas industry. In this thesis, we have established a stepwise process for understanding all key macro factors across various stakeholders which are perceived to drive a procurement decision within a commodity group, particularly, the machine parts category. Thereafter, we developed a methodology to systematically rank each driver across a spectrum of procurement and sourcing stakeholders so as to produce a consensus outlook of what the department, as a whole assessed to be critical when making a procurement decision.

We believe this work provides several benefits to the procurement and sourcing group. Namely, it allowed introspection into the drivers that the group as a whole felt was important rather than the subjective judgment of an individual. The findings of this thesis provide greater clarity across the group as to an individual's procurement mindset within the group, an outcome which would not have been possible if not for informal discussions or lost due to organizational hierarchy. In addition to being able to quantify the difference in importance of drivers across a spectrum of competing considerations, this process reinforced the procurement practitioner's approach by proactively seeking to clarify and understand the underlying rationale for the rating of each drivers. At times, after the respondents had articulated their reasoning, many had returned to their original judgments and made amendments to their rankings. This served as an indication that the respondents were consciously evaluating and tuning their internal decision-

making "flowchart" when it came appraising multiple factors when making a procurement decision.

A secondary outcome which was an unintended but crucial discovery was the methodology's proficiency in crystalizing subconscious prerequisites within a respondent's approach in developing a procurement strategy such as dual-sourcing, evaluating supplier dependency and expediting of supplier qualifications. Through this process, we have observed that the interviews and surveys allow the group to "visualize" and communicate procurement considerations and articulate the group's strategy in a tangible and quantifiable manner, an attribute that was absent within the group and by extension, the organization's knowledge base. We also noticed that the interview process momentarily decelerated the organization's cadence and allowed time to be taken for introspection and rationalization. This momentary pause as enabled by the interview and survey process effectively allowed the group to question and crystalize their decision framework.

Not only does this thesis offer the ability to rate competing drivers, it effectively translates qualitative drivers into quantitative and comparatively objective rankings across various countries around the world. This methodology is a crucial consideration when managing across various geographical locations, procuring globally and doing business in a globalized economy. The methodology attempts to blend disparate sources of global rankings of competing drivers into a holistic and unified assessment of a country's fitness to the company's procurement strategy and overall global manufacturing competitiveness. The effective customization of rankings to the company's internal evaluation criteria and methodology proves to be a unique contribution to OG company's procurement and sourcing group. It is important to note that the

process as developed throughout this thesis can also be replicated to other commodity groups and adapted based on the commodity's industry context and market conditions.

It was our intent to develop a roadmap which can provide guidance in the middle to long term. However, it is also important to note that this tool utilizes currently available data by means of combining lagging indicators averaged over a longer time horizon and forecast which are made at this epoch. As such, the future roadmap might shift due to alteration made with changes in market projections. However, we believe that this provides the nearest predictive value based on current trends while incorporating both leading and lagging indicators.

6.2 Limitations to Commodity Sourcing Strategy Development Process

Although this process is instructive in evaluating competing considerations when developing a procurement strategy, there are limitations when utilizing this process in developing a long term procurement strategy.

Firstly, throughout our research, we found it challenging to select proxies which accurately reflected the specificity of conditions relating to sourcing for machine parts and the general forces which impact the company's business as a whole. There was no individual factor which was able to balance both considerations equitably and accurately. More specifically, as we delved deeper into research within the procurement of machine parts, the availability of data across countries was incomplete, sparse and less granular. As such, ascertaining the "appropriate" boundary between generality and specificity was a challenge which constantly required greater consideration and analysis.

Secondly, in line with selecting the appropriate balance between being specific and general, a critical consideration was the choice of a proxy global comparative index which accurately reflected of the underlying drivers that it represented. The "proximity" of the drivers

were limited by the availability of publicly available information and the extent to which countries were being compared and evaluated. As such, the accuracy of the recommendations are limited to the span of publicly available indices and the proximity to which these indices are representative of the drivers which were preselected by the OG company's procurement personnel.

Thirdly, it must be noted that through this process, the output of this evaluative process was a consensus ranking of drivers as limited by the respondent's experiences. However, it is critical to note that the consensus rankings does not equate to upper management's intended direction for the procurement group nor does it necessarily represents the best practice for procurement sourcing. This disconnect between management's intended strategy and consensus ranking across the drivers has to be reconciled and calibrated so as to ensure alignment across the procurement team and management's direction. This model also lacks the thorough incorporation of internal drivers which will increase the veracity and precision to the outcomes of this strategy development process. Yet, we believe that the merits of our approach outweighs its weaknesses. Specifically, we have effectively harnessed the collective wisdom and experience of a small sample of highly experienced procurement individuals. We believe that companies which undertake this process will be able to unearth the underlying motivations, rationale and decision drivers that are often hidden below the operating rhythm of daily business requirements. Moreover, this methodology deftly seeks the incentives and trade-offs which are often disregarded in general procurement and sourcing practices.

Fourthly, the relationship between drivers and their consequent impact amongst each of the factors has to be further studied so as to understand the dependency that driver might have to eventual rankings of the countries. A critical understanding of each driver's impact, be it

reinforcing or balancing will enable increased accuracy in the rankings of a country's competitiveness towards manufacturing.

Finally, the question of whether the output of the process is predictively accurate and indicative of what will happen in the future remains to be seen. However, our thesis has been predicated on being able to forecast megatrends with longer term implications. It is with this premise that we have selected historical indices and derived averages over longer periods, such as three to five years, in order to allow the indices to provide directionally correct assessments of each driver. This methodology also provide as accurate as possible longer term historical trends and mitigates against year to year variability when optimizing for the predictive ability of this process.

6.3 Summary

Our thesis delivers a procurement strategy development process that is systematic and stepwise in being able to determine the underlying motivations, rationale and thought process when formulating a procurement and sourcing strategy. It scans the external environment for all relevant procurement related drivers and structures the environment into an exhaustive list of considerations so as to enable users of the process to make more accurate decisions relating to where it would like to procure and how it would like to manage its procurement budget depending on the various competing factors within its external environment. The framework proposed can serve as an organizational development approach and decision-making tool which is useful in uncovering the underlying motivations of the procurement and sourcing managers. The tool also provides qualitative recommendations through a quantitative stepwise approach.

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8. Appendices

Appendix A Preliminary Survey

Table A-1 List of Drivers

#	(P) Political	(E) Economic	(S) Social
1	Governmental Effectiveness	Disposal income of consumers	Population Demographics
2	Social Policies	Accessibility of Credit facilities	Distribution of Wealth
3	Entry Mode Regulations	Unemployment Rates / Growth rate of Employment	Changes in lifestyle and trends
4	Tax Policies	Major Countries Economic Stimulus (Bond-buying) & Interest Rates control	Educational levels of population (Access to skilled labor force)
5	Trade compliance	Inflation rates of Major Economies	No. of Strikes per year
6	Implementation of Sanctions	Growth rate of wages	Local content
7	Availability of FDI tax incentives	Demand for Drilling & Production	High risk nationalistic trends
8	Exit Mode Regulations	Financial Crisis	Risk of Terrorist activities
9	Governmental Relationship with USA	Domestic Consumption	Demanding local customer base
10	Governmental Relationship with EU	Country Debt Ratio / Risk of Default	Governmental immigration policies
11	Control of Corruption	Currency Fluctuation and Volatility	
12	Regulatory Quality	Adequacy of existing infrastructure to conduct business (energy, transporatation, utilities)	
13	Conduciveness of business environment	GDP allocation for energy	
14	Governmental funding for Industries	GDP allocation for Defense	
15	Availability of Export rebates	Private investment into public infrastructure (utilities, machinery, buildings and vehicles)	
16		Issuance of exploration permits	
17		Ease of exportation for products	
18		Establishment of products & service for the exportation markets	
19		Price of Natural gas	
20		Diversity of customer base (prod sold to diff markets)	
21		Competition from Imports	
22		Increase in demand from major consuming countries	
23		Crude oil price	
24		Trade weighted index	
25		Prime rate	
26		Finding and development (F&D) spending of upstream	
27		Housing demand (Copper)	
28		Growth of telecom & power industry (Copper)	
29		Regional competitiveness - Growth triangle (Electronics)	
30		Integration with China (Electronics)	
31		Scrap recycling (Copper)	
		Industrial production index (machinery)	
		Steel price (machinery)	
SUBTOTAL	15	33	10

#	(T) Technological	(E) Environmental	(L) Legal	(B) Business Internal
1	Innovations and Discoveries	Environmental protection laws	Employment regulations	Global presence of suppliers
2	Pace of technological Innovations and Advancement	Waste disposal laws	Competitive regulations	Criticality of component (technology)
3	Pace of technological obsolescence	In-country energy law	Health & Safety regulations	Marketshare concentration of supplier
4	New technological platforms	Popular attitude towards the environment	Product regulations	Timeliness of deliveries
5	Uniqueness of technology (niche)	Risk of Natural disasters	Intellectual property protection	Rivalry between market suppliers
6	Technological level of equivalent industries	Environmental opposition from local citizens & regulators	Strength of rule of law	Raw material cost
7	Maintenance, replacement or overhaul facilties of existing products	Public opposition to natural resource development	Protectionism (anti-dumping laws)	Logistics cost
8	High tech manufacturing capacity	Conflict mineral disclosures		Available Financing Options
9	Existing & Extent of manufacturing & distribution	Regulations towards hydraulic fracking		
10	Existing oil field services supply base			
11	Perceived quality & reputation of components / products			
12	R & D investment into sector (governmental & private)			
13	Technological Maturity of Specific Industry			
14	Capital intensity of technology			
15	Revenue volatility of industry			
16	Length of product life cycles			
17	Manufacturing flexibility (Electronics)			
18	Government and military activities using satellitecommunications (electronics)			
SUBTOTAL	18	9	7	8

Table A-2 Survey Form

LEGEND	RANKING (based on Importance)
0	No Opinion
1	Not Important at All
2	Slightly Important
3	Important
4	Fairly Important
5	Very Important

NAME :	
POSITION :	
DEPARTMENT :	

Massachusetts Institute of Technology

MIT Supply Chain

#	LEVEL OF IMPORTANCE SCORE	DRIVER CATEGORY	DRIVERS	DRIVER DESCRIPTION
1	0	Political	Governmental Effectiveness	Perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
2	0	Political	Social Policies	Guidelines, principles, legislation and activities that affect the living conditions conducive to human welfare.
3	0	Political	Entry Mode Regulations	Regulations on entry modes into country including exporting, licensing, joint venture, direct investment and etc
4	0	Political	Tax Policies	The choice by a government as to what taxes to levy, in what amounts, and on whom.
5	0	Political	Trade compliance	The ease and process by which goods enter the country in conformance with all local laws and regulations
6	0	Political	Implementation of Sanctions	Action that is taken or an order that is given to force a country to obey international laws by limiting or stopping trade with that country, by not allowing economic aid for that country
7	0	Political	Availability of FDI tax incentives	Tax incentives available in country which are utilized to encourage foreign direct investment
8	0	Political	Exit Mode Regulations	Regulations requirements for companies who have decided to exit the market
9	0	Political	Governmental Relationship with USA	A country's perceived 'health' of governmental relationship with the government of USA
10	0	Political	Governmental Relationship with EU	A country's perceived 'health' of governmental relationship with the European Union

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#	LEVEL OF IMPORTANCE SCORE	DRIVER CATEGORY	DRIVERS	DRIVER DESCRIPTION
11	0	Political	Control of Corruption	Perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests
12	0	Political	Regulatory Quality	Ability to formulate and implement sound policies and regulations that permit and promote private sector development
13	0	Political	Conduciveness of business environment	Ease of doing business in a country
14	0	Political	Governmental funding for Industries	Funding available by local governments in the form of grants, tax benefits, incentives for the development of grants
16	0	Political	Availability of Export rebates	Availability of incentives which stimulate exportation of locally manufactured products
16	0	Economic	Disposal income of consumers	The maximum amount that a unit can afford to spend on consumption goods or services without having to reduce its financial or non-financial assets or by increasing its liabilities.
17	0	Economic	Accessibility of Credit facilities	Ease of available credit that enterprises have within selected country
18	0	Economic	Unemployment Rates / Growth rate of Employment	The percentage of the total labor force that is unemployed but actively seeking employment and willing to work.
19	0	Economic	Major Countries Economic Stimulus (Bond-buying) & Interest Rates control	A country's attempts to use monetary or fiscal policy (or stabilization policy in general) to stimulate the economy
20	0	Economic	Inflation rates of Major Economies	The overall generalized rate in which prices for a basket of goods and services are rising in a particular country
21	0	Economic	Growth rate of wages	Year-on-Year change in wages
22	0	Economic	Demand for Drilling & Production	Global rig count forecast
23	0	Economic	Financial Crisis	Disturbance to financial markets. associated typically with falling asset prices and insolvency among debtors and intermediaries, which spreads through the financial system, disrupting the market's capacity to allocate capital
24	0	Economic	Domestic Consumption	The market value of all goods and services, including durable products (such as cars, washing machines, and home computers), purchased by household
25	0	Economic	Country Debt Ratio / Risk of Default	The ratio between a country's government debt and its gross domestic product (GDP).
26	0	Economic	Currency Fluctuation and Volatility	Volatility between a country's exchange rate and it's key trading partners
27	0	Economic	Adequacy of existing infrastructure to conduct business (energy, transporatation, utilities)	Energy infrastructure includes: Electrical power network, Petroleum pipelines; transportation infrastructure includes roads, rail, ports; utilities infrastructure includes water, electricity
28	0	Economic	GDP allocation for energy	Total Primary Energy Consumption per Dollar of GDP
29	0	Economic	GDP allocation for Defense	All current and capital expenditures on the armed forces, including peacekeeping forces; defense ministries and other government agencies engaged in defense projects; paramilitary forces, if these are judged to be trained and equipped for military operations; and military space activities.
30	0	Economic	Private investment into public infrastructure (utilities, machinery, buildings and vehicles)	Degree to which private company's are investing in public infrastructure (utilities, machinery, building and etc)

#	LEVEL OF IMPORTANCE SCORE	DRIVER CATEGORY	DRIVERS	DRIVER DESCRIPTION
31	0	Economic	Issuance of exploration permits	Number of exploration permits which the government has released to explore O & G in the country
32	0	Economic	Ease of exportation for products	Ease of exporation of locally manufactured products to various target markets
33	0	Economic	Establishment of products & service for the exportation markets	Ability and maturity of products to be exported for overseas markets
34	0	Economic	Price of Natural gas	Forecasted price of natural gas
35	0	Economic	Diversity of customer base (prod sold to diff markets)	Variety of geographical markets in which products can be sold
36	0	Economic	Competition from Imports	Availability of import substitutes
37	0	Economic	Increase in demand from major consuming countries	Anticipated demand of products from product consumption countries
38	0	Economic	Crude oil price	Forecasted price of crude oil
39	0	Economic	Trade weighted index	An average of the exchange rates of a country's currency with the currencies of its most important trading partners, weighted to reflect each trading partners' importance to the country's trade.
40	0	Economic	Prime rate	Interest rate that commercial banks charge their most credit-worthy customers.
41	0	Economic	Finding and development (F&D) spending of upstream	Finding and development spending in upstream activitiies
42	0	Economic	Housing demand (Copper)	Forecasted housing demand in country
43	0	Economic	Growth of telecom & power industry (Copper)	Forecasted growth of telecommunication and power industry in country
44	0	Economic	Regional competitiveness - Growth triangle (Electronics)	Capability of a region to attract and keep firms with stable or increasing market shares in an activity, while maintaining stable or increasing standards of living for those who participate in it/
45	0	Economic	Integration with China (Electronics)	Ability to effectively provide raw materials and subcomponents to support manufacturers based in China
46	0	Economic	Scrap recycling (Copper)	Amount of products which have copper in them that are being scrapped so as to recycle the copper within them
47	0	Economic	Industrial production index (machinery)	The amount of output from the manufacturing, mining, electric and gas industries.
48	0	Economic	Steel price (machinery)	Forecasted market price for the Steel industry
49	0	Social	Population Demographics	Changes in population trends which drive an increase consumption of oil & gas products (i.e.growing working class, middle class consumption, etc)
50	0	Social	Distribution of Wealth	The distribution of wealth across the segments of the population (i.e. the distribution % of people who fall within various income group)

#	LEVEL OF IMPORTANCE SCORE	DRIVER CATEGORY	DRIVERS	DRIVER DESCRIPTION
51	0	Social	Changes in lifestyle and trends	Demand for consumer goods and the subsequent flow through demand in transportation services and different energy products
52	0	Social	Educational levels of population (Access to skilled labor force)	Generalized educational levels of the current available workforce
53	0	Social	No. of Strikes per year	No. of occurences of labor strikes within in the country
54	0	Social	Local content	The development of local skills, technology transfer, and use of local manpower and local manufacturing
55	0	Social	High risk nationalistic trends	The tendency of people and governments to assert control over natural resources located on their territory.
56	0	Social	Risk of Terrorist activities	The perceived risk of terrorist activities emanating and potentially erupting from within a particular country
57	0	Social	Demanding local customer base	Percieved level of local customer requirements and standards over other customer locations
58	0	Social	Governmental immigration policies	Governmental policies which favor the immigration of skilled foreign labor
59	0	Technology	Innovations and Discoveries	Amount of high tech output, exports and new business density for a particular country
60	0	Technology	Pace of technological Innovations and Advancement	Number of patents or patent application filed, scientific and technical publications and citations; patents and trademarks per capita
61	0	Technology	Pace of technological obsolescence	Technology cycle time indicator
62	0	Technology	New technological platforms	A structural or technological form from which various products can emerge without the expense of a new process / technology introduction.
63	0	Technology	Uniqueness of technology (niche)	Availability of substitutes and concentration of technology within particular country
64	0	Technology	Technological level of equivalent industries	Technological advancement of aerospace, defense and telecom industries
65	0	Technology	Maintenance, replacement or overhaul facilties of existing products	Availability of facilities to support the MRO of existing products
66	0	Technology	High tech manufacturing capacity	Existence of high tech manufacturing and capacity to produce high tech products
67	0	Technology	Existing & Extent of manufacturing & distribution base (EoS)	Number of existing manufacturing and distribution base and its output
68	0	Technology	Existing oil field services supply base	Number of existing oil field service supply base in a country
69	0	Technology	Perceived quality & reputation of components / products	Perceived quality and reputation of products produced from country
70	0	Technology	R & D investment into sector (governmental & private)	% of research and development spending out of total for a particular a sector

#	LEVEL OF IMPORTANCE SCORE	DRIVER CATEGORY	DRIVERS	DRIVER DESCRIPTION
71	0	Technology	Technological Maturity of Specific Industry	The maturity (stage within life-cycle) of evolving technologies
72	0	Technology	Capital Intensity of technology	The amount of fixed or real capital present in relation to other factors of production
73	0	Technology	Revenue volatility of industry	The extent to which revenue fluctuates over the course of the business cycle
74	0	Technology	Length of product life cycles	The life expectancy of a product from the time it is launched until it is no longer available
75	0	Technology	Manufacturing flexibility (Electronics)	Ability to handle varying levels of production and to adapt to the changes in the product being manufactured
76	0	Technology	Government and military activities using satellitecommunications (electronics)	Satellite communication technology used by government and military
77	0	Environmental	Environmental protection laws	Corporate Environmental Law, Environmental Law, Air & Water Environmental Law, Toxics Environmental Law & Natural Resources
78	0	Environmental	Waste disposal laws	Laws that govern the transport, treatment, storage, and disposal of all manner of waste
79	0	Environmental	In-country energy law	Laws that governs the uses and taxation of energy
80	0	Environmental	Popular attitude towards the environment	General population's attitude towards environmental consciouness, recycling and etc
81	0	Environmental	Risk of Natural disasters	Likelihood of natural disasters to occur within country
82	0	Environmental	Environmental opposition from local citizens & regulators	Opposition to certain technology used in oil drilling and production from local citizens, groups and regulations
83	0	Environmental	Public opposition to natural resource development	public opposition to oil exploration & production and other non-renewable energy resources
84	0	Environmental	Conflict mineral disclosures	Disclose whether sourcing of conflict minerals in their products benefited armed groups responsible for human rights violations
85	0	Environmental	Regulations towards hydraulic fracking	Regulations that limit or restrict hydraulic fracking
86	0	Legal	Employment regulations	Regulations dictating employment and labor requirements in country
87	0	Legal	Competitive regulations	Law that promotes or seeks to maintain market competition by regulating anti-competitive conduct by companies.(competition law, EU competition law, US antitrust laws)
88	0	Legal	Health & Safety regulations	Law that protects the health, safety and welfare of the general public and certain defined sectors of the population such as employees
89	0	Legal	Product regulations	Regulations dictating the use and requirements that apply to individuals, businesses, and others relating to the product.
90	0	Legal	Intellectual property protection	Protection and enforcement of intellectual property rights

#	LEVEL OF IMPORTANCE SCORE	DRIVER CATEGORY	DRIVERS	DRIVER DESCRIPTION
91	0	Legal	Strength of rule of law	Strength and impartiality of the legal system to determine contractual enforcement
92	0	Legal	Protectionism (anti-dumping laws)	Protectionist tariffs that a domestic government imposes on foreign imports that it believes are priced below fair market value.
93	0	Business	Global presence of suppliers	Number of countries that key suppliers have presence in
94	0	Business	Criticality of component (technology)	Importance of part to the overall quality and operation of the product itself
95	0	Business	Marketshare concentration of supplier	Marketshare of supplier within the particular industry
96	0	Business	Timeliness of deliveries	Track record of delivering products on time
97	0	Business	Rivalry between market suppliers	Number of potential suppliers and the intensity of competition between suppliers which can produce products of similar quality
98	0	Business	Raw material cost	Raw material cost for usage in the production of the final product
99	0	Business	Logistics cost	Cost of movement of raw materials, components, subcomponents towards the build up of the final product
100	0	Business	Available Financing Options	Availability of financing structure provided from seller to customers (leasing, buy, ,etc)

Appendix B Preliminary Survey Analysis

Table B-1 Central Tendency and Variability

#	DRIVER CATEGORY	DRIVERS	Abs Mean	Abs Mode	Abs Median	Abs Range	# of Max Users (for Abs Rg = 4)	# of Min Users (for Abs Rg = 4)	Highest User #1	Lowest User #1
1	Political	Governmental Effectiveness	2.4	3	3	2	0	0	User 1	User 5
2	Political	Social Policies	3.75	5	4.5	4	2	1	User 2	User 1
3	Political	Entry Mode Regulations	3	3	3	2	0	0	User 3	User 4
4	Political	Tax Policies	3	4	4	3	0	0	User 3	User 2
5	Political	Trade compliance	4.4	4	4	1	0	0	User 1	User 3
6	Political	Implementation of Sanctions	4.5	5	4.5	1	0	0	User 1	User 3
7	Political	Availability of FDI tax incentives	2.5	#N/A	2.5	3	0	0	User 3	User 1
8	Political	Exit Mode Regulations	2.8	2	3	2	0	0	User 3	User 1
9	Political	Governmental Relationship with USA	2.6	3	3	3	0	0	User 1	User 5
10	Political	Governmental Relationship with EU	2.6	3	3	3	0	0	User 1	User 5

11	**Political**	Control of Corruption	3.25	3	3	3	0	0	User 1	User 4
12	**Political**	Regulatory Quality	2.4	3	3	2	0	0	User 1	User 5
13	**Political**	Conduciveness of business environment	3.6	4	4	1	0	0	User 1	User 2
14	**Political**	Governmental funding for Industries	2	2	2	2	0	0	User 3	User 5
15	**Political**	Availability of Export rebates	2	1	2	2	0	0	User 3	User 1
16	**Economic**	Disposal income of consumers	2.333	2	2	1	0	0	User 3	User 2
17	**Economic**	Accessibility of Credit facilities	2	2	2	2	0	0	User 5	User 1
18	**Economic**	Unemployment Rates / Growth rate of Employment	2	1	2	2	0	0	User 4	User 2
19	**Economic**	Major Countries Economic Stimulus (Bond-buying) & Interest Rates	2	2	2	0	0	0	User 2	User 2
20	**Economic**	Inflation rates of Major Economies	3.6	3	3	2	0	0	User 4	User 2
21	**Economic**	Growth rate of wages	3.8	3	4	2	0	0	User 1	User 2
22	**Economic**	Demand for Drilling & Production	3	4	3.5	3	0	0	User 4	User 1
23	**Economic**	Financial Crisis	2.8	2	3	2	0	0	User 1	User 2
24	**Economic**	Domestic Consumption	1.75	1	1.5	2	0	0	User 3	User 1
25	**Economic**	Country Debt Ratio / Risk of Default	2.75	3	3	3	0	0	User 1	User 5
26	**Economic**	Currency Fluctuation and Volatility	3.6	4	4	1	0	0	User 2	User 1
27	**Economic**	Adequacy of existing infrastructure to conduct business (energy, transporatation, utilities)	3.5	#N/A	3.5	3	0	0	User 1	User 3
28	**Economic**	GDP allocation for energy	2.333	2	2	1	0	0	User 3	User 4
29	**Economic**	GDP allocation for Defense	3	#N/A	3	4	1	1	User 1	User 4
30	**Economic**	Private investment into public infrastructure	2.2	2	2	2	0	0	User 3	User 2

31	Economic	Issuance of exploration permits	3	3	3	0	0	0	User 3	User 3
32	Economic	Ease of exportation for products	3	2	3	2	0	0	User 3	User 1
33	Economic	Establishment of products & service for the exportation markets	2.8	3	3	3	0	0	User 4	User 1
34	Economic	Price of Natural gas	3.25	3	3	1	0	0	User 5	User 1
35	Economic	Diversity of customer base (prod sold to diff markets)	2.8	3	3	3	0	0	User 2	User 1
36	Economic	Competition from Imports	2.5	#N/A	2.5	3	0	0	User 4	User 1
37	Economic	Increase in demand from major consuming countries	2.4	2	2	3	0	0	User 4	User 5
38	Economic	Crude oil price	2.4	1	3	3	0	0	User 5	User 1
39	Economic	Trade weighted index	3	3	3	2	0	0	User 1	User 2
40	Economic	Prime rate	2.75	3	3	1	0	0	User 1	User 3

41	Economic	Finding and development (F&D) spending of upstream	3	3	3	0	0	0	User 1	User 1
42	Economic	Housing demand (Copper)	1.75	1	1.5	2	0	0	User 3	User 1
43	Economic	Growth of telecom & power industry (Copper)	1.6	1	1	2	0	0	User 3	User 1
44	Economic	Regional competitiveness - Growth triangle (Electronics)	2	1	2	2	0	0	User 3	User 1
45	Economic	Integration with China (Electronics)	3.6	4	4	4	1	1	User 1	User 5
46	Economic	Scrap recycling (Copper)	2	1	2	2	0	0	User 3	User 1
47	Economic	Industrial production index (machinery)	2.8	2	3	2	0	0	User 5	User 1
48	Economic	Steel price (machinery)	2.6	2	2	4	1	1	User 5	User 1
49	Social	Population Demographics	2.25	2	2	1	0	0	User 3	User 1
50	Social	Distribution of Wealth	2	#N/A	2	2	0	0	User 3	User 1

#	Category	Description								
51	Social	Changes in lifestyle and trends	2	#N/A	2	2	0	0	User 3	User 1
52	Social	Educational levels of population (Access to skilled labor force)	2.8	2	3	2	0	0	User 1	User 2
53	Social	No. of Strikes per year	2.2	2	2	2	0	0	User 4	User 1
54	Social	Local content	2.6	3	3	2	0	0	User 2	User 1
55	Social	High risk nationalistic trends	2	#N/A	2	2	0	0	User 3	User 1
56	Social	Risk of Terrorist activities	3.333	#N/A	3	3	0	0	User 1	User 3
57	Social	Demanding local customer base	2.2	2	2	2	0	0	User 3	User 1
58	Social	Governmental immigration policies	2.4	2	2	1	0	0	User 3	User 1
59	Technology	Innovations and Discoveries	2.75	2	2.5	2	0	0	User 1	User 3
60	Technology	Pace of technological Innovations and Advancement	2.25	2	2	3	0	0	User 1	User 5

#	Category	Description								
61	Technology	Pace of technological obsolescence	1.8	1	2	2	0	0	User 3	User 1
62	Technology	New technological platforms	1.8	1	2	2	0	0	User 1	User 2
63	Technology	Uniqueness of technology (niche)	2.5	3	2.5	1	0	0	User 1	User 3
64	Technology	Technological level of equivalent industries	2.8	3	3	1	0	0	User 1	User 2
65	Technology	Maintenance, replacement or overhaul facilties of existing products	2.75	3	3	3	0	0	User 5	User 1
66	Technology	High tech manufacturing capacity	4.25	5	4.5	2	0	0	User 1	User 3
67	Technology	Existing & Extent of manufacturing & distribution base (EoS)	3	3	3	3	0	0	User 4	User 1
68	Technology	Existing oil field services supply base	2.5	#N/A	2.5	3	0	0	User 4	User 1
69	Technology	Perceived quallity & reputation of components / products	3.8	4	4	2	0	0	User 5	User 3
70	Technology	R & D investment into sector (governmental & private)	3.25	3	3	1	0	0	User 1	User 3

#	Category		Value 1	Value 2	Value 3	Value 4	Value 5	Value 6	User A	User B
71	Technology	Technological Maturity of Specific Industry	3.333	3	3	1	0	0	User 1	User 3
72	Technology	Capital Intensity of technology	3	3	3	0	0	0	User 1	User 1
73	Technology	Revenue volatility of industry	2	1	2	2	0	0	User 3	User 1
74	Technology	Length of product life cycles	2.6	3	3	3	0	0	User 1	User 5
75	Technology	Manufacturing flexibility (Electronics)	3.2	4	4	3	0	0	User 2	User 1
76	Technology	Government and military activities using satellitecommunications (electronics)	1.75	1	1.5	2	0	0	User 3	User 1
77	Environmental	Environmental protection laws	2.4	1	3	3	0	0	User 2	User 1
78	Environmental	Waste disposal laws	2.4	1	3	3	0	0	User 2	User 1
79	Environmental	In-country energy law	1.75	1	1.5	2	0	0	User 3	User 1
80	Environmental	Popular attitude towards the environment	1.6	1	1	2	0	0	User 3	User 1
81	Environmental	Risk of Natural disasters	2.8	3	3	4	1	1	User 1	User 5
82	Environmental	Environmental opposition from local citizens & regulators	2.4	3	3	2	0	0	User 1	User 2
83	Environmental	Public opposition to natural resource development	1.75	1	1.5	2	0	0	User 4	User 1
84	Environmental	Conflict mineral disclosures	4	5	5	4	3	1	User 1	User 3
85	Environmental	Regulations towards hydraulic fracking	1.6	1	1	2	0	0	User 4	User 1
86	Legal	Employment regulations	2.25	3	2.5	2	0	0	User 4	User 1
87	Legal	Competitive regulations	2.8	3	3	4	1	1	User 1	User 5
88	Legal	Health & Safety regulations	3	4	3	2	0	0	User 1	User 2
89	Legal	Product regulations	2.4	1	2	3	0	0	User 2	User 1
90	Legal	Intellectual property protection	4.2	4	4	1	0	0	User 5	User 1

#		Drivers								
91	Legal	Strength of rule of law	2.4	1	2	3	0	0	User 4	User 1
92	Legal	Protectionism (anti-dumping laws)	3.5	5	4	4	2	1	User 1	User 3
93	Business	Global presence of suppliers	4	4	4	2	0	0	User 5	User 3
94	Business	Criticality of component (technology)	3.6	4	4	3	0	0	User 5	User 1
95	Business	Marketshare concentration of supplier	2.75	4	3	3	0	0	User 3	User 1
96	Business	Timeliness of deliveries	4	5	4	2	0	0	User 1	User 2
97	Business	Rivalry between market suppliers	4	4	4	2	0	0	User 5	User 4
98	Business	Raw material cost	4.4	4	4	1	0	0	User 1	User 2
99	Business	Logistics cost	3.6	4	4	3	0	0	User 5	User 2
100	Business	Available Financing Options	3	4	3.5	3	0	0	User 3	User 1

Table B-2 Cumulative Probability of Drivers

#	DRIVER CATEGORY	DRIVERS					
1	Political	Governmental Effectiveness	0.65	0.74	0.22	0.74	0.34
2	Political	Social Policies	0.41	1.00	1.00	1.00	
3	Political	Entry Mode Regulations	0.65	0.74	1.00	0.30	0.65
4	Political	Tax Policies	0.51	0.17	1.00	0.98	0.86
5	Political	Trade compliance	1.00	1.00	1.00	0.98	0.86
6	Political	Implementation of Sanctions	1.00	1.00	1.00	0.98	
7	Political	Availability of FDI tax incentives	0.41	0.74	1.00	0.30	
8	Political	Exit Mode Regulations	0.51	0.74	1.00	0.74	0.43
9	Political	Governmental Relationship with USA	0.84	0.52	0.84	0.74	0.34
10	Political	Governmental Relationship with EU	0.84	0.52	0.84	0.74	0.34

#	DRIVER CATEGORY	DRIVERS					
11	Political	Control of Corruption	1.00	0.74	0.84	0.30	
12	Political	Regulatory Quality	0.65	0.74	0.84	0.30	0.34
13	Political	Conduciveness of business environment	0.84	0.74	0.84	0.98	0.86
14	Political	Governmental funding for Industries	0.51		0.84	0.30	0.34
15	Political	Availability of Export rebates	0.41	0.17	0.84	0.74	
16	Economic	Disposal income of consumers		0.52	0.84	0.30	
17	Economic	Accessibility of Credit facilities	0.41		0.22	0.30	0.65
18	Economic	Unemployment Rates / Growth rate of Employment		0.17	0.03	0.74	0.65
19	Economic	Major Countries Economic Stimulus (Bond-buying) & Interest Rates control		0.52	0.22	0.30	0.43
20	Economic	Inflation rates of Major Economies	0.84	0.74	0.84	1.00	0.65
21	Economic	Growth rate of wages	1.00	0.74	0.84	0.98	0.86
22	Economic	Demand for Drilling & Production	0.41		0.84	0.98	0.86
23	Economic	Financial Crisis	0.84	0.52	0.84	0.74	0.43
24	Economic	Domestic Consumption	0.41		0.84	0.30	0.34
25	Economic	Country Debt Ratio / Risk of Default	0.84		0.84	0.74	0.34
26	Economic	Currency Fluctuation and Volatility	0.65	0.94	0.84	0.98	0.86
27	Economic	Adequacy of existing infrastructure to conduct business (energy, transporation, utilities)	1.00		0.22	0.74	0.86
28	Economic	GDP allocation for energy			0.84	0.30	0.43
29	Economic	GDP allocation for Defense	1.00		0.84	0.01	
30	Economic	Private investment into public infrastructure (utilities, machinery, buildings and vehicles)	0.51	0.17	0.84	0.30	0.65
31	Economic	Issuance of exploration permits			0.84	0.74	
32	Economic	Ease of exportation for products	0.51	0.52	1.00	0.98	
33	Economic	Establishment of products & service for the exportation markets	0.41	0.74	0.84	0.98	0.65
34	Economic	Price of Natural gas	0.65		0.84	0.74	0.86
35	Economic	Diversity of customer base (prod sold to diff markets)	0.41	0.94	0.84	0.74	0.65
36	Economic	Competition from Imports	0.41		0.22	0.98	0.65
37	Economic	Increase in demand from major consuming countries	0.65	0.52	0.22	0.98	0.34
38	Economic	Crude oil price	0.41	0.17	0.84	0.74	0.86
39	Economic	Trade weighted index	0.84	0.52	0.84	0.74	0.65
40	Economic	Prime rate	0.65		0.22	0.74	0.65

#	DRIVER CATEGORY	DRIVERS					
41	Economic	Finding and development (F&D) spending of upstream	0.65		0.84	0.74	
42	Economic	Housing demand (Copper)	0.41		0.84	0.30	0.34
43	Economic	Growth of telecom & power industry (Copper)	0.41	0.17	0.84	0.30	0.34
44	Economic	Regional competitiveness - Growth triangle (Electronics)	0.41	0.52	0.84	0.74	0.34
45	Economic	Integration with China (Electronics)	1.00	0.94	1.00	0.98	0.34
46	Economic	Scrap recycling (Copper)	0.41		0.84	0.74	0.34
47	Economic	Industrial production index (machinery)	0.51	0.52	0.84	0.74	0.86
48	Economic	Steel price (machinery)	0.41	0.52	0.84	0.30	1.00
49	Social	Population Demographics	0.51		0.84	0.30	0.43
50	Social	Distribution of Wealth	0.41		0.84	0.30	
51	Social	Changes in lifestyle and trends	0.41		0.84	0.30	
52	Social	Educational levels of population (Access to skilled labor force)	0.84	0.52	0.84	0.74	0.43
53	Social	No. of Strikes per year	0.41	0.52	0.22	0.74	0.65
54	Social	Local content	0.41	0.74	0.84	0.74	0.65
55	Social	High risk nationalistic trends	0.41		0.84	0.30	
56	Social	Risk of Terrorist activities	1.00		0.22	0.74	
57	Social	Demanding local customer base	0.41	0.52	0.84	0.74	0.43
58	Social	Governmental immigration policies	0.51	0.52	0.84	0.30	0.65
59	Technology	Innovations and Discoveries	0.84		0.22	0.30	0.65
60	Technology	Pace of technological Innovations and Advancement	0.84		0.22	0.30	0.34
61	Technology	Pace of technological obsolescence	0.41	0.52	0.84	0.30	0.34
62	Technology	New technological platforms	0.65	0.17	0.22	0.30	0.34
63	Technology	Uniqueness of technology (niche)	0.65	0.74	0.22	0.30	
64	Technology	Technological level of equivalent industries	0.65	0.52	0.84	0.74	0.65
65	Technology	Maintenance, replacement or overhaul facilties of existing products	0.41		0.84	0.74	0.86
66	Technology	High tech manufacturing capacity	1.00		0.84	0.98	1.00
67	Technology	Existing & Extent of manufacturing & distribution base (EoS)	0.41	0.74	0.84	0.98	0.86
68	Technology	Existing oil field services supply base	0.41		0.84	0.98	0.43
69	Technology	Perceived quallity & reputation of components / products	0.84	0.94	0.84	0.74	1.00
70	Technology	R & D investment into sector (governmental & private)	0.84		0.84	0.74	0.65

#	DRIVER CATEGORY	DRIVERS					
71	Technology	Technological Maturity of Specific Industry	0.84		0.84	0.74	
72	Technology	Capital Intensity of technology	0.65		0.84	0.74	
73	Technology	Revenue volatility of industry	0.41	0.52	0.84	0.74	0.34
74	Technology	Length of product life cycles	0.84	0.52	0.84	0.74	0.34
75	Technology	Manufacturing flexibility (Electronics)	0.41	0.94	0.84	0.98	0.86
76	Technology	Government and military activities using satellitecommunications (electronics)	0.41		0.84	0.30	0.34
77	Environmental	Environmental protection laws	0.41	0.94	0.84	0.74	0.34
78	Environmental	Waste disposal laws	0.41	0.94	0.84	0.74	0.34
79	Environmental	In-country energy law	0.41		0.84	0.30	0.34
80	Environmental	Popular attitude towards the environment	0.41	0.17	0.84	0.30	0.34
81	Environmental	Risk of Natural disasters	1.00	0.52	0.84	0.74	0.34
82	Environmental	Environmental opposition from local citizens & regulators	0.65	0.17	0.84	0.30	0.65
83	Environmental	Public opposition to natural resource development	0.41		0.22	0.74	0.34
84	Environmental	Conflict mineral disclosures	1.00	1.00	0.03	0.98	1.00
85	Environmental	Regulations towards hydraulic fracking	0.41	0.17	0.22	0.74	0.34
86	Legal	Employment regulations	0.41		0.22	0.74	0.65
87	Legal	Competitive regulations	1.00	0.52	0.84	0.74	0.34
88	Legal	Health & Safety regulations	0.84	0.52	0.22	0.74	0.86
89	Legal	Product regulations	0.41	0.94	0.22	0.98	0.34
90	Legal	Intellectual property protection	0.84	0.94	1.00	0.98	1.00
91	Legal	Strength of rule of law	0.41	0.17	0.22	0.98	0.86
92	Legal	Protectionism (anti-dumping laws)	1.00		0.03	0.74	1.00
93	Business	Global presence of suppliers	0.84	0.94	0.84	0.98	1.00
94	Business	Criticality of component (technology)	0.51	0.94	1.00	0.74	1.00
95	Business	Marketshare concentration of supplier	0.41		1.00	0.30	0.86
96	Business	Timeliness of deliveries	1.00	0.74	0.84	0.98	1.00
97	Business	Rivalry between market suppliers	0.84	0.94	1.00	0.74	1.00
98	Business	Raw material cost	1.00	0.94	1.00	0.98	1.00
99	Business	Logistics cost	0.65	0.52	1.00	0.98	1.00
100	Business	Available Financing Options	0.41		1.00	0.74	0.86

Appendix C User Profile Survey

Table C-1 User Profile Survey Form

LEGEND	RANKING (based on Familiarity)
1	Extremely Unfamiliar
2	Moderately Unfamiliar
3	Slightly Unfamiliar
4	Neither
5	Slightly Familiar
6	Moderately Familiar
7	Extremely Familiar

NAME :	
POSITION :	
DEPARTMENT :	

Massachusetts Institute of Technology

MIT Supply Chain

PESTEL+B Framework

Political, Business Internal, Economic, Legal, Social, Environmental, Technological

AGE	YEARS OF EXPERIENCE WITH OG	FAMILIARITY WITH PESTEL+B WITHIN RESPECTIVE REGION						
		North America	Latin America (CA & SA)	Asia	Middle East	Eurrope	CIS	Africa
31 - 35	11 - 15	1	1	1	1	1	1	1

Brief Background	(Please give a brief description of geographical experience based on the previous work experience)

Appendix D Ranking of Drivers

Table D-1 Average Cumulative Probability, in Descending Order

RANK	#	DRIVER CATEGORY	DRIVERS	AVERAGE CUMULATIVE SCORE
1	6	Political	Implementation of Sanctions	1.00
2	98	Business	Raw material cost	0.98
3	5	Political	Trade compliance	0.97
4	66	Technology	High tech manufacturing capacity	0.96
5	90	Legal	Intellectural property protection	0.95
6	93	Business	Global presence of suppliers	0.92
7	96	Business	Timeliness of deliveries	0.91
8	97	Business	Rivalry between market suppliers	0.90
9	21	Economic	Growth rate of wages	0.88
10	69	Technology	Perceived quallity & reputation of components / products	0.87
11	26	Economic	Currency Fluctuation and Volatility	0.85
12	2	Political	Social Policies	0.85
13	13	Political	Conduciveness of business environment	0.85
14	45	Economic	Integration with China (Electronics)	0.85
15	94	Business	Criticality of component (technology)	0.84
16	99	Business	Logistics cost	0.83
17	20	Economic	Inflation rates of Major Economies	0.81
18	71	Technology	Technological Maturity of Specific Industry	0.81
19	75	Technology	Manufacturing flexibility (Electronics)	0.80
20	84	Environmental	Conflict mineral disclosures	0.80
21	31	Economic	Issuance of exploration permits	0.79
22	34	Economic	Price of Natural gas	0.77
23	22	Economic	Demand for Drilling & Production	0.77
24	70	Technology	R & D investment into sector (governmental & private)	0.77
25	67	Technology	Existing & Extent of manufacturing & distribution base (EoS)	0.76
26	32	Economic	Ease of exportation for products	0.75
27	100	Business	Available Financing Options	0.75
28	41	Economic	Finding and development (F&D) spending of upstream	0.74
29	72	Technology	Capital Intensity of technology	0.74
30	33	Economic	Establishment of products & service for the exportation markets	0.72
31	11	Political	Control of Corruption	0.72
32	39	Economic	Trade weighted index	0.72
33	35	Economic	Diversity of customer base (prod sold to diff markets)	0.72
34	65	Technology	Maintenance, replacement or overhaul facilties of existing products	0.71
35	27	Economic	Adequacy of existing infrastructure to conduct business (energy, transporatation, utilities)	0.70
36	4	Political	Tax Policies	0.70
37	47	Economic	Industrial production index (machinery)	0.69
38	92	Legal	Protectionism (anti-dumping laws)	0.69
39	25	Economic	Country Debt Ratio / Risk of Default	0.69
40	81	Environmental	Risk of Natural disasters	0.69

RANK	#	DRIVER CATEGORY	DRIVERS	AVERAGE CUMULATIVE SCORE
41	87	Legal	Competitive regulations	0.69
42	8	Political	Exit Mode Regulations	0.68
43	64	Technology	Technological level of equivalent industries	0.68
44	54	Social	Local content	0.68
45	23	Economic	Financial Crisis	0.68
46	52	Social	Educational levels of population (Access to skilled labor force)	0.68
47	3	Political	Entry Mode Regulations	0.67
48	68	Technology	Existing oil field services supply base	0.67
49	9	Political	Governmental Relationship with USA	0.66
50	10	Political	Governmental Relationship with EU	0.66
51	74	Technology	Length of product life cycles	0.66
52	56	Social	Risk of Terrorist activities	0.65
53	77	Environmental	Environmental protection laws	0.65
54	78	Environmental	Waste disposal laws	0.65
55	95	Business	Marketshare concentration of supplier	0.64
56	88	Legal	Health & Safety regulations	0.64
57	29	Economic	GDP allocation for Defense	0.62
58	48	Economic	Steel price (machinery)	0.61
59	7	Political	Availability of FDI tax incentives	0.61
60	38	Economic	Crude oil price	0.60
61	57	Social	Demanding local customer base	0.59
62	46	Economic	Scrap recycling (Copper)	0.58
63	89	Legal	Product regulations	0.58
64	12	Political	Regulatory Quality	0.57
65	44	Economic	Regional competitiveness - Growth triangle (Electronics)	0.57
66	73	Technology	Revenue volatility of industry	0.57
67	40	Economic	Prime rate	0.57
68	36	Economic	Competition from Imports	0.57
69	58	Social	Governmental immigration policies	0.56
70	16	Economic	Disposal income of consumers	0.55
71	37	Economic	Increase in demand from major consuming countries	0.54
72	15	Political	Availability of Export rebates	0.54
73	1	Political	Governmental Effectiveness	0.54
74	91	Legal	Strength of rule of law	0.53
75	28	Economic	GDP allocation for energy	0.52
76	82	Environmental	Environmental opposition from local citizens & regulators	0.52
77	49	Social	Population Demographics	0.52
78	50	Social	Distribution of Wealth	0.52
79	51	Social	Changes in lifestyle and trends	0.52
80	55	Social	High risk nationalistic trends	0.52
81	53	Social	No. of Strikes per year	0.51
82	86	Legal	Employment regulations	0.51
83	59	Technology	Innovations and Discoveries	0.50
84	14	Political	Governmental funding for Industries	0.50
85	30	Economic	Private investment into public infrastructure (utilities, machinery, buildings and vehicles)	0.49
86	61	Technology	Pace of technological obsolescence	0.48
87	63	Technology	Uniqueness of technology (niche)	0.48
88	24	Economic	Domestic Consumption	0.47
89	42	Economic	Housing demand (Copper)	0.47
90	76	Technology	Government and military activities using satellitecommunications (electronics)	0.47
91	79	Environmental	In-country energy law	0.47
92	83	Environmental	Public opposition to natural resource development	0.43
93	60	Technology	Pace of technological Innovations and Advancement	0.42
94	43	Economic	Growth of telecom & power industry (Copper)	0.41
95	80	Environmental	Popular attitude towards the environment	0.41
96	18	Economic	Unemployment Rates / Growth rate of Employment	0.40
97	17	Economic	Accessibility of Credit facilities	0.40
98	85	Environmental	Regulations towards hydraulic fracking	0.38
99	19	Economic	Major Countries Economic Stimulus (Bond-buying) & Interest Rates control	0.37
100	62	Technology	New technological platforms	0.34

Table D-2 Driver Ranking by Mean, Median and Mode

#	DRIVER CATEGORY	DRIVERS	Mean Rank	Median Rank	Range Rank
1	Political	Governmental Effectiveness	62	24	37
2	Political	Social Policies	12	2	1
3	Political	Entry Mode Regulations	27	25	38
4	Political	Tax Policies	28	5	9
5	Political	Trade compliance	2	6	81
6	Political	Implementation of Sanctions	1	3	82
7	Political	Availability of FDI tax incentives	58	62	10
8	Political	Exit Mode Regulations	39	24	39
9	Political	Governmental Relationship with USA	53	26	11
10	Political	Governmental Relationship with EU	54	27	12
11	Political	Control of Corruption	23	28	13
12	Political	Regulatory Quality	63	29	40
13	Political	Conduciveness of business environment	13	7	83
14	Political	Governmental funding for Industries	80	69	41
15	Political	Availability of Export rebates	81	68	42
16	Economic	Disposal income of consumers	72	70	84
17	Economic	Accessibility of Credit facilities	82	71	43
18	Economic	Unemployment Rates / Growth rate of Employment	83	69	44
19	Economic	Major Countries Economic Stimulus (Bond-buying) & Interest Rates	84	72	97
20	Economic	Inflation rates of Major Economies	14	30	45

21	Economic	Growth rate of wages	10	12	46
22	Economic	Demand for Drilling & Production	29	24	14
23	Economic	Financial Crisis	40	29	47
24	Economic	Domestic Consumption	93	95	48
25	Economic	Country Debt Ratio / Risk of Default	48	32	15
26	Economic	Currency Fluctuation and Volatility	15	9	85
27	Economic	Adequacy of existing infrastructure to conduct business (energy, transporatation, utilities)	19	22	16
28	Economic	GDP allocation for energy	73	74	86
29	Economic	GDP allocation for Defense	30	26	2
30	Economic	Private investment into public infrastructure	77	75	49
31	Economic	Issuance of exploration permits	31	33	98
32	Economic	Ease of exportation for products	32	32	50
33	Economic	Establishment of products & service for the exportation markets	41	34	17
34	Economic	Price of Natural gas	24	35	87
35	Economic	Diversity of customer base (prod sold to diff markets)	42	36	18
36	Economic	Competition from Imports	59	65	19
37	Economic	Increase in demand from major consuming countries	64	77	20
38	Economic	Crude oil price	65	27	21
39	Economic	Trade weighted index	33	37	51
40	Economic	Prime rate	49	38	88

41	**Economic**	Finding and development (F&D) spending of upstream	34	39	99
42	**Economic**	Housing demand (Copper)	94	97	52
43	**Economic**	Growth of telecom & power industry (Copper)	98	103	53
44	**Economic**	Regional competitiveness - Growth triangle (Electronics)	85	74	54
45	**Economic**	Integration with China (Electronics)	16	10	3
46	**Economic**	Scrap recycling (Copper)	86	75	55
47	**Economic**	Industrial production index (machinery)	43	34	56
48	**Economic**	Steel price (machinery)	55	79	4
49	**Social**	Population Demographics	74	80	89
50	**Social**	Distribution of Wealth	87	72	57

51	Social	Changes in lifestyle and trends	88	73	58
52	Social	Educational levels of population (Access to skilled labor force)	44	37	59
53	Social	No. of Strikes per year	78	82	60
54	Social	Local content	56	40	61
55	Social	High risk nationalistic trends	89	74	62
56	Social	Risk of Terrorist activities	21	31	22
57	Social	Demanding local customer base	79	83	63
58	Social	Governmental immigration policies	66	84	90
59	Technology	Innovations and Discoveries	50	79	64
60	Technology	Pace of technological Innovations and Advancement	75	86	23
61	Technology	Pace of technological obsolescence	91	76	65
62	Technology	New technological platforms	92	77	66
63	Technology	Uniqueness of technology (niche)	60	79	91
64	Technology	Technological level of equivalent industries	45	42	92
65	Technology	Maintenance, replacement or overhaul facilties of existing products	51	43	24
66	Technology	High tech manufacturing capacity	4	4	67
67	Technology	Existing & Extent of manufacturing & distribution base (EoS)	35	44	25
68	Technology	Existing oil field services supply base	61	70	26
69	Technology	Perceived quallity & reputation of components / products	11	11	68
70	Technology	R & D investment into sector (governmental & private)	25	45	93

71	Technology	Technological Maturity of Specific Industry	22	46	94
72	Technology	Capital Intensity of technology	36	47	100
73	Technology	Revenue volatility of industry	90	78	69
74	Technology	Length of product life cycles	57	48	27
75	Technology	Manufacturing flexibility (Electronics)	26	12	28
76	Technology	Government and military activities using satellitecommunications (electronics)	95	104	70
77	Environmental	Environmental protection laws	67	36	29
78	Environmental	Waste disposal laws	68	37	30
79	Environmental	In-country energy law	96	107	71
80	Environmental	Popular attitude towards the environment	99	113	72
81	Environmental	Risk of Natural disasters	46	49	5
82	Environmental	Environmental opposition from local citizens & regulators	69	50	73
83	Environmental	Public opposition to natural resource development	97	109	74
84	Environmental	Conflict mineral disclosures	6	4	6
85	Environmental	Regulations towards hydraulic fracking	100	115	75
86	Legal	Employment regulations	76	89	76
87	Legal	Competitive regulations	47	52	7
88	Legal	Health & Safety regulations	37	32	77
89	Legal	Product regulations	70	86	31
90	Legal	Intellectual property protection	5	14	95

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91	Legal	Strength of rule of law	71	87	32
92	Legal	Protectionism (anti-dumping laws)	20	9	8
93	Business	Global presence of suppliers	7	15	78
94	Business	Criticality of component (technology)	17	16	33
95	Business	Marketshare concentration of supplier	52	36	34
96	Business	Timeliness of deliveries	8	10	79
97	Business	Rivalry between market suppliers	9	18	80
98	Business	Raw material cost	3	19	96
99	Business	Logistics cost	18	20	35
100	Business	Available Financing Options	38	37	36

Table D-3 Proxies and References

#	DRIVER CATEGORY	DESCRIPTION	DRIVERS	Entity	Index
1	Political	Perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.	Governmental Effectiveness	Government Effectiveness - Estimate of Governance (2013)	World Bank
2	Political	Guidelines, principles, legislation and activities that affect the living conditions conducive to human welfare.	Social Policies	Social Progress Index	Social Progress Imperative
3	Political	Regulations on entry modes into country including exporting, licensing, joint venture, direct investment and etc	Entry Mode Regulations	Starting a Business (DTF)	World Bank
4	Political	The choice by a government as to what taxes to levy, in what amounts, and on whom.	Tax Policies	Paying Taxes 2015 Rankings	PWC
5	Political	The ease and process by which goods enter the country in conformance with all local laws and regulations	Trade compliance	DTF	World Bank
6	Political	Action that is taken or an order that is given to force a country to obey international laws by limiting or stopping trade with that country, by not allowing economic aid for that country	Implementation of Sanctions	Basel AML Index	Basel Governance
7	Political	Tax incentives available in country which are utilized to encourage foreign direct investment	Availability of FDI tax incentives	Corporate Tax Incentives / Complexity Score	Tax Foundation
8	Political	Regulations requirements for companies who have decided to exit the market	Exit Mode Regulations	Resolving Insolvency (DTF)	World Bank
9	Political	A country's perceived 'health' of governmental relationship with the government of USA	Governmental Relationship with USA	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	United States International Trade Comission
10	Political	A country's perceived 'health' of governmental relationship with the European Union	Governmental Relationship with EU	Trading Volume in € (M)	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014

#	DRIVER CATEGORY	DESCRIPTION	DRIVERS	Entity	Index
11	Political	Perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests	Control of Corruption	Corruption Perception Index (2014 Score)	Transparency International
12	Political	Ability to formulate and implement sound policies and regulations that permit and promote private sector development	Regulatory Quality	Regulatory Quality - Estimate of Regulatory Quality (2013)	World Bank
13	Political	Ease of doing business in a country	Conduciveness of business environment	Ease of doing business index (2014)	World Bank
14	Political	Funding available by local governments in the form of grants, tax benefits, incentives for the development of grants	Governmental funding for Industries	6.04 Effect of taxation on incentives to invest, 1-7 (best)	World Economic Forum
15	Political	Availability of incentives which stimulate exportation of locally manufactured products	Availability of Export rebates	Country Risk Classifications of the Participants to the Arrangement on Officially Supported Export Credits	OECD
16	Economic	The maximum amount that a unit can afford to spend on consumption goods or services without having to reduce its financial or non-financial assets or by increasing its liabilities.	Disposal income of consumers	Real Household Disposable Income Growth (over 3 years) 2008 - 2010	OECD
17	Economic	Ease of available credit that enterprises have within selected country	Accessibility of Credit facilities	Getting Credit DTF	World Bank
18	Economic	The percentage of the total labor force that is unemployed but actively seeking employment and willing to work.	Unemployment Rates / Growth rate of Employment	Unemployment, total (% of total labor force) over 5 years	World Bank
19	Economic	A country's attempts to use monetary or fiscal policy (or stabilization policy in general) to stimulate the economy	Major Countries Economic Stimulus (Bond-buying) & Interest Rates control	Expense (% of GDP) over 3 years (2010 - 2012)	World Bank
20	Economic	The overall generalized rate in which prices for a basket of goods and services are rising in a particular country	Inflation rates of Major Economies	5 Years Average Inflation, CP (annual %)	World Bank
21	Economic	Year-on-Year change in wages	Growth rate of wages	International Comparisons of Hourly Compensation Costs in Manufacturing - Growth Rate 2007 - 2011 (in 2013)	The Conference Board, International Labor Comparisons program
22	Economic	Global rig count forecast	Demand for Drilling & Production	Consumption by fuel (O & G total) - % of Global	BP
23	Economic	Disturbance to financial markets. associated typically with falling asset prices and insolvency among debtors and intermediaries, which spreads through the financial system, disrupting the market's capacity to allocate capital	Financial Crisis	Trading Economics Credit Rating - Ranking	Trading Economics
24	Economic	The market value of all goods and services, including durable products (such as cars, washing machines, and home computers), purchased by household	Domestic Consumption	Household final consumption expenditure per capita (constant 2005 US$) over 5 years (2009 - 2013)	World Bank
25	Economic	The ratio between a country's government debt and its gross domestic product (GDP).	Country Debt Ratio / Risk of Default	Central government debt, total (% of GDP) - 3 Year Average	World Bank
26	Economic	Volatility between a country's exchange rate and it's key trading partners	Currency Fluctuation and Volatility	International Comparisons of Hourly Compensation Costs in Manufacturing - Growth Rate 2007 - 2011 (in 2013)	The Conference Board, International Labor Comparisons program
27	Economic	Energy infrastructure includes: Electrical power network, Petroleum pipelines; transportation infrastructure includes roads, rail, ports; utilities infrastructure includes water, electricity	Adequacy of existing infrastructure to conduct business (energy, transporatation, utilities)	Logistics Performance Index - Infrastructure	World Bank
28	Economic	Total Primary Energy Consumption per Dollar of GDP	GDP allocation for energy	Energy Intensity- Total Primary Energy Consumption / $GDP	EIA
29	Economic	All current and capital expenditures on the armed forces, including peacekeeping forces; defense ministries and other government agencies engaged in defense projects; paramilitary forces, if these are judged to be trained and equipped for military operations; and military space activities.	GDP allocation for Defense	5 Years Average Military expenditure (% of GDP)	World Bank
30	Economic	Degree to which private company's are investing in public infrastructure (utilities, machinery, building and etc)	Private investment into public infrastructure (utilities, machinery, buildings and vehicles)	Investment in transport with private participation (current US$) over 3 years	World Bank

#	DRIVER CATEGORY	DESCRIPTION	DRIVERS	Entity	Index
31	Economic	Number of exploration permits which the government has released to explore O & G in the country	Issuance of exploration permits	Total No. of Wells (2015 - 2020)	Spears and Associates
32	Economic	Ease of exporation of locally manufactured products to various target markets	Ease of exporation for products	Time to export (days)	World Bank
33	Economic	Ability and maturity of products to be exported for overseas markets	Establishment of products & service for the exportation markets	Total US dollar amount of merchandise exports on an f.o.b. (free on board) basis.	CIA Work Factbook
34	Economic	Forecasted price of natural gas	Price of Natural gas	Average Wholesale Prices in 2013 (by Country)	International Gas Union (Wholesale Gas Price Survey - 2014 Edition)
35	Economic	Variety of geographical markets in which products can be sold	Diversity of customer base (prod sold to diff markets)	10.02 Foreign market size index, 1–7 (best)*	World Economic Forum
36	Economic	Availability of import substitutes	Competition from Imports	6.14 Imports as a percentage of GDP*	World Economic Forum
37	Economic	Anticipated demand of products from product consumption countries	Increase in demand from major consuming countries	O & G CONSUMPTION GROWTH (in tonnes) OVER 5 YEARS	BP Statistical Review of World Energy, 2014
38	Economic	Forecasted price of crude oil	Crude oil price	Pump price for gasoline (US$ per liter) in 2012	World Bank
39	Economic	An average of the exchange rates of a country's currency with the currencies of its most important trading partners, weighted to reflect each trading partners' importance to the country's trade.	Trade weighted index	△TWI change by OG Spend (YTD - Sep 2014)	World Bank
41	Economic	Finding and development spending in upstream activitiies	Finding and development (F&D) spending of upstream	Total Spending in $M (2015 - 2020)	Spears and Associates
42	Economic	Forecasted housing demand in country	Housing demand (Copper)	Housing Stock (2014)	World Bank
43	Economic	Forecasted growth of telecommunication and power industry in country	Growth of telecom & power industry (Copper)	Average Investment in telecoms with private participation (current US$) over 5 Years (2009 - 2013)	World Bank
44	Economic	Capability of a region to attract and keep firms with stable or increasing market shares in an activity, while maintaining stable or increasing standards of living for those who participate in it/	Regional competitiveness - Growth triangle (Electronics)	11.03 State of cluster development, 1-7 (best)	World Economic Forum
45	Economic	Ability to effectively provide raw materials and subcomponents to support manufacturers based in China	Integration with China (Electronics)	FDI Investment (% of Total) by Partner Country (2012,2011)	OECD
46	Economic	Amount of products which have copper in them that are being scrapped so as to recycle the copper within them	Scrap recycling (Copper)	World Copper and Copper Alloy Scrap Exports (2010 - 2012)	International Copper Study Group (October 2012)
47	Economic	The amount of output from the manufacturing, mining, electric and gas industries.	Industrial production index (machinery)	Industrial Production By Country (Level in $B)	Quandl
48	Economic	Forecasted market price for the Steel industry	Steel price (machinery)	Averages of Index Prices over time	SteelBenchMarker.com
49	Social	Changes in population trends which drive an increase consumption of oil & gas products (i.e.growing working class, middle class consumption, etc)	Population Demographics	Average annual rate of change in Urban Population (%) 2010–2015	UN World Urbanization Prospects
50	Social	The distribution of wealth across the segments of the population (i.e. the distribution % of people who fall within various income group)	Distribution of Wealth	DISTRIBUTION OF FAMILY INCOME - GINI INDEX	CIA World Factbook
51	Social	Demand for consumer goods and the subsequent flow through demand in transportation services and different energy products	Changes in lifestyle and trends	Total Primary Energy Consumption per Capita (Million Btu per Person) - Average Growth over 3 years (2009 to 2011)	UN World Urbanization Prospects
52	Social	Generalized educational levels of the current available workforce	Educational levels of population (Access to skilled labor force)	Labor force with tertiary education (% of total) (over 3 years) 2009 - 2011	World Bank
53	Social	No. of occurences of labor strikes within in the country	No. of Strikes per year	7.01 Cooperation in labor-employer relations, 1-7 (best)	World Economic Forum
54	Social	The development of local skills, technology transfer, and use of local manpower and local manufacturing	Local content	5.08 Extent of staff training, 1-7 (best)	World Economic Forum
55	Social	The tendency of people and governments to assert control over natural resources located on their territory.	High risk nationalistic trends	Country Risk Assessment (Adjusted)	CountryWatch, Inc (Political Overview)
56	Social	The perceived risk of terrorist activities emanating and potentially erupting from within a particular country	Risk of Terrorist activities	Global Terrorism Index Score	Vision of Humanity
57	Social	Percieved level of local customer requirements and standards over other customer locations	Demanding local customer base	6.16 Buyer sophistication, 1-7 (best)	World Economic Forum
58	Social	Governmental policies which favor the immigration of skilled foreign labor	Governmental immigration policies	7.09 Country capacity to attract talent, 1-7 (best)	World Economic Forum
59	Technology	Amount of high tech output, exports and new business density for a particular country	Innovations and Discoveries	High-technology exports (% of manufactured exports) Average over 3 Years (2010 - 2012)	World Bank
60	Technology	Number of patents or patent application filed, scientific and technical publications and citations; patents and trademarks per capita	Pace of technological Innovations and Advancement	Average Patent applications, residents over 3 year period (2010 - 2012)	World Bank

#	DRIVER CATEGORY	DESCRIPTION	DRIVERS	Entity	Index
61	Technology	Technology cycle time indicator	Pace of technological obsolescence	A. Technological adoption	World Economic Forum
62	Technology	A structural or technological form from which various products can emerge without the expense of a new process / technology introduction.	New technological platforms	9.01 Availability of latest technologies, 1-7 (best)	World Economic Forum
63	Technology	Availability of substitutes and concentration of technology within particular country	Uniqueness of technology (niche)	National Office resident patent applications Percentage Rank	Global Innovation Index
64	Technology	Technological advancement of aerospace, defense and telecom industries	Technological level of equivalent industries	Communications, computer and information services exports, % total trade Percentage Rank	Global Innovation Index
65	Technology	Availability of facilities to support the MRO of existing products	Maintenance, replacement or overhaul facilities of existing products	Refinery MRO services (Downstream) market capacity	Global Oil & Gas Refinery MRO Services Market, Ashay Abbhi, 30 Aug 2013
66	Technology	Existence of high tech manufacturing and capacity to produce high tech products	High tech manufacturing capacity	High-technology exports (% of manufactured exports) - 3 Year Average (2010 - 2012)	World Bank
67	Technology	Number of existing manufacturing and distribution base and its output	Existing & Extent of manufacturing & distribution base (EoS)	11.01 Local supplier quantity, 1-7 (best)	World Economic Forum
68	Technology	Number of existing oil field service supply base in a country	Existing oil field services supply base	Total Proven Crude Oil Reserves (million barrels)	World.ByMap.Org
69	Technology	Perceived quality and reputation of products produced from country	Perceived qualitiy & reputation of components / products	Country Brand Ranking	Country Brand Index
70	Technology	% of research and development spending out of total for a particular a sector	R & D investment into sector (governmental & private)	12.03 Company spending on R&D, 1-7 (best)	World Economic Forum
71	Technology	The maturity (stage within life-cycle) of evolving technologies	Technological Maturity of Specific Industry	9.02 Firm-level technology absorption, 1-7 (best)	World Economic Forum
72	Technology	The amount of fixed or real capital present in relation to other factors of production	Capital Intensity of technology	Buying Price (US$ / m2)	Numbeo (Global Property Guide)
73	Technology	The extent to which revenue fluctuates over the course of the business cycle	Revenue volatility of industry	Average Oil Rents (% of GDP) over 3 Years (2010 - 2012)	World Bank
74	Technology	The life expectancy of a product from the time it is launched until it is no longer available	Length of product life cycles	9th pillar: Technological readiness	World Economic Forum
75	Technology	Ability to handle varying levels of production and to adapt to the changes in the product being manufactured	Manufacturing flexibility (Electronics)	Manufacturing capability rank	Bloomberg
76	Technology	Satellite communication technology used by government and military	Government and military activities using satellitecommunications (electronics)	12.05 Gov't procurement of advanced tech products, 1-7 (best)	World Economic Forum
77	Environmental	Corporate Environmental Law, Environmental Law, Air & Water Environmental Law, Toxics Environmental Law & Natural Resources	Environmental protection laws	EPI Score	Yale University
78	Environmental	Laws that govern the transport, treatment, storage, and disposal of all manner of waste	Waste disposal laws	Wastewater Treatment	Yale University
79	Environmental	Laws that governs the uses and taxation of energy	In-country energy law	Environmental Regulatory Regime Index by Country Score	World Bank
80	Environmental	General population's attitude towards environmental consciouness, recycling and etc	Popular attitude towards the environment	2014 Global Green Economy Index - PERFORMANCE RANK	Dual Citizen Inc

#	DRIVER CATEGORY	DESCRIPTION	DRIVERS	Entity	Index
81	Environmental	Likelihood of natural disasters to occur within country	Risk of Natural disasters	World Risk Index Percent Score	United Nations University - Institute for Environment and Human Security
82	Environmental	Opposition to certain technology used in oil drilling and production from local citizens, groups and regulators	Environmental opposition from local citizens & regulators	Electric Production from Renewable Sources, Excluding Hydroelectric (% of total) Value	IndexMundi.org
83	Environmental	public opposition to oil exploration & production and other non-renewable energy resources	Public opposition to natural resource development	Alternative and nuclear energy (% of total energy use) Value	IndexMundi.org
84	Environmental	Disclose whether sourcing of conflict minerals in their products benefited armed groups responsible for human rights violations	Conflict mineral disclosures	Conflict Minerals Covered Countries	Womble Carlyle Sandridge & Rice (WCSR)
85	Environmental	Regulations that limit or restrict hydraulic fracking	Regulations towards hydraulic fracking	Fracking Banned (Yes or No)	Petro Global News
86	Legal	Regulations dictating employment and labor requirements in country	Employment regulations	7.03 Hiring and firing practices, 1-7 (best)	World Economic Forum
87	Legal	Law that promotes or seeks to maintain market competition by regulating anti-competitive conduct by companies.(competition law, EU competition law, US antitrust laws)	Competitive regulations	6.03 Effectiveness of anti-monopoly policy, 1-7 (best)	World Economic Forum
88	Legal	Law that protects the health, safety and welfare of the general public and certain defined sectors of the population such as employees	Health & Safety regulations	Global Rights Index Country Rating	International Trade Union Confederation
89	Legal	Regulations dictating the use and requirements that apply to individuals, businesses, and others relating to the product.	Product regulations	Product Market Regulations Index Score (2013)	OECD
90	Legal	Protection and enforcement of intellectual property rights	Intellectual property protection	1.02 Intellectual property protection, 1-7 (best)	World Economic Forum
91	Legal	Strength and impartiality of the legal system to determine contractual enforcement	Strength of rule of law	Enforcing Contracts DTF	World Bank
92	Legal	Protectionist tariffs that a domestic government imposes on foreign imports that it believes are priced below fair market value.	Protectionism (anti-dumping laws)	6.09 Prevalence of trade barriers, 1-7 (best)	World Economic Forum
93	Business	Number of countries that key suppliers have presence in	Global presence of suppliers	11.06 Control of international distribution, 1-7 (best)	World Economic Forum
94	Business	Importance of part to the overall quality and operation of the product itself	Criticality of component (technology)	11.04 Nature of competitive advantage, 1-7 (best)	World Economic Forum
95	Business	Marketshare of supplier within the particular industry	Marketshare concentration of supplier	6.02 Extent of market dominance, 1-7 (best)	World Economic Forum
96	Business	Track record of delivering products on time	Timeliness of deliveries	Logistics Performance Index - Timeliness	World Bank
97	Business	Number of potential suppliers and the intensity of competition between suppliers which can produce products of similar quality	Rivalry between market suppliers	6.01 Intensity of local competition, 1-7 (best)	World Economic Forum
98	Business	Raw material cost for usage in the production of the final product	Raw material cost	Average of Value / kg for H4 - 7213	UNCOMTRADE
99	Business	Cost of movement of raw materials, components, subcomponents towards the build up of the final product	Logistics cost	Export Land S/C Cost	World Bank
100	Business	Availability of financing structure provided from seller to customers (leasing, buy, ,etc)	Available Financing Options	8.01 Availability of financial services, 1-7 (best)	World Economic Forum

Table D-4 Country Comparison, by Individual Indices

COUNTRY COMPARISON by Individual Ranking Indices		#	1	2	3	4	5	6	7	8	9	10	11	12	13
		RANKING	73	12	47	36	3	1	59	42	49	50	31	64	13
		ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	DE	AS
		METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Corporate Tax Incentives / Complexity Score	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
		ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	Tax Foundation	World Bank	United States International Trade Comision	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
1	Aruba	ABW	1.21								1,400.20	218.00		1.44	
2	Andorra	AND	1.53								5.00	1,111.00		1.55	
3	Afghanistan	AFG	(1.43)		93.54	79.00	9.21	8.53		23.60	844.40	634.00	12.00	(1.21)	183.00
4	Albania	ALB	(0.33)	69.13	91.86	131.00	72.48	5.54		61.37	120.30	3,563.00	33.00	0.18	68.00
5	Algeria	DZA	(0.50)	59.13	74.07	176.00	64.21	6.61		42.74	7,267.80	54,340.00	36.00	(1.19)	154.00
6	Angola	AGO	(1.26)	39.93	56.56	144.00	40.96	6.66		0.00	7,760.10	15,516.00	19.00	(1.05)	181.00
7	Argentina	ARG	(0.29)	70.59	72.58	170.00	65.11	6.71		45.10	15,071.20	18,144.00	34.00	(0.99)	124.00
8	Armenia	ARM	0.07	65.03	97.77	41.00	68.81	4.86		48.14	152.60	979.00	37.00	0.28	45.00
9	American Samoa	ASM	0.48									3.00		0.36	
10	Antigua and Barbuda	ATG	0.48		83.28	159.00	73.58			38.19	220.80	420.00		0.60	89.00
11	Australia	AUS	1.62	86.10	96.47	39.00	80.53	5.01	73.80	81.60	37,337.60	42,256.00	80.00	1.79	10.00
12	Austria	AUT	1.57	85.11	83.42	72.00	87.66	5.47	66.50	78.84	14,483.10		72.00	1.48	21.00
13	Azerbaijan	AZE	(0.46)	62.44	95.54	33.00	42.37	6.46		43.02	1,961.90	17,936.00	29.00	(0.43)	80.00
14	Bangladesh	BGD	(0.82)	52.04	81.36	83.00	61.36	6.38		29.49	6,366.70	12,502.00	25.00	(0.93)	173.00
15	Belarus	BLR	(0.94)	65.20	91.88	60.00		5.42		48.18	224.10	12,036.00	31.00	(1.09)	57.00
16	Belgium	BEL	1.59	82.63	94.42	81.00	85.55	3.91	50.90	83.87	55,728.80		76.00	1.29	42.00
17	Benin	BEN	(0.55)	49.11	80.91	178.00	66.45	6.62		38.08	787.00	984.00	39.00	(0.42)	151.00
18	Bolivia	BOL	(0.40)	62.90	59.07	189.00	65.79	7.32		42.82	2,933.60	1,236.00	35.00	(0.79)	157.00
19	Bosnia and Herzegovina	BIH	(0.45)	64.99	72.51	151.00	69.76	5.61		66.21	128.80	8,028.00	39.00	(0.08)	107.00
20	Bahrain	BHR	0.58		76.92	8.00	77.27	5.57		44.24	2,025.40	2,714.00	49.00	0.60	53.00
21	Bahamas, The	BHS	0.86		84.12	31.00	77.36	6.01		52.93	3,896.90	965.00		0.16	97.00
22	Botswana	BWA	0.28	65.60	71.68	67.00	52.02	5.84		57.17	370.90	4,406.00	63.00	0.66	74.00
23	Brazil	BRA	(0.08)	69.97	63.37	177.00	66.11	5.85		54.52	72,754.60	73,140.00	43.00	0.07	120.00
24	Belize	BLZ	(0.19)		72.38	61.00	73.17			47.94	333.70	242.00		(0.49)	118.00
25	Bermuda	BMU	1.00								681.80	1,315.00		1.31	
26	Bhutan		0.36		85.01	86.00	43.10			0.00	2.70	32.00	65.00	(1.10)	125.00
27	Bulgaria	BGR	0.15	70.24	91.09	89.00	78.34	3.83		64.75	964.10		43.00	0.52	38.00
28	Burkina Faso	BFA	(0.62)	47.33	69.06	152.00		7.49		38.08	78.50	707.00	38.00	(0.17)	167.00
29	Barbados	BRB	1.35		84.36	92.00		5.17		74.09	621.40	197.00	74.00	0.43	106.00
30	Brunei Darussalam	BRN	0.86		53.12	30.00	80.87	5.84		44.17	582.20	1,288.00		1.10	101.00

COUNTRY COMPARISON by Individual Ranking Indices	#	1	2	3	4	5	6	7	8	9	10	11	12	13
	RANKING	73	12	47	36	3	1	59	42	49	50	53	64	13
	ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	DE	AS
	METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Corporate Tax Incentives / Complexity Score	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business Index (2014)
	ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	Tax Foundation	World Bank	United States International Trade Comision	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
31	Burundi	BDI	(1.07)	37.33	94.25	124.00				30.55	9.60	115.00	20.00	(0.87)	152.00
32	Cambodia	KHM	(0.82)	51.89	41.23	90.00	65.92	8.39		45.02	3,171.90	2,744.00	21.00	(0.35)	135.00
33	Cameroon	CMR	(0.86)	45.51	76.41	181.00	49.83			36.42	487.70	4,129.00	27.00	(0.93)	158.00
34	Canada	CAN	1.77	86.95	98.82	9.00	86.07	5.29	76.40	89.17	658,187.80	58,912.00	81.00	1.70	16.00
35	Channel Islands	CHI	1.34											1.19	
36	Central African Republic	CAF	(1.78)	34.17	34.30	185.00	6.48			28.13	33.90	125.00	24.00	(1.13)	187.00
37	Chad	TCD	(1.50)	32.60	39.98	186.00	10.68			28.13	2,391.90	330.00	22.00	(1.02)	185.00
38	Cote d'Ivoire	CIV	(1.04)		91.24	175.00	50.54	6.60		44.97	1,440.10		32.00	(0.73)	147.00
39	Chile	CHL	1.25	76.30	89.83	29.00	82.05	4.07	96.40	47.38	26,121.50	18,267.00	73.00	1.48	41.00
40	Congo, Rep.	COG	(1.22)	47.99	60.56	182.00	15.40			37.75	745.90	2,749.00		(1.36)	178.00
41	China	CHN	(0.03)	58.67	77.43	120.00	71.68	6.06		55.31	590,680.50	########	36.00	(0.31)	90.00
42	Comoros	COM	(1.44)		57.65	167.00	59.33	6.93		0.00	5.70	58.00	26.00	(1.26)	159.00
43	Cabo Verde	CPV	0.12		87.00	91.00	70.92	6.98		0.00		522.00	57.00	(0.12)	122.00
44	Colombia	COL	0.04	67.24	86.13	146.00	72.69	4.61		70.00	38,551.00	13,545.00	37.00	0.38	34.00
45	Costa Rica	CRI	0.47	77.75	80.90	121.00	80.84	6.37		43.95	16,534.00	4,887.00	54.00	0.58	83.00
46	Curacao	CUW										828.50			
47	Cayman Islands	CYM	1.21								834.90	1,146.00		1.11	
48	Cyprus	CYP	1.35		89.18	50.00	83.87	4.99		56.68	217.70		63.00	0.91	64.00
49	Croatia	HRV	0.69	73.31	85.43	36.00	74.25	4.15		53.92	805.90	2,672.00	48.00	0.44	65.00
50	Cuba	CUB	(0.44)	61.07							299.10		46.00	(1.62)	
51	Czech Republic	CZE	0.88	80.41	82.58	119.00	78.33	4.56	61.50	77.50	6,643.10		51.00	1.09	44.00
52	Dominica	DMA	0.71		89.27	94.00	74.03	4.63		37.09	65.70	22.00	58.00	0.27	97.00
53	Denmark	DNK	1.97	86.55	93.40	12.00	92.23	4.29	78.00	84.59	9,861.80		92.00	1.80	4.00
54	Djibouti	DJI	(1.18)	45.95	65.89	75.00	78.65	5.48		48.04	137.40	200.00	34.00	(0.55)	155.00
55	Dominican Republic	DOM	(0.49)	63.03	81.60	80.00	85.56	6.68		23.75	12,473.60	1,924.00	32.00	(0.11)	84.00
56	Ecuador	ECU	(0.49)	68.15	65.31	138.00	68.23	5.62		28.36	19,237.70	4,854.00	33.00	(0.94)	115.00
57	Egypt, Arab Rep.	EGY	(0.39)	59.97	88.14	149.00	71.56	5.18		36.17	7,900.40	22,877.00	37.00	(0.70)	112.00
58	Eritrea	ERI	(1.54)		44.81	174.00	32.24			0.00	5.50	88.00	18.00	(2.23)	189.00
59	El Salvador	SLV	(0.13)	64.70	79.87	161.00	76.01	4.86		46.02	5,742.20	728.00	39.00	0.31	109.00
60	Estonia	EST	0.98	81.28	93.25	28.00	92.76	3.27	98.70	64.92	871.00		69.00	1.48	17.00

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COUNTRY COMPARISON	#	1	2	3	4	5	6	7	8	9	10	11	12	13
by Individual Ranking Indices	RANKING	73	12	47	86	3	1	59	42	49	50	31	64	13
	ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	DE	AS
	METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Corporate Tax Incentives / Complexity Score	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
	ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	Tax Foundation	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO. / COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
61 Ethiopia	ETH	(0.52)		63.15	112.00	38.58			47.20	1,936.00	1,760.00	33.00	(1.13)	132.00
62 Finland	FIN	2.17	86.91	93.10	21.00	89.10	2.51	82.20	93.85	7,156.30		89.00	1.85	9.00
63 Fiji	FJI	(0.96)		67.79	107.00	68.04			43.62	263.30	417.00		(0.57)	81.00
64 France	FRA	1.47	81.11	93.00	95.00	90.18	4.78	59.00	75.94	78,212.60		69.00	1.15	31.00
65 Faeroe Islands	FRO									140.50	1,060.00			
66 Micronesia, Fed. Sts.	FSM	(0.56)		69.63	114.00	69.42			37.74	42.00	1.00		(0.57)	145.00
67 Gabon	GAB	(0.77)		75.90	154.00	63.26			36.29	1,218.30	2,938.00	37.00	(0.56)	144.00
68 Georgia	GEO	0.53	63.94	97.73	38.00	84.02	4.83		36.48	1,021.70	2,701.00	52.00	0.74	15.00
69 Germany	DEU	1.52	84.61	81.38	68.00	87.67	5.49	60.90	91.78	172,623.60		79.00	1.55	14.00
70 Ghana	GHA	(0.09)	55.96	83.73	101.00	67.10	5.88		22.45	1,399.00	6,802.00	48.00	0.08	70.00
71 Greece	GRC	0.45	73.43	90.71	59.00	80.80	6.33	63.30	55.98	1,820.50		43.00	0.62	61.00
72 Gambia, The	GMB	(0.72)		68.37	180.00	75.52	6.68		41.51			29.00	(0.57)	138.00
73 Guinea-Bissau	GNB	(1.44)		54.83	150.00	67.41	8.25		0.00			19.00	(1.30)	179.00
74 Equatorial Guinea	GNQ	(1.59)		36.74	171.00	59.67			0.00	830.60	4,865.00		(1.44)	165.00
75 Guatemala	GTM	(0.71)	61.37	83.72	54.00	70.10	5.60		27.37	10,273.80	1,395.00	32.00	(0.21)	73.00
76 Grenada	GRD	0.27		86.70	106.00	80.22	5.12		0.00	92.80	24.00		0.35	126.00
77 Greenland	GRL	0.91								18.20	935.00		1.40	
78 Guinea	GIN	(1.32)	37.41	55.44	184.00	60.25	7.37		37.62	151.30	1,633.00	25.00	(1.01)	169.00
79 Guam	GUM	(0.04)									34.00		0.60	
80 Guyana	GUY	(0.16)	60.06	83.62	115.00	74.63	6.50		28.50	871.60	317.00	30.00	(0.52)	123.00
81 Hong Kong SAR, China	HKG	1.73		96.38	4.00	95.36	5.62		75.06	46,671.30		74.00	1.93	3.00
82 Honduras	HND	(0.74)	61.28	74.84	153.00	76.50	6.26		31.83	10,574.90	1,098.00	29.00	(0.20)	104.00
83 Hungary	HUN	0.64	73.87	90.04	88.00	76.48	4.00	57.70	49.78	7,104.90		54.00	0.89	54.00
84 Haiti	HTI	(1.53)		33.48	142.00	59.98	7.41		0.00	2,184.80	196.00	19.00	(0.95)	180.00
85 Iceland	ISL	1.48	88.07	92.35	46.00	83.23	4.29	58.60	81.47	636.80	4,521.00	79.00	1.09	12.00
86 India	IND	(0.19)	50.24	68.42	156.00	65.47	5.64		32.60	66,855.80	72,683.00	38.00	(0.47)	142.00
87 Isle of Man	IMN													
88 Indonesia	IDN	(0.24)	58.98	68.84	160.00	77.46	6.25		46.75	27,693.20	24,107.00	34.00	(0.20)	114.00
89 Iraq	IRQ	(1.08)	44.84	74.03	52.00	20.48	8.22		0.00	15,814.60	16,044.00	16.00	(1.26)	156.00
90 Iran, Islamic Rep.	IRN	(0.70)	56.65	89.37	124.00	56.81	8.56		32.38	182.10	6,218.00	27.00	(1.50)	130.00

		#	1	2	3	4	5	6	7	8	9	10	11	12	13
		RANKING	73	12	47	26	3	1	59	42	49	50	81	64	13
		ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	DE	AS
		METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Corporate Tax Incentives / Complexity Score	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
		ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	Tax Foundation	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
91	Ireland	IRL	1.46	84.05	94.17	6.00	93.01	4.36	55.90	76.90	41,756.00		74.00	1.58	13.00
92	Israel	ISR	1.22	71.40	90.54	97.00	89.39	4.92	18.90	75.21	38,124.20	29,451.00	60.00	1.16	40.00
93	Italy	ITA	0.45	76.93	91.22	141.00	83.44	5.37	47.20	71.29	59,068.80		43.00	0.77	56.00
94	Jamaica	JAM	(0.02)	70.39	94.13	147.00	68.22	3.98		53.29	2,459.30	510.00	38.00	0.23	58.00
95	Japan	JPN	1.59	84.21	86.21	122.00	87.23	5.92	25.60	93.74	200,902.80	########	76.00	1.10	29.00
96	Jordan	JOR	(0.11)	61.92	85.61	45.00	78.92	5.02		30.17	3,409.30	4,080.00	49.00	0.11	117.00
97	Kazakhstan	KAZ	(0.54)	59.47	90.19	17.00	7.87	5.94		51.45	2,453.00	31,091.00	29.00	(0.38)	77.00
98	Kenya	KEN	(0.49)	50.20	74.02	102.00	54.49	7.72		33.31	2,165.90	2,990.00	25.00	(0.35)	136.00
99	Kuwait	KWT	(0.07)	70.66	71.30	11.00	68.00	6.14		36.02	15,086.50	11,557.00	44.00	(0.09)	86.00
100	Kyrgyz Republic	KGZ	(0.59)	57.08	96.35	136.00	9.70	6.29		24.38	74.20	478.00		(0.33)	102.00
101	Latvia	LVA	0.88	73.91	92.12	24.00	85.36	5.03		63.42	702.30		55.00	1.03	23.00
102	Kiribati	KIR	(0.85)		79.74	14.00	74.76			0.00	5.90	8.00		(1.58)	134.00
103	St. Kitts and Nevis	KNA	0.90		85.56	137.00	77.22			0.00	238.80	127.00		0.40	121.00
104	Korea, Rep.	KOR	1.22	77.18	94.36		93.45	5.21	59.80	90.06	114,149.70	75,808.00	55.00	0.98	5.00
105	Kosovo		(0.41)		91.33	63.00	67.70	5.15		19.63	16.90	851.00	33.00	(0.04)	75.00
106	Lebanon	LBN	(0.39)	60.05	80.80	40.00	71.96	7.01		33.03	1,362.30	7,041.00	27.00	(0.09)	104.00
107	Lao PDR	LAO	(0.76)	52.41	68.95	129.00	52.96	7.45		0.00	61.40	370.00	25.00	(0.35)	148.00
108	Lesotho	LSO	(0.38)	48.94	82.84	109.00	57.86	7.14		37.51	363.40	201.00	49.00	(0.55)	128.00
109	Liberia	LBR	(1.33)	44.02	92.41	77.00	56.40	7.52		4.60	268.20	1,086.00	37.00	(0.52)	174.00
110	Libya	LBY	(1.60)		73.50	157.00	61.72			0.00	728.00	31,084.00	18.00	(1.63)	188.00
111	St. Lucia	LCA	0.97		88.24	69.00	66.44	5.01		41.82	716.10			0.42	100.00
112	Liechtenstein	LIE	1.73								323.80	2,254.00		1.56	
113	Lithuania	LTU	0.82	73.76	96.22	44.00	87.21	3.64		48.47	1,826.10		58.00	1.13	24.00
114	Madagascar	MDG	(1.12)	44.28	92.02	65.00	68.98			34.43	262.20	1,277.00	28.00	(0.67)	163.00
115	Malawi	MWI	(0.56)	48.79	68.53	103.00	37.40	5.72		18.99	117.40	394.00	33.00	(0.68)	164.00
116	Luxembourg	LUX	1.62		86.47	20.00	83.58	5.96	17.00	51.83	2,270.60		82.00	1.76	59.00
117	Malaysia	MYS	1.10	70.00	94.90	32.00	89.94	5.41		65.61	43,584.40	32,692.00	52.00	0.62	18.00
118	Macao SAR, China	MAC	1.04								508.40	689.00		1.35	
119	St. Martin (French part)	MAF													
120	Mali	MLI	(0.84)	46.85	62.92	145.00	46.33	8.06		40.35	43.30	796.00	32.00	(0.50)	146.00

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COUNTRY COMPARISON	#	1	2	3	4	5	6	7	8	9	10	11	12	13
by Individual Ranking Indices	RANKING	73	12	47	93	3	1	59	42	49	50	83	64	13
	ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	DE	AS
	METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Corporate Tax Incentives / Complexity Score	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
	ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	Tax Foundation	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME / COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment

NO.	COUNTRY NAME	COUNTRY CODE	1	2	3	4	5	6	7	8	9	10	11	12	13
121	Monaco	MCO		43.11	65.83	187.00	55.49	6.82		0.00		161.40	1,721.00	30.00	(0.70)	176.00
122	Mauritania	MRT	(0.90)								264.10					
123	Mauritius	MUS	0.88	73.68	92.47	13.00	87.74	5.74		62.81	436.10	1,948.00	54.00	0.94	28.00
124	Maldives	MDV	(0.28)		91.07	134.00	63.63	7.13		33.12	52.20	215.00		(0.39)	116.00
125	Mexico	MEX	0.31	66.41	88.85	105.00	81.26	5.35	46.80	72.59	534,483.70	44,952.00	35.00	0.46	39.00
126	Marshall Islands	MHL	(1.58)		88.37	128.00	76.97	6.44		9.19	109.70	573.00		(1.10)	139.00
127	Macedonia, FYR	MKD	(0.06)	68.33	98.08	7.00	74.43	4.51		65.93	200.90	5,798.00	45.00	0.32	30.00
128	Moldova	MDA	(0.40)	60.12	92.16	70.00	54.97	5.09		53.32	70.60	3,247.00	35.00	(0.09)	63.00
129	Malta	MLT	1.25		75.29	26.00	81.56	3.97		44.78	1,142.40		55.00	1.29	94.00
130	Myanmar	MMR	(1.51)		22.85	116.00	70.02	7.89		23.51	186.30	570.00	21.00	(1.51)	177.00
131	Mongolia	MNG	(0.64)	58.97	91.33	84.00	30.18	6.14		43.93	179.00	582.00	39.00	(0.29)	72.00
132	Montenegro	MNE	0.16	66.80	90.05	98.00	79.37	4.46		68.22	20.90	1,102.00	42.00	0.05	36.00
133	Northern Mariana Islands	MNP													
134	Morocco	MAR	(0.07)	58.01	90.33	66.00	84.64	5.61		38.47	3,059.30	27,373.00	39.00	(0.17)	71.00
135	Mozambique	MOZ	(0.65)	45.23	82.96	123.00	64.76	7.92		40.75	475.90	2,166.00	31.00	(0.41)	127.00
136	Namibia	NAM	0.19	61.19	68.67	85.00	63.17	6.69		45.53	597.50	1,696.00	49.00	0.05	88.00
137	Nepal	NPL	(0.93)	51.58	83.01	126.00	36.08	7.64		45.41	122.90	181.00	29.00	(0.87)	108.00
138	Netherlands	NLD	1.77	87.37	94.08	23.00	89.22	5.03	52.00	83.77	64,476.40		83.00	1.77	27.00
139	New Zealand	NZL	1.75	88.24	99.96	22.00	85.41	3.83	76.80	71.56	8,240.40	7,161.00	91.00	1.81	2.00
140	New Caledonia	NCL									206.20	1,241.00			
141	Nicaragua	NIC	(0.82)	62.33	80.27	164.00	75.84	5.84		39.64	4,118.50	444.00	28.00	(0.50)	119.00
142	Niger	NER	(0.71)	40.10	54.41	155.00	19.66	7.07		36.01	63.10	963.00	35.00	(0.61)	168.00
143	Nigeria	NGA	(1.01)	42.65	77.13	179.00	50.12	7.14		33.76	9,766.40	40,522.00	27.00	(0.71)	170.00
144	Norway	NOR	1.86	87.12	94.03	15.00	85.56	4.03	85.80	85.62	9,805.90	########	86.00	1.65	6.00
145	Pakistan	PAK	(0.80)	42.40	80.92	172.00	69.05	6.53		46.18	5,187.80	8,370.00	29.00	(0.71)	128.00
146	Panama	PAN	0.32	72.58	91.93	166.00	91.25	7.16		33.66	10,798.10	3,536.00	37.00	0.37	52.00
147	Paraguay	PRY	(0.38)	62.65	77.52	111.00	55.92	7.59		40.87	2,293.40	1,698.00	24.00	(0.52)	92.00
148	Oman	OMN	0.21		79.29	10.00	78.05	4.76		39.02	2,989.20	4,887.00	45.00	0.47	66.00
149	Peru	PER	(0.14)	66.29	85.10	57.00	78.81	4.42		46.57	16,149.50	8,751.00	38.00	0.45	35.00
150	Philippines	PHL	0.06	65.86	67.23	127.00	77.23	6.39		56.74	18,621.70	10,920.00	38.00	(0.07)	95.00

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COUNTRY COMPARISON by Individual Ranking Indices			1	2	3	4	5	6	7	8	9	10	11	12	13
# RANKING			73	12	47	30	3	1	59	42	49	50	31	64	13
ORDER			DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	DE	AS
METRIC			Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Corporate Tax Incentives / Complexity Score	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business Index (2014)
ENTITY			World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	Tax Foundation	World Bank	United States International Trade Comision	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
151	Poland	POL	0.71	77.44	85.79	87.00	81.80	3.95	68.40	69.73	8,836.90		61.00	1.05	32.00
152	Portugal	PRT	1.23	80.49	96.27	64.00	85.20	4.17	67.10	84.19	4,347.70		63.00	0.79	25.00
153	Palau	PLW	(0.59)		81.83	132.00	69.49			16.28	21.00	8.00		(1.01)	113.00
154	Papua New Guinea	PNG	(0.71)		77.03	110.00	62.61	6.11		31.64	243.30	922.00	25.00	(0.52)	133.00
155	Romania	ROU	(0.07)	67.72	91.93	52.00	77.23	4.61		58.70	3,083.30		43.00	0.59	48.00
156	Puerto Rico	PRI	0.36		91.17	133.00	74.53			86.37			63.00	0.84	47.00
157	Korea, Dem. Rep.	PRK	(1.93)			25.00					24.00		8.00	(2.52)	
158	Rwanda	RWA	(0.00)	49.46	81.66	27.00	44.67			41.77	61.90	213.00	49.00	0.03	46.00
159	Saudi Arabia	SAU	0.06	64.38	82.71	3.00	73.01	5.66		21.67	65,716.50	63,833.00	49.00	0.08	49.00
160	French Polynesia	PYF									169.80	604.00			
161	Qatar	QAT	1.07		83.14	1.00	77.79	4.96		58.27	6,830.90	15,128.00	69.00	0.74	50.00
162	Senegal	SEN	(0.48)	53.52	85.04	183.00	75.08	5.43		41.86	197.80	3,329.00	43.00	(0.05)	161.00
163	Russian Federation	RUS	(0.36)	60.79	92.17	49.00	53.58	6.29		49.69		########	27.00	(0.37)	62.00
164	Serbia	SRB	(0.10)	70.61	88.91	165.00	72.13	5.16		57.90	414.80	16,508.00	41.00	(0.07)	91.00
165	South Asia	SAS													134.25
166	Slovak Republic	SVK	0.78	78.93	87.02	100.00	76.49	4.71	44.00	69.93	2,543.80		50.00	0.91	37.00
167	Slovenia	SVN	1.00	81.65	94.39	42.00	79.29	3.38	52.90	62.91	1,005.20		58.00	0.61	51.00
168	South Africa	ZAF	0.43	62.96	89.43	19.00	71.05	4.95		64.51	14,694.50	40,046.00	44.00	0.41	43.00
169	Spain	ESP	1.15	80.77	88.08	76.00	84.68	5.30	52.40	75.89	24,508.80		60.00	0.93	33.00
170	Singapore	SGP	2.07		96.48	5.00	96.47	4.96		77.94	46,995.10	46,757.00	84.00	1.95	1.00
171	Solomon Islands	SLB	(0.36)		84.60	58.00	74.24			31.87		59.00		(1.13)	87.00
172	Sierra Leone	SLE	(1.14)		85.02	130.00	63.61	7.09		30.68	116.30	474.00	31.00	(0.69)	140.00
173	Sri Lanka	LKA	(0.23)	59.71	83.01	158.00	76.94	6.42		47.81	3,029.20	3,545.00	38.00	(0.16)	99.00
174	San Marino	SMR			76.81	34.00	78.27			39.11	12.50	305.00			93.00
175	Somalia	SOM	(2.21)								35.90	54.00	8.00	(2.21)	
176	Sudan	SDN	(1.53)	38.45	74.71	139.00	46.98			26.54	88.80	1,093.00	11.00	(1.44)	160.00
177	South Sudan	SSD	(1.49)		53.96	98.00	5.70	7.74		0.00	19.20	50.00	15.00	(1.51)	186.00
178	Small states	SST													111.68
179	Sao Tome and Principe	STP	(0.74)		93.99	162.00	68.73	7.33		21.70	2.10	62.00	42.00	(0.81)	153.00
180	Suriname	SUR	0.00		48.05	71.00	69.42	5.98		34.27	970.80		36.00	(0.34)	162.00

COUNTRY COMPARISON by Individual Ranking Indices			1	2	3	4	5	6	7	8	9	10	11	12	13
RANKING			73	12	47	70	3	1	59	42	49	50	35	64	13
ORDER			DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	DE	AS
METRIC			Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Corporate Tax Incentives / Complexity Score	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
ENTITY			World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	Tax Foundation	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
181	Swaziland	SWZ	(0.44)	48.87	73.47	74.00	65.43	7.92		45.80	107.20	253.00	43.00	(0.36)	110.00
182	Sweden	SWE	1.89	87.08	92.30	35.00	93.06	4.02	100.00	78.43	14,559.80		87.00	1.89	11.00
183	Switzerland	CHE	1.81	88.19	88.42	18.00	86.10	5.54	60.60	63.10	53,816.40	########	86.00	1.63	20.00
184	Sint Maarten (Dutch part)	SXM									982.70	58.00			
185	Seychelles	SYC	0.28		77.48	43.00	81.65	6.46		52.17	16.80	614.00	55.00	(0.29)	85.00
186	Syrian Arab Republic	SYR	(1.34)		69.23	117.00	58.57	5.83		30.15			20.00	(1.61)	175.00
187	Turks and Caicos Islands	TCA									290.30	10.00			
188	Taiwan, China	TWN	1.19		94.39	37.00	84.38	5.10		78.41	67,407.40	38,635.00	61.00	1.14	
189	Tajikistan	TJK	(1.08)	56.05	83.00	169.00	3.85	8.34		29.26	28.20	286.00	23.00	(1.07)	166.00
190	Tanzania	TZA	(0.57)	46.06	78.85	148.00	62.96	7.03		41.12	390.50	1,457.00	31.00	(0.34)	131.00
191	Thailand	THA	0.21	65.14	87.98	62.00	83.57	6.53		58.73	38,912.50	32,109.00	38.00	0.21	26.00
192	Togo	TGO	(1.37)	42.80	76.06	163.00	68.58	7.05		43.12	989.80	3,470.00	29.00	(0.95)	149.00
193	Turkmenistan	TKM	(1.32)								475.80	1,957.00	17.00	(2.12)	
194	Timor-Leste	TLS	(1.26)		83.73	55.00	72.49			0.00		18.00	28.00	(0.99)	172.00
195	Tonga	TON	(0.20)		90.74	73.00	75.49			33.34	22.90	6.00		(0.59)	69.00
196	Trinidad and Tobago	TTO	0.35	69.88	88.33	113.00	75.55	5.85		48.97	8,406.00	2,770.00	38.00	0.25	79.00
197	Tunisia	TUN	(0.00)	62.96	83.60	82.00	80.36	5.06		54.71	1,371.20	20,543.00	40.00	(0.35)	60.00
198	Turkey	TUR	0.37	64.62	86.86	56.00	73.26	6.11	63.50	40.00	19,019.10	########	45.00	0.42	55.00
199	Tuvalu	TUV	(0.55)								0.70	0.00		(1.32)	
200	Uganda	UGA	(0.58)	47.75	63.44	104.00	48.01	7.84		42.27	123.40	897.00	26.00	(0.24)	150.00
201	Ukraine	UKR	(0.65)	64.91	87.35	108.00	53.96	6.55		31.17	2,212.40	37,762.00	26.00	(0.64)	96.00
202	United Arab Emirates	ARE	1.17	72.92	89.97	1.00	91.46	6.33		43.51	24,912.40	53,873.00	70.00	0.78	22.00
203	United Kingdom	GBR	1.47	84.56	91.23	16.00	88.32	4.72	51.30	82.04	107,913.60		78.00	1.77	8.00
204	United States	USA	1.50	82.77	91.22	47.00	88.25	5.20	51.50	90.12		########	74.00	1.26	7.00
205	Uruguay	URY	0.41	77.51	89.68	140.00	74.60	5.14		53.47	1,946.30	3,034.00	73.00	0.52	82.00
206	St. Vincent and the Grenadines	VCT	0.90		86.70	93.00	81.05	5.33		0.00	105.20		67.00	0.31	103.00
207	Venezuela	VEN	(1.14)	63.78	45.23	188.00	25.55	6.42		19.20	41,558.50	8,052.00	19.00	(1.64)	182.00
208	Virgin Islands (U.S.)	VIR	1.27									178.00		0.60	
209	Vietnam	VNM	(0.30)		77.68	173.00	75.56	6.76		41.27	36,308.50	27,067.00	31.00	(0.65)	78.00
210	Vanuatu	VUT	(0.21)		75.26	48.00	68.50	6.18		41.48	28.40	101.00		(0.15)	76.00

#		1	2	3	4	5	6	7	8	9	10	11	12	13
RANKING		73	12	47	36	3	1	59	42	49	50	31	64	13
ORDER		DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	DE	AS
METRIC		Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Corporate Tax Incentives / Complexity Score	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
ENTITY		World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	Tax Foundation	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
211	West Bank and Gaza	PSE	(0.78)		66.53	51.00	64.43			0.00	0.40	131.00		0.15	143.00
212	Samoa	WSM	0.14		92.28	96.00	74.78	5.78		36.31	28.20		52.00	(0.13)	67.00
213	Yemen	YEM	(1.20)	40.23	74.43	135.00	63.54	7.51		27.46	406.30	1,699.00	19.00	(0.54)	137.00
214	Uzbekistan	UZB	(0.94)	57.34	89.00	118.00	2.56	5.40		46.45	226.90	1,655.00	18.00	(1.63)	141.00
215	Congo, Dem. Rep.	COD	(1.69)		58.53	168.00	29.09			0.00	338.50		22.00	(1.28)	184.00
216	Zambia	ZMB	(0.48)	49.88	88.63	78.00	20.92	7.40		43.01	169.60	1,023.00	38.00	(0.47)	111.00
217	Zimbabwe	ZWE	(1.14)		51.42	143.00	19.40	7.02		29.28	113.60	628.00	21.00	(1.60)	171.00
	AVERAGE		-0.022045	63.67212	80.41354	94.97884	67.15762	5.870124	61.21765	43.76302	19747.09045	19490.64	43.23837	-0.019415	95.67855
	SUM		-4.497243	8404.72	15198.16	17951	12424.16	945.09	2081.4	8271.21	3929671	3293919	7437	-3.960725	18178.93

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Table D-5 Country Comparison, by Individual Indices

COUNTRY COMPARISON	#	1	2	3	4	5	6	8	9	10	11	12	13
by Normalized score & rank — RANKING		73	12	47	36	3	1	42	49	50	31	64	13
ORDER		DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
METRIC		Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
ENTITY		World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO. — COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
1 Aruba	ABW	32							88	137		20	
2 Andorra	AND	17							195	96		17	
3 Afghanistan	AFG	189		24	79	180	160	159	102	115	169	182	184
4 Albania	ALB	114	48	41	131	94	67	44	158	61	109	85	67
5 Algeria	DZA	138	87	141	176	130	117	97	54	13	99	181	155
6 Angola	AGO	182	127	174	144	165	119	170	53	37	158	173	182
7 Argentina	ARG	112	42	146	170	127	123	83	38	33	106	168	124
8 Armenia	ARM	84	60	4	41	109	32	69	151	104	93	82	44
9 American Samoa	ASM	61								167		75	
10 Antigua and Barbuda	ATG	61		102	159	88		114	140	127		57	88
11 Australia	AUS	12	10	7	39	48	39	14	25	17	11	7	10
12 Austria	AUT	16	11	101	72	19	64	16	41		23	19	20
13 Azerbaijan	AZE	124	73	12	33	164	110	94	82	34	125	132	79
14 Bangladesh	BGD	157	99	115	83	139	105	147	59	40	143	162	174
15 Belarus	BLR	168	58	40	60		62	68	139	41	118	175	56
16 Belgium	BEL	15	17	14	81	26	7	11	15		15	25	41

COUNTRY COMPARISON *by Normalized score & rank*	#		1	2	3	4	5	6	8	9	10	11	12	13
	RANKING		73	12	47	36	3	1	42	49	50	31	64	13
	ORDER		DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
	METRIC		Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
	ENTITY		World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
17	Benin	BEN	133	106	117	178	120	118	115	107	103	79	131	152
18	Bolivia	BOL	118	71	171	189	124	138	96	71	94	102	156	158
19	Bosnia and Herzegovina	BIH	123	61	147	151	103	71	34	155	47	79	99	106
20	Bahrain	BHR	59		131	8	63	69	87	81	73	54	56	52
21	Bahamas, The	BHS	51		95	31	62	91	60	64	105		86	96
22	Botswana	BWA	75	57	149	67	155	81	49	125	58	30	52	73
23	Brazil	BRA	98	46	167	177	122	84	55	9	9	68	91	120
24	Belize	BLZ	105		148	61	90		71	128	136		135	118
25	Bermuda	BMU	41							112	90		24	
26	Bhutan		70		92	86	163		170	196	159	29	176	125
27	Bulgaria	BGR	81	44	49	89	56	5	38	99		68	63	37
28	Burkina Faso	BFA	139	112	153	152		144	115	167	113	84	106	168
29	Barbados	BRB	25		94	92		51	26	114	142	17	68	105
30	Brunei Darussalam	BRN	52		179	30	45	81	88	116	91		35	100
32	Burundi	BDI	172	130	18	124			144	191	149	156	160	153
33	Cambodia	KHM	165	100	184	90	123	159	84	66	72	153	123	136
34	Cameroon	CMR	161	116	133	181	158		123	118	59	135	163	159

COUNTRY COMPARISON	#	1	2	3	4	5	6	8	9	10	11	12	13
by Normalized score & rank	RANKING	73	12	47	36	3	1	42	49	50	31	64	13
	ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
	METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
	ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO. / COUNTRY NAME / COUNTRY CODE		Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
35 Canada (CAN)		7	7	2	9	23	55	6	1	12	10	11	16
36 Channel Islands (CHI)		26										28	
37 Central African Republic (CAF)		202	131	187	185	182		152	178	148	148	178	188
38 Chad (TCD)		193	132	185	186	178		152	75	131	151	172	186
39 Cote d'Ivoire (CIV)		171		44	175	156	116	85	87		114	154	148
40 Chile (CHL)		29	30	59	29	39	14	73	28	32	21	18	40
41 Congo, Rep. (COG)		181	110	170	182	177		117	108	71		188	179
42 China (CHN)		92	90	128	120	97	92	53	2	2	99	116	89
43 Comoros (COM)		190		173	167	143	126	170	193	154	140	184	160
44 Cabo Verde (CPV)		83		78	91	100	127	170		122	41	104	122
45 Colombia (COL)		87	52	84	146	92	24	30	23	39	93	73	33
46 Costa Rica (CRI)		63	25	118	121	46	104	89	34	53	46	61	82
47 Curacao (CUW)									105				
48 Cayman Islands (CYM)		32							103	95		33	
49 Cyprus (CYP)		24		64	50	34	38	51	141		30	44	63
50 Croatia (HRV)		57	36	88	36	85	15	56	106		60	67	64
51 Cuba (CUB)		121	79						130	75	62	196	
52 Czech Republic (CZE)		50	23	110	119	57	23	20	58		52	37	43

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COUNTRY COMPARISON		#	1	2	3	4	5	6	8	9	10	11	12	13
by Normalized score & rank		RANKING	73	12	47	36	3	1	42	49	50	31	64	13
		ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
		METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
		ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
53	Dominica	DMA	55		63	94	87	26	121	170	161	38	80	96
54	Denmark	DNK	3	9	25	12	7	17	9	46		1	6	4
55	Djibouti	DJI	179	115	163	75	55	65	70	154	141	106	138	156
56	Dominican Republic	DOM	129	68	113	80	24	120	158	42	80	114	103	83
57	Ecuador	ECU	127	50	165	138	113	73	151	31	56	109	164	115
58	Egypt, Arab Rep.	EGY	163	84	73	149	98	52	126	52	30	93	150	112
59	Eritrea	ERI	198		183	174	169		170	194	151	163	203	190
60	El Salvador	SLV	102	63	121	161	72	32	79	60	112	79	79	108
61	Estonia	EST	43	19	26	28	6	2	37	101		25	21	17
62	Ethiopia	ETH	130		168	112	166		74	84	81	109	180	132
63	Finland	FIN	1	8	27	21	14	1	1	55		3	4	9
64	Fiji	FJI	169		160	107	115		91	134	128		141	80
65	France	FRA	22	20	28	95	10	30	22	8		25	30	30
66	Faeroe Islands	FRO								153	101			
67	Micronesia, Fed. Sts.	FSM	134		151	114	105		118	176	168		167	146
68	Gabon	GAB	153		135	154	134		125	92	69	93	140	145
69	Georgia	GEO	60	66	5	38	33	31	122	94	74	49	51	15
70	Germany	DEU	18	12	114	68	18	66	3	5		12	16	14

COUNTRY COMPARISON	#	1	2	3	4	5	6	8	9	10	11	12	13
by Normalized score & rank	RANKING	73	12	47	36	3	1	42	49	50	31	64	13
	ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
	METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
	ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
71	Ghana	GHA	99	96	96	101	119	86	161	89	50	60	89	69
72	Greece	GRC	65	35	52	59	47	102	52	86		68	53	60
73	Gambia, The	GMB	149		159	180	76	120	102			125	126	139
74	Guinea-Bissau	GNB	191		176	150	118	157	170			158	186	180
75	Equatorial Guinea	GNQ	200		186	171	142		170	104	55		190	166
76	Guatemala	GTM	147	76	98	54	101	70	155	45	89	114	110	72
77	Grenada	GRD	76		80	106	50	47	170	165	160		76	126
78	Greenland	GRL	45						187	107			22	
79	Guinea	GIN	185	129	175	184	140	140	119	152	87	143	171	170
80	Guam	GUM	93								158		57	
81	Guyana	GUY	104	82	99	115	81	112	150	100	132	123	144	123
82	Hong Kong SAR, China	HKG	10		8	4	2	73	25	18		17	2	3
83	Honduras	HND	151	77	138	153	69	99	140	44	98	125	109	103
84	Hungary	HUN	58	32	57	88	71	11	64	56		46	45	53
85	Haiti	HTI	196		188	142	141	142	170	79	143	158	165	181
86	Iceland	ISL	20	3	31	46	38	17	15	113	57	12	36	12

#	1	2	3	4	5	6	8	9	10	11	12	13
RANKING	73	12	47	36	3	1	42	49	50	31	64	13
ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank

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87	India	IND	106	102	158	156	125	75	137	11	10	84	134	143
88	Isle of Man	IMN												
89	Indonesia	IDN	110	88	155	160	61	98	75	27	29	106	108	114
90	Iraq	IRQ	174	118	142	52	174	156	170	36	36	167	183	157
91	Iran, Islamic Rep.	IRN	145	94	62	124	146	161	138	146	51	135	192	130
92	Ireland	IRL	23	15	19	6	5	19	21	20		17	14	13
93	Israel	ISR	31	39	53	97	12	34	24	24	26	36	29	39
94	Italy	ITA	64	29	46	141	37	59	29	14		68	49	55
95	Jamaica	JAM	91	43	20	147	114	10	59	73	123	84	83	57
96	Japan	JPN	14	14	83	122	20	87	2	4	7	15	34	28
97	Jordan	JOR	101	75	86	45	53	41	145	65	60	54	88	117
98	Kazakhstan	KAZ	131	86	55	17	181	88	63	74	24	125	128	76
99	Kenya	KEN	128	103	143	102	151	149	134	80	68	143	124	137
101	Kuwait	KWT	96	40	150	11	116	95	127	37	42	66	100	85
102	Kyrgyz Republic	KGZ	144	93	9	136	179	100	157	168	124		118	101
103	Latvia	LVA	48	31	36	24	28	42	40	111		42	39	22
104	Kiribati	KIR	159		122	14	80		170	192	164		189	134
105	St. Kitts and Nevis	KNA	46		87	137	66		170	137	147		72	121
106	Korea, Rep.	KOR	37	28	17		3	54	5	6	8	42	40	5

COUNTRY COMPARISON *by Normalized score & rank*															
#			1	2	3	4	5	6	8	9	10	11	12	13
RANKING			73	12	47	36	3	1	42	49	50	31	64	13
ORDER			DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
METRIC			Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
ENTITY			World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
107	Kosovo		120		42	63	117	49	164	188	110	109	95	74
108	Lebanon	LBN	117	83	119	40	96	128	136	91	49	135	101	103
109	Lao PDR	LAO	152	98	154	129	154	143	170	173	130	143	158	149
110	Lesotho	LSO	116	107	108	109	145	135	120	126	140	54	122	128
111	Liberia	LBR	186	120	30	77	147	146	169	132	100	93	161	175
112	Libya	LBY	194		144	157	138		170	109	25	163	200	189
113	St. Lucia	LCA	44		72	69	121	39	100	110			70	99
114	Liechtenstein	LIE	11							129	76		15	
115	Lithuania	LTU	53	33	11	44	21	4	67	85		38	32	23
116	Madagascar	MDG	175	119	37	65	108		129	135	92	132	147	164
117	Malawi	MWI	135	109	157	103	167	77	166	159	129	109	148	165
118	Luxembourg	LUX	13		82	20	35	89	62	77		9	10	58
119	Malaysia	MYS	38	45	13	32	11	61	36	19	22	49	54	18
120	Macao SAR, China	MAC	40							117	114		23	
121	St. Martin (French part)	MAF												
122	Mali	MLI	158	113	169	145	161	155	108	175	111	114	136	147
123	Monaco	MCO								150				
124	Mauritania	MRT	164	121	164	187	149	125	170	133	82	123	151	177
125	Mauritius	MUS	49	34	29	13	17	78	43	121	79	46	41	27
126	Maldives	MDV	111		50	134	131	134	135	174	138		129	116

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COUNTRY COMPARISON by Normalized score & rank													
#			1	2	3	4	5	6	8	9	10	11	12	13
RANKING			73	12	47	36	3	1	42	49	50	31	64	13
ORDER			DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
METRIC			Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
ENTITY			World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
127	Mexico	MEX	73	54	67	105	43	58	27	3	16	102	65	38
128	Marshall Islands	MHL	199		70	128	67	109	168	162	120		177	140
129	Macedonia, FYR	MKD	94	49	3	7	84	22	35	143	52	63	77	29
130	Moldova	MDA	119	81	35	70	150	45	58	169	66	102	102	62
131	Malta	MLT	28		136	26	42	9	86	93		42	26	93
132	Myanmar	MMR	195		189	116	102	152	160	145	121	153	193	178
133	Mongolia	MNG	132	89	42	84	170	95	90	147	119	79	113	71
134	Montenegro	MNE	80	53	56	98	51	21	33	185	97	75	93	35
135	Northern Mariana Islands	MNP												
136	Morocco	MAR	97	91	54	66	31	71	113	68	27	79	107	70
137	Mozambique	MOZ	140	117	107	123	128	153	107	119	77	118	130	127
138	Namibia	NAM	79	78	156	85	135	122	81	115	85	54	92	87
139	Nepal	NPL	166	101	104	126	168	148	82	157	144	125	159	107
140	Netherlands	NLD	8	4	21	23	13	42	12	13		8	8	26
141	New Zealand	NZL	9	1	1	22	27	5	28	51	48	2	5	2
142	New Caledonia	NCL								142	93			
143	Nicaragua	NIC	156	74	120	164	73	81	110	63	126	132	115	119
144	Niger	NER	146	126	177	155	175	132	128	171	106	102	143	169
145	Nigeria	NGA	170	123	129	179	157	135	131	48	18	135	152	171
146	Norway	NOR	5	5	22	15	24	13	8	47	5	5	12	6

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COUNTRY COMPARISON														
by Normalized score & rank	#		1	2	3	4	5	6	8	9	10	11	12	13
	RANKING		73	12	47	36	3	1	42	49	50	31	64	13
	ORDER		DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
	METRIC		Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
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147	Pakistan	PAK	155	124	116	172	107	113	78	61	45	125	153	128
148	Panama	PAN	72	38	38	166	9	137	132	43	63	93	74	51
149	Paraguay	PRY	162	72	126	111	148	147	106	76	84	148	117	91
150	Oman	OMN	78		123	10	59	29	112	70	53	63	64	65
151	Peru	PER	103	55	89	57	54	20	76	35	44	84	66	34
152	Philippines	PHL	86	56	161	127	64	106	50	33	43	84	97	94
153	Poland	POL	56	27	85	87	40	8	32	49		34	38	31
154	Portugal	PRT	30	22	10	64	29	16	10	62		30	47	24
155	Palau	PLW	137		111	132	104		167	184	164		170	113
156	Papua New Guinea	PNG	148		130	110	137	93	141	136	108	143	137	133
157	Romania	ROU	95	51	38	52	64	24	46	67		68	60	47
158	Puerto Rico	PRI	69		48	133	83		7			30	46	46
159	Korea, Dem. Rep.	PRK	203			25				182		171	204	
160	Rwanda	RWA	89	105	112	27	162		101	172	139	54	94	45
161	Saudi Arabia	SAU	85	65	109	3	91	76	163	12	11	54	90	48
162	French Polynesia	PYF								148	118			
163	Qatar	QAT	39		103	1	60	36	47	57	38	25	50	49
164	Senegal	SEN	126	97	90	183	78	63	99	144	65	68	96	162
165	Russian Federation	RUS	115	80	34	49	153	100	65		3	135	127	61
166	Serbia	SRB	100	41	66	165	95	50	48	122	35	77	98	90

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COUNTRY COMPARISON	#	1	2	3	4	5	6	8	9	10	11	12	13
by Normalized score & rank	RANKING	73	12	47	36	3	1	42	49	50	31	64	13
	ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
	METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
	ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO. — COUNTRY NAME — COUNTRY CODE		Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
167 South Asia (SAS)													135
168 Slovak Republic (SVK)		54	24	77	100	70	27	31	72		53	43	36
169 Slovenia (SVN)		42	18	15	42	52	3	42	95		38	55	50
170 South Africa (ZAF)		66	69	61	19	99	35	39	39	19	66	71	42
171 Spain (ESP)		36	21	74	76	30	56	23	30		36	42	32
172 Singapore (SGP)		2		6	5	1	36	19	17	15	7	1	1
173 Solomon Islands (SLB)		160		93	58	86		139		153		179	86
174 Sierra Leone (SLE)		178		91	130	132	133	143	160	125	118	149	141
175 Sri Lanka (LKA)		109	85	104	158	68	107	72	69	62	84	105	98
176 San Marino (SMR)				132	34	58		111	190	133			92
177 Somalia (SOM)		204						177	156		171	202	
178 Sudan (SDN)		197	128	139	139	160		156	166	99	170	191	161
179 South Sudan (SSD)		192		178	98	183	150	170	186	157	168	194	187
180 Small states (SST)													111
181 Sao Tome and Principe (STP)		150		23	162	110	139	162	197	152	75	157	154
182 Suriname (SUR)		88		181	71	105	90	130	98		99	119	163
184 Swaziland (SWZ)		122	108	145	74	126	153	80	163	135	68	125	109
185 Sweden (SWE)		4	6	32	35	4	12	17	40		4	3	11
186 Switzerland (CHE)		6	2	69	18	22	67	41	16	4	5	13	19

COUNTRY COMPARISON	#	1	2	3	4	5	6	8	9	10	11	12	13
by Normalized score & rank	RANKING	73	12	47	36	3	1	42	49	50	31	64	13
	ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
	METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
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NO. COUNTRY NAME — COUNTRY CODE		Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
187 Sint Maarten (Dutch part)	SXM								97	154			
188 Seychelles	SYC	74		127	43	41	110	61	189	117	42	114	84
189 Syrian Arab Republic	SYR	187		152	117	144	80	146			156	195	176
190 Turks and Caicos Islands	TCA								131	163			
191 Taiwan, China	TWN	34		15	37	32	46	18	10	20	34	31	
192 Tajikistan	TJK	173	95	106	169	184	158	149	180	134	150	174	167
193 Tanzania	TZA	143	114	124	148	136	130	105	124	88	118	120	131
194 Thailand	THA	77	59	75	62	36	113	45	22	23	84	84	25
195 Togo	TGO	188	122	134	163	111	131	93	96	64	125	166	150
196 Turkmenistan	TKM	184							120	78	166	201	
197 Timor-Leste	TLS	183		96	55	93		170		162	132	169	173
198 Tonga	TON	107		51	73	77		133	183	166		142	68
199 Trinidad and Tobago	TTO	71	47	71	113	75	84	66	50	70	84	81	78
200 Tunisia	TUN	90	69	100	82	49	44	54	90	31	78	121	59
201 Turkey	TUR	68	64	79	56	89	93	109	32	6	63	69	54
202 Tuvalu	TUV	142							198	169		187	
203 Uganda	UGA	136	111	166	104	159	151	98	156	109	140	112	151
204 Ukraine	UKR	141	62	76	108	152	115	142	78	21	140	145	95
205 United Arab Emirates	ARE	35	37	58	1	8	102	92	29	14	24	48	21
206 United Kingdom	GBR	21	13	45	16	15	28	13	7		14	9	8

COUNTRY COMPARISON by Normalized score & rank		#	1	2	3	4	5	6	8	9	10	11	12	13
		RANKING	73	12	47	36	3	1	42	49	50	31	64	13
		ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
		METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
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207	United States	USA	19	16	46	47	16	53	4		1	17	27	7
208	Uruguay	URY	67	26	60	140	82	48	57	83	67	21	62	81
209	St. Vincent and the Grenadines	VCT	46		80	93	44	57	170	164		28	78	102
210	Venezuela	VEN	176	67	182	188	172	107	165	21	46	158	198	183
211	Virgin Islands (U.S.)	VIR	27								145		57	
212	Vietnam	VNM	113		125	173	74	124	104	26	28	118	146	77
213	Vanuatu	VUT	108		137	48	112	97	103	179	150		139	75
214	West Bank and Gaza	PSE	154		162	51	129		170	199	146		87	144
215	Samoa	WSM	82		33	96	79	79	124	181		49	111	66
216	Yemen	YEM	180	125	140	135	133	145	154	123	83	158	155	138
217	Uzbekistan	UZB	167	92	65	118	185	60	77	138	86	163	197	142
218	Congo, Dem. Rep.	COD	201		172	168	171		170	127		151	185	185
219	Zambia	ZMB	125	104	68	78	173	141	95	149	102	84	133	110
220	Zimbabwe	ZWE	177		180	143	176	129	148	161	116	153	199	172
	AVERAGE		102.4853	66.49242	94.96296	94.97884	92.98378	80.85093	93.98413	100	84.98225	85.07558	102.4853	95.48421
	SUM		20907	8777	17948	17951	17202	13017	17763	19900	14362	14633	20907	18142

Table D-6 Country Comparison, by Normalized Score and Rank

COUNTRY COMPARISON		#	1	2	3	4	5	6	8	9	10	11	12	13
by Normalized score & rank		RANKING	73	12	47	38	3	1	42	49	50	31	64	13
		ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
		METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
		ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
1	Aruba	ABW	172							112	33		185	
2	Andorra	AND	188							5	74		188	
3	Afghanistan	AFG	16		166	111	6	2	31	98	55	4	23	7
4	Albania	ALB	91	85	149	59	92	94	146	42	109	60	120	124
5	Algeria	DZA	67	46	49	14	56	45	93	146	157	72	24	36
6	Angola	AGO	23	6	16	46	21	43	1	147	133	11	32	9
7	Argentina	ARG	93	91	44	20	59	39	107	162	137	65	37	67
8	Armenia	ARM	121	73	186	149	77	129	121	49	66	75	123	147
9	American Samoa	ASM	143								3		130	
10	Antigua and Barbuda	ATG	143		88	31	98		76	60	43		146	103
11	Australia	AUS	193	123	183	151	138	122	176	175	153	162	198	181
12	Austria	AUT	189	122	89	118	167	98	174	159		150	186	171
13	Azerbaijan	AZE	81	60	178	157	22	51	96	118	136	42	73	112
14	Bangladesh	BGD	48	34	75	107	47	57	43	141	130	26	43	17
15	Belarus	BLR	37	75	150	130		100	122	61	129	51	30	135
16	Belgium	BEL	190	116	176	109	160	155	179	185		157	180	150
17	Benin	BEN	72	27	73	12	66	44	74	93	67	90	74	39
18	Bolivia	BOL	87	62	19	1	62	24	94	129	76	68	49	33
19	Bosnia and Herzegovina	BIH	82	72	43	39	83	90	156	45	123	90	106	85
20	Bahrain	BHR	146		59	182	123	93	103	119	97	114	149	139

COUNTRY COMPARISON														
by Normalized score & rank														
#			1	2	3	4	5	6	8	9	10	11	12	13
RANKING			73	12	47	36	3	1	42	49	50	31	64	13
ORDER			DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
METRIC			Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
ENTITY			World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
21	Bahamas, The	BHS	154		95	159	124	71	130	136	65		119	94
22	Botswana	BWA	130	76	41	123	31	79	141	75	112	140	153	118
23	Brazil	BRA	107	87	23	13	64	77	135	191	161	99	114	71
24	Belize	BLZ	100		42	129	96		119	72	34		70	73
25	Bermuda	BMU	164							88	80		181	
26	Bhutan		135		98	104	23		1	4	11	144	29	66
27	Bulgaria	BGR	124	89	141	101	130	156	152	101		99	142	154
28	Burkina Faso	BFA	66	21	37	38		18	74	33	57	81	99	23
29	Barbados	BRB	180		96	98		111	164	86	28	153	137	86
30	Brunei Darussalam	BRN	153		11	160	141	79	102	84	79		170	91
32	Burundi	BDI	33	3	172	65			46	9	21	16	45	38
33	Cambodia	KHM	40	33	6	100	63	3	106	134	98	18	82	55
34	Cameroon	CMR	44	17	57	9	28		67	82	111	34	42	32
35	Canada	CAN	198	126	188	181	163	107	184	199	158	163	194	175
36	Channel Islands	CHI	179										177	
37	Central African Republic	CAF	3	2	3	5	4		37	22	22	24	27	3
38	Chad	TCD	12	1	5	4	8		37	125	39	21	33	5
39	Cote d'Ivoire	CIV	34		146	15	30	46	105	113		56	51	43
40	Chile	CHL	176	103	131	161	147	148	117	172	138	151	187	151

COUNTRY COMPARISON		#	1	2	3	4	5	6	8	9	10	11	12	13
by Normalized score & rank		RANKING	73	12	47	36	3	1	42	49	50	31	64	13
		ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
		METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
		ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
41	Congo, Rep.	COG	24	23	20	8	9		73	92	99		17	12
42	China	CHN	113	43	62	70	89	70	137	198	168	72	89	102
43	Comoros	COM	15		17	23	43	36	1	7	15	31	21	31
44	Cabo Verde	CPV	122		112	99	86	35	1		48	132	101	69
45	Colombia	COL	118	81	106	44	94	137	160	177	131	75	132	158
46	Costa Rica	CRI	142	108	72	69	140	58	101	166	116	125	144	109
47	Curacao	CUW								95				
48	Cayman Islands	CYM	172							97	75		172	
49	Cyprus	CYP	181		126	140	152	124	139	59		140	161	128
50	Croatia	HRV	148	97	102	154	101	147	134	94		112	138	127
51	Cuba	CUB	84	54					70	95	111	9		
52	Czech Republic	CZE	155	110	80	71	129	139	170	142		121	168	148
53	Dominica	DMA	150		127	96	99	136	69	30	9	133	125	94
54	Denmark	DNK	202	124	165	178	179	144	181	154		172	199	187
55	Djibouti	DJI	26	18	27	115	131	97	120	46	29	65	67	35
56	Dominican Republic	DOM	76	65	77	110	161	41	32	158	90	56	102	108
57	Ecuador	ECU	78	83	25	52	73	88	39	169	114	60	41	76
58	Egypt, Arab Rep.	EGY	42	49	117	41	88	110	64	148	140	75	55	79
59	Eritrea	ERI	7		7	16	17		1	6	19	8	2	1
60	El Salvador	SLV	103	70	69	29	114	129	111	140	58	90	126	83

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COUNTRY COMPARISON by Normalized score & rank	#	1	2	3	4	5	6	8	9	10	11	12	13
	RANKING	73	12	47	36	3	1	42	49	50	31	64	13
	ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
	METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
	ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
61	Estonia	EST	162	114	164	162	180	160	153	99		146	184	174
62	Ethiopia	ETH	75		22	78	20		116	116	89	60	25	59
63	Finland	FIN	204	125	163	169	172	161	189	145		170	201	182
64	Fiji	FJI	36		30	83	71		99	66	42		64	111
65	France	FRA	183	113	162	95	176	132	168	192		146	175	161
66	Faeroe Islands	FRO								47	69			
67	Micronesia, Fed. Sts.	FSM	71		39	76	80		72	24	2		38	45
68	Gabon	GAB	52		55	36	52		65	108	101	75	65	46
69	Georgia	GEO	145	67	185	152	153	131	68	106	96	122	154	176
70	Germany	DEU	187	121	76	122	168	96	187	195		160	189	177
71	Ghana	GHA	106	37	93	89	67	76	29	111	120	112	116	122
72	Greece	GRC	140	98	138	131	139	59	138	114		99	152	131
73	Gambia, The	GMB	56		31	10	110	41	88			42	79	52
74	Guinea-Bissau	GNB	14		14	40	68	5	1			11	19	11
75	Equatorial Guinea	GNQ	5		4	19	44		1	96	115		15	25
76	Guatemala	GTM	58	57	92	136	85	92	35	155	81	56	95	119
77	Grenada	GRD	129		109	84	136	115	1	35	10		129	65
78	Greenland	GRL	160							13	63		183	
79	Guinea	GIN	20	4	15	6	46	22	71	48	83	26	34	21
80	Guam	GUM	112									12	146	

COUNTRY COMPARISON		#	1	2	3	4	5	6	8	9	10	11	12	13
by Normalized score & rank		RANKING	73	12	47	36	3	1	42	49	50	31	64	13
		ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
		METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
		ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comision	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
81	Guyana	GUY	101	51	91	75	105	50	40	100	38	49	61	68
82	Hong Kong SAR, China	HKG	195		182	186	184	88	165	182		153	203	188
83	Honduras	HND	54	56	52	37	117	63	50	156	72	42	96	87
84	Hungary	HUN	147	101	133	102	115	151	126	144		125	160	138
85	Haiti	HTI	9		2	48	45	20	1	121	27	11	40	10
86	Iceland	ISL	185	130	159	144	148	144	175	87	113	160	169	179
87	India	IND	99	31	32	34	61	87	53	189	160	81	71	48
88	Isle of Man	IMN												
89	Indonesia	IDN	95	45	35	30	125	64	115	173	141	65	97	77
90	Iraq	IRQ	31	15	48	137	12	6	1	164	134	6	22	34
91	Iran, Islamic Rep.	IRN	60	39	128	65	40	1	52	54	119	34	13	61
92	Ireland	IRL	182	118	171	184	181	143	169	180		153	191	178
93	Israel	ISR	174	94	137	93	174	128	166	176	144	136	176	152
94	Italy	ITA	141	104	143	49	149	103	161	186		99	156	136
95	Jamaica	JAM	114	90	170	43	72	152	131	127	47	81	122	134
96	Japan	JPN	191	119	107	68	166	75	188	196	163	157	171	163
97	Jordan	JOR	104	58	104	145	133	121	45	135	110	114	117	74
98	Kazakhstan	KAZ	74	47	135	173	5	74	127	126	146	42	77	115
99	Kenya	KEN	77	30	47	88	35	13	56	120	102	26	81	54

COUNTRY COMPARISON		#	1	2	3	4	5	6	8	9	10	11	12	13
by Normalized score & rank		RANKING	73	12	47	36	3	1	42	49	50	31	64	13
		ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
		METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
		ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
101	Kuwait	KWT	109	93	40	179	70	66	63	163	128	106	105	106
102	Kyrgyz Republic	KGZ	61	40	181	54	7	61	33	32	46		87	90
103	Latvia	LVA	157	102	154	166	158	119	150	89		128	166	169
104	Kiribati	KIR	46		68	176	106		1	8	5		16	57
105	St. Kitts and Nevis	KNA	158		103	53	120		1	63	23		133	70
106	Korea, Rep.	KOR	168	105	173		183	108	185	194	162	128	165	186
107	Kosovo		85		147	127	69	113	26	12	60	60	110	117
108	Lebanon	LBN	88	50	71	150	90	34	54	109	121	34	104	87
109	Lao PDR	LAO	53	35	36	61	32	19	1	27	40	26	47	42
110	Lesotho	LSO	89	26	82	81	41	26	70	74	30	114	83	62
111	Liberia	LBR	19	13	160	113	39	16	21	68	70	75	44	16
112	Libya	LBY	11		46	33	48		1	91	145	8	5	2
113	St. Lucia	LCA	161		118	121	65	122	90	90			135	92
114	Liechtenstein	LIE	194							71	94		190	
115	Lithuania	LTU	152	100	179	146	165	158	123	115		133	173	168
116	Madagascar	MDG	30	14	153	125	78		61	65	78	39	58	27
117	Malawi	MWI	70	24	33	87	19	85	24	41	41	60	57	26
118	Luxembourg	LUX	192		108	170	151	73	128	123		164	195	133
119	Malaysia	MYS	167	88	177	158	175	101	154	181	148	122	151	173
120	Macao SAR, China	MAC	165							83	56		182	

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COUNTRY COMPARISON		#	1	2	3	4	5	6	8	9	10	11	12	13
by Normalized score & rank		RANKING	73	12	47	36	3	1	42	49	50	31	64	13
		ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS
		METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
		ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comision	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
121	St. Martin (French part)	MAF												
122	Mali	MLI	47	20	21	45	25	7	82	25	59	56	69	44
123	Monaco	MCO								50				
124	Mauritania	MRT	41	12	26	3	37	37	1	67	88	49	54	14
125	Mauritius	MUS	156	99	161	177	169	84	147	79	91	125	164	164
126	Maldives	MDV	94		140	56	55	28	55	26	32		76	75
127	Mexico	MEX	132	79	123	85	143	104	163	197	154	68	140	153
128	Marshall Islands	MHL	6		120	62	119	53	22	38	50		28	51
129	Macedonia, FYR	MKD	111	84	187	183	102	140	155	57	118	108	128	162
130	Moldova	MDA	86	52	155	120	36	117	132	31	104	68	103	129
131	Malta	MLT	177		54	164	144	153	104	107		128	179	98
132	Myanmar	MMR	10		1	74	84	10	30	55	49	18	12	13
133	Mongolia	MNG	73	44	147	106	16	66	100	53	51	90	92	120
134	Montenegro	MNE	125	80	134	91	135	141	157	15	73	97	112	156
135	Northern Mariana Islands	MNP												
136	Morocco	MAR	108	42	136	124	155	90	77	132	143	90	98	121
137	Mozambique	MOZ	65	16	83	67	58	8	83	81	93	51	75	64
138	Namibia	NAM	126	55	34	105	51	40	109	85	85	114	113	104
139	Nepal	NPL	39	32	85	64	18	14	108	43	26	42	46	84
140	Netherlands	NLD	197	129	169	167	173	119	178	187		165	197	165

COUNTRY COMPARISON
by Normalized score & rank

#	1	2	3	4	5	6	8	9	10	11	12	13	14	15
RANKING	73	12	47	36	3	1	42	49	50	31	64	13	84	72
ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS	DE	DE
METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)	6.04 Effect of taxation on incentives to invest, 1-7 (best)	Country Risk Classifications of the Participants to the Arrangement on Officially Supported Export Credits
ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank	World Economic Forum	OECD

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment	Governmental funding for Industries	Availability of Export rebates
141	New Zealand	NZL	196	132	189	168	159	156	162	149	122	171	200	189	139	1
142	New Caledonia	NCL								58	77					
143	Nicaragua	NIC	49	59	70	26	113	79	80	137	44	39	90	72	57	120
144	Niger	NER	59	7	13	35	11	30	62	29	64	68	62	22		120
145	Nigeria	NGA	35	10	61	11	29	26	59	152	152	34	53	20	112	76
146	Norway	NOR	200	128	168	175	161	149	182	153	165	167	193	185	111	1
147	Pakistan	PAK	50	9	74	18	79	48	112	139	125	42	52	62	88	120
148	Panama	PAN	133	95	151	24	177	25	58	157	107	75	131	140	129	48
149	Paraguay	PRY	43	61	64	79	38	15	84	124	86	24	88	100	137	76
150	Oman	OMN	127		67	180	127	133	78	130	116	108	141	126	147	37
151	Peru	PER	102	78	101	133	132	142	114	165	126	81	139	157	61	48
152	Philippines	PHL	119	77	29	63	121	56	140	167	127	81	108	97	100	48
153	Poland	POL	149	106	105	103	146	154	158	151		138	167	160	50	1
154	Portugal	PRT	175	111	180	126	157	146	180	138		140	158	167	23	1
155	Palau	PLW	68		79	58	82		23	16	5		35	78		
156	Papua New Guinea	PNG	57		60	80	49	68	49	64	62	26	68	58		76
157	Romania	ROU	110	82	151	137	121	137	144	133		99	145	144	24	48
158	Puerto Rico	PRI	136		142	57	103		183			140	159	145	80	
159	Korea, Dem. Rep.	PRK	2			165				18		1	1			120
160	Rwanda	RWA	116	28	78	163	24		89	28	31	114	111	146	123	120

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COUNTRY COMPARISON by Normalized score & rank																

#		1	2	3	4	5	6	8	9	10	11	12	13	14	15
RANKING		73	12	47	38	3	1	42	49	50	31	64	13	84	72
ORDER		DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS	DE	DE
METRIC		Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)	6.04 Effect of taxation on incentives to invest, 1-7 (best)	Country Risk Classifications of the Participants to the Arrangement on Officially Supported Export Credits
ENTITY		World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank	World Economic Forum	OECD

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment	Governmental funding for Industries	Availability of Export rebates
161	Saudi Arabia	SAU	120	68	81	187	95	86	27	188	159	114	115	143	141	37
162	French Polynesia	PYF								52	52					
163	Qatar	QAT	166		87	188	126	125	143	143	132	146	155	142	149	48
164	Senegal	SEN	79	36	100	7	108	99	91	56	105	99	109	29	91	93
165	Russian Federation	RUS	90	53	156	141	33	61	125		167	34	78	130	30	66
166	Serbia	SRB	105	92	124	25	91	112	142	78	135	96	107	101	16	93
167	South Asia	SAS												56		
168	Slovak Republic	SVK	151	109	113	90	116	135	159	128		120	162	155	38	1
169	Slovenia	SVN	163	115	174	148	134	159	148	105		133	150	141	18	1
170	South Africa	ZAF	139	63	129	171	87	127	151	161	151	106	134	149	126	48
171	Spain	ESP	169	112	116	114	156	106	167	170		136	163	159	22	1
172	Singapore	SGP	203		184	185	185	125	171	183	155	166	204	190	148	34
173	Solomon Islands	SLB	45		97	132	100		51		17		26	105		
174	Sierra Leone	SLE	27		99	60	54	29	47	40	45	51	56	50	74	120
175	Sri Lanka	LKA	96	48	85	32	118	54	118	131	108	81	100	93	86	93
176	San Marino	SMR			58	156	128		79	10	37			99		
177	Somalia	SOM	1							23	14	1	3			120
178	Sudan	SDN	8	5	51	51	26		34	34	71	3	14	30		120
179	South Sudan	SSD	13		12	91	3	12	1	14	13	5	11	4		120
180	Small states	SST												80		

COUNTRY COMPARISON
by Normalized score & rank

#	1	2	3	4	5	6	8	9	10	11	12	13	14	15
RANKING	73	12	47	36	3	1	42	49	50	81	64	13	84	72
ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS	DE	DE
METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)	6.04 Effect of taxation on incentives to invest, 1-7 (best)	Country Risk Classifications of the Participants to the Arrangement on Officially Supported Export Credits
ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank	World Economic Forum	OECD

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment	Governmental funding for Industries	Availability of Export rebates
181	Sao Tome and Principe	STP	55		167	28	76	23	28	3	18	97	48	37		
182	Suriname	SUR	117		9	119	80	72	60	102		72	86	28	95	93
184	Swaziland	SWZ	83	25	45	116	60	8	110	37	35	99	80	82	90	93
185	Sweden	SWE	201	127	158	155	182	150	173	160		169	202	180	124	1
186	Switzerland	CHE	199	131	121	172	164	94	149	184	166	167	192	172	145	1
187	Sint Maarten (Dutch part)	SXM								103	15					
188	Seychelles	SYC	131		63	147	145	51	129	11	53	128	91	107	105	120
189	Syrian Arab Republic	SYR	18		38	73	42	82	44			16	10	15	1	120
190	Turks and Caicos Islands	TCA								69	7					
191	Taiwan, China	TWN	171		174	153	154	116	172	190	150	138	174		119	35
192	Tajikistan	TJK	32	38	84	21	2	4	41	20	36	23	31	24	29	120
193	Tanzania	TZA	62	19	66	42	50	32	85	76	82	51	85	60	56	93
194	Thailand	THA	128	74	115	128	150	48	145	178	147	81	121	166	98	48
195	Togo	TGO	17	11	56	27	75	31	97	104	106	42	39	41		120
196	Turkmenistan	TKM	21							80	92	7	4			93
197	Timor-Leste	TLS	22		93	135	93		1		8	39	36	18	101	93
198	Tonga	TON	98		139	117	109		57	17	4		63	123		
199	Trinidad and Tobago	TTO	134	86	119	77	111	77	124	150	100	81	124	113	132	37
200	Tunisia	TUN	115	63	90	108	137	118	136	110	139	95	84	132	83	66
201	Turkey	TUR	137	69	111	134	97	68	81	168	164	108	136	137	62	66
202	Tuvalu	TUV	63							2	1		18			
203	Uganda	UGA	69	22	24	86	27	11	92	44	61	31	93	40	58	93
204	Ukraine	UKR	64	71	114	82	34	47	48	122	149	31	60	96	15	120
205	United Arab Emirates	ARE	170	96	132	188	178	59	98	171	156	149	157	170	150	37
206	United Kingdom	GBR	184	120	145	174	171	134	177	193		159	196	183	127	1
207	United States	USA	186	117	143	143	170	109	186		169	153	178	184	118	1
208	Uruguay	URY	138	107	130	50	104	114	133	117	103	151	143	110	92	48
209	St. Vincent and the Grenadines	VCT	158		109	97	142	105	1	36		145	127	89		
210	Venezuela	VEN	29	66	8	2	14	54	25	179	124	11	7	8	20	120

COUNTRY COMPARISON			#	1	2	3	4	5	6	8	9	10	11	12	13	14	15
by Normalized score & rank			RANKING	73	12	47	36	3	1	42	49	50	31	64	13	84	72
			ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	AS	DE	DE
			METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)	6.04 Effect of taxation on incentives to invest, 1-7 (best)	Country Risk Classifications of the Participants to the Arrangement on Officially Supported Export Credits
			ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank	World Economic Forum	OECD
NO.	COUNTRY NAME	COUNTRY CODE		Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment	Governmental funding for Industries	Availability of Export rebates
211	Virgin Islands (U.S.)	VIR		178								25		146			
212	Vietnam	VNM		92		65	17	112	38	86	174	142	51	59	114	59	76
213	Vanuatu	VUT		97		53	142	74	65	87	21	20		66	116		
214	West Bank and Gaza	PSE		51		28	139	57		1	1	24		118	47		120
215	Samoa	WSM		123		157	94	107	83	66	19		122	94	125		
216	Yemen	YEM		25	8	50	55	53	17	36	77	87	11	50	53	40	120
217	Uzbekistan	UZB		38	41	125	72	1	102	113	62	84	8	8	49		93
218	Congo, Dem. Rep.	COD		4		18	22	15		1	73		21	20	6		120
219	Zambia	ZMB		80	29	122	112	13	21	95	51	68	81	72	81	96	76
220	Zimbabwe	ZWE		28		10	47	10	33	42	39	54	18	6	19	64	120
		AVERAGE		102.4853	66.49242	94.96296	94.97884	92.98378	80.85093	93.98413	100	84.98225	85.07558	102.4853	95.48421	75.86093	71.67241
		SUM		20907	8777	17948	17951	17202	13017	17763	19900	14362	14633	20907	18142	11455	12471

Table D-7 Country Comparison, by Fraction of Countries Index Ranked

COUNTRY COMPARISON by fraction of countries index ranked	#	1	2	3	4	5	6	7	8	9	10	11	12	13
	RANKING	73	12	47	36	3	1	59	42	49	50	51	64	13
	ORDER	DE	DE	DE	AS	DE	AS	DE	DE	DE	DE	DE	DE	AS
	METRIC	Government Effectiveness - Estimate of Governance (2013)	Social Progress Index	Starting a Business (DTF)	Paying Taxes 2015 Rankings	DTF	Basel AML Index	Corporate Tax Incentives / Complexity Score	Resolving Insolvency (DTF)	GENERAL IMPORT & TOTAL EXPORT (TOTAL)	Trading Volume in € (M)	Corruption Perception Index (2014 Score)	Regulatory Quality - Estimate of Regulatory Quality (2013)	Ease of doing business index (2014)
	ENTITY	World Bank	Social Progress Imperative	World Bank	PWC	World Bank	Basel Governance	Tax Foundation	World Bank	United States International Trade Comission	Eurostat (Comext, statistical regime 4) Updated 27-Aug-2014	Transparency International	World Bank	World Bank
NO. / COUNTRY NAME / COUNTRY CODE		Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
1 Aruba — ABW		0.84								0.56	0.20		0.91	
2 Andorra — AND		0.92								0.03	0.44		0.92	
3 Afghanistan — AFG		0.08		0.88	0.59	0.03	0.01		0.16	0.49	0.33	0.02	0.11	0.04
4 Albania — ALB		0.45	0.64	0.79	0.31	0.50	0.58		0.77	0.21	0.64	0.35	0.59	0.65
5 Algeria — DZA		0.33	0.35	0.26	0.07	0.30	0.28		0.49	0.73	0.93	0.42	0.12	0.19
6 Angola — AGO		0.11	0.05	0.08	0.24	0.11	0.27		0.01	0.74	0.79	0.06	0.16	0.05
7 Argentina — ARG		0.46	0.69	0.23	0.11	0.32	0.24		0.57	0.81	0.81	0.38	0.18	0.35
8 Armenia — ARM		0.59	0.55	0.98	0.79	0.42	0.80		0.64	0.25	0.39	0.44	0.60	0.77
9 American Samoa — ASM		0.70									0.02		0.64	
10 Antigua and Barbuda — ATG		0.70		0.47	0.16	0.53			0.40	0.30	0.25		0.72	0.54
11 Australia — AUS		0.95	0.93	0.97	0.80	0.75	0.76	0.76	0.93	0.88	0.91	0.94	0.97	0.95
12 Austria — AUT		0.93	0.92	0.47	0.63	0.90	0.61	0.68	0.92	0.80		0.87	0.91	0.90
13 Azerbaijan — AZE		0.40	0.45	0.94	0.84	0.12	0.32		0.51	0.59	0.80	0.24	0.36	0.59
14 Bangladesh — BGD		0.24	0.26	0.40	0.57	0.25	0.35		0.23	0.71	0.77	0.15	0.21	0.09
15 Belarus — BLR		0.18	0.57	0.79	0.69		0.62		0.65	0.31	0.76	0.30	0.15	0.71
16 Belgium — BEL		0.93	0.88	0.93	0.58	0.86	0.96	0.21	0.95	0.93		0.91	0.88	0.79
17 Benin — BEN		0.35	0.20	0.39	0.06	0.36	0.27		0.39	0.47	0.40	0.52	0.36	0.21
18 Bolivia — BOL		0.43	0.47	0.10	0.01	0.34	0.15		0.50	0.65	0.45	0.40	0.24	0.17
19 Bosnia and Herzegovina — BIH		0.40	0.55	0.23	0.21	0.45	0.56		0.83	0.23	0.73	0.52	0.52	0.45
20 Bahrain — BHR		0.72		0.31	0.97	0.66	0.58		0.54	0.60	0.57	0.66	0.73	0.73

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
21	Bahamas, The	BHS	0.75		0.50	0.85	0.67	0.44		0.69	0.68	0.38		0.58	0.49
22	Botswana	BWA	0.64	0.58	0.22	0.65	0.17	0.49		0.75	0.38	0.66	0.81	0.75	0.62
23	Brazil	BRA	0.52	0.66	0.12	0.07	0.35	0.48		0.71	0.96	0.95	0.58	0.56	0.37
24	Belize	BLZ	0.49		0.22	0.69	0.52			0.63	0.36	0.20		0.34	0.38
25	Bermuda	BMU	0.80								0.44	0.47		0.89	
26	Bhutan		0.66		0.52	0.55	0.12			0.01	0.02	0.07	0.84	0.14	0.35
27	Bulgaria	BGR	0.61	0.67	0.75	0.54	0.70	0.97		0.80	0.51		0.58	0.70	0.81
28	Burkina Faso	BFA	0.32	0.16	0.20	0.20		0.11		0.39	0.17	0.34	0.47	0.49	0.12
29	Barbados	BRB	0.88		0.51	0.52		0.69		0.87	0.43	0.17	0.89	0.67	0.45
30	Brunei Darussalam	BRN	0.75		0.06	0.85	0.76	0.49		0.54	0.42	0.47		0.83	0.48
31	Burundi	BDI	0.16	0.02	0.91	0.35				0.24	0.05	0.12	0.09	0.22	0.20
32	Cambodia	KHM	0.20	0.25	0.03	0.53	0.34	0.02		0.56	0.67	0.58	0.10	0.40	0.29
33	Cameroon	CMR	0.22	0.13	0.30	0.05	0.15			0.35	0.41	0.66	0.20	0.21	0.17
34	Canada	CAN	0.97	0.95	0.99	0.96	0.88	0.66	0.79	0.97	1.00	0.93	0.95	0.95	0.92
35	Channel Islands	CHI	0.88											0.87	
36	Central African Republic	CAF	0.01	0.02	0.02	0.03	0.02			0.20	0.11	0.13	0.14	0.13	0.02
37	Chad	TCD	0.06	0.01	0.03	0.02	0.04			0.20	0.63	0.23	0.12	0.16	0.03
38	Cote d'Ivoire	CIV	0.17		0.77	0.08	0.16	0.29		0.56	0.57		0.33	0.25	0.23
39	Chile	CHL	0.86	0.78	0.69	0.86	0.79	0.92	0.94	0.62	0.86	0.82	0.88	0.92	0.79
40	Congo, Rep.	COG	0.12	0.17	0.11	0.04	0.05			0.39	0.46	0.59		0.08	0.06
41	China	CHN	0.55	0.33	0.33	0.37	0.48	0.43		0.72	0.99	0.99	0.42	0.44	0.54
42	Comoros	COM	0.07		0.09	0.12	0.23	0.22		0.01	0.04	0.09	0.18	0.10	0.16
43	Cabo Verde	CPV	0.60		0.59	0.53	0.46	0.22		0.01		0.28	0.77	0.50	0.36
44	Colombia	COL	0.58	0.61	0.56	0.23	0.51	0.85		0.85	0.89	0.78	0.44	0.65	0.83
45	Costa Rica	CRI	0.70	0.82	0.38	0.37	0.76	0.36		0.53	0.83	0.69	0.73	0.71	0.57
46	Curacao	CUW									0.48				
47	Cayman Islands	CYM	0.84							0.49	0.44			0.84	
48	Cyprus	CYP	0.89		0.67	0.74	0.82	0.77		0.74	0.30		0.81	0.79	0.67
49	Croatia	HRV	0.73	0.73	0.54	0.82	0.55	0.91		0.71	0.47		0.65	0.68	0.67
50	Cuba	CUB	0.41	0.41						0.35		0.56	0.65	0.04	
51	Czech Republic	CZE	0.76	0.83	0.42	0.38	0.70	0.86	0.59	0.90	0.71		0.70	0.82	0.78
52	Dominica	DMA	0.74		0.67	0.51	0.54	0.84		0.37	0.15	0.05	0.77	0.61	0.49
53	Denmark	DNK	0.99	0.94	0.87	0.95	0.97	0.89	0.85	0.96	0.77		1.00	0.98	0.98
54	Djibouti	DJI	0.13	0.14	0.14	0.61	0.71	0.60		0.63	0.23	0.17	0.38	0.33	0.18
55	Dominican Republic	DOM	0.37	0.49	0.41	0.59	0.87	0.25		0.17	0.79	0.53	0.33	0.50	0.57
56	Ecuador	ECU	0.38	0.63	0.13	0.28	0.39	0.55		0.21	0.85	0.67	0.35	0.20	0.40
57	Egypt, Arab Rep.	EGY	0.21	0.37	0.62	0.22	0.48	0.68		0.34	0.74	0.83	0.44	0.27	0.42
58	Eritrea	ERI	0.03		0.04	0.09	0.09			0.01	0.03	0.11	0.05	0.01	0.01
59	El Salvador	SLV	0.50	0.53	0.37	0.15	0.62	0.80		0.59	0.70	0.34	0.52	0.62	0.44
60	Estonia	EST	0.79	0.86	0.87	0.86	0.97	0.99	0.97	0.81	0.50		0.85	0.90	0.92

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
61	Ethiopia	ETH	0.37		0.12	0.41	0.11			0.61	0.58	0.53	0.35	0.12	0.31
62	Finland	FIN	1.00	0.95	0.86	0.90	0.93	1.00	0.88	1.00	0.73		0.99	0.99	0.96
63	Fiji	FJI	0.18		0.16	0.44	0.38			0.52	0.33	0.25		0.31	0.58
64	France	FRA	0.90	0.86	0.86	0.51	0.95	0.82	0.47	0.89	0.96		0.85	0.86	0.85
65	Faeroe Islands	FRO									0.24	0.41			
66	Micronesia, Fed. Sts.	FSM	0.35		0.21	0.40	0.43			0.38	0.12	0.01		0.19	0.24
67	Gabon	GAB	0.25		0.29	0.19	0.28			0.34	0.54	0.60	0.44	0.32	0.24
68	Georgia	GEO	0.71	0.51	0.98	0.81	0.83	0.81		0.36	0.53	0.57	0.71	0.75	0.93
69	Germany	DEU	0.92	0.92	0.40	0.65	0.91	0.60	0.56	0.99	0.98		0.93	0.93	0.93
70	Ghana	GHA	0.52	0.28	0.49	0.47	0.36	0.47		0.15	0.56	0.71	0.65	0.57	0.64
71	Greece	GRC	0.69	0.74	0.73	0.70	0.75	0.37	0.62	0.73	0.57		0.58	0.75	0.69
72	Gambia, The	GMB	0.27		0.16	0.05	0.59	0.25		0.47			0.24	0.39	0.27
73	Guinea-Bissau	GNB	0.07		0.07	0.21	0.37	0.03		0.01			0.06	0.09	0.06
74	Equatorial Guinea	GNQ	0.02		0.02	0.10	0.24			0.01	0.48	0.68		0.07	0.13
75	Guatemala	GTM	0.28	0.43	0.49	0.72	0.46	0.57		0.19	0.78	0.48	0.33	0.47	0.63
76	Grenada	GRD	0.63		0.58	0.45	0.74	0.71		0.01	0.18	0.06		0.63	0.34
77	Greenland	GRL	0.78								0.07	0.37		0.90	
78	Guinea	GIN	0.10	0.03	0.08	0.03	0.25	0.14		0.38	0.24	0.49	0.15	0.17	0.11
79	Guam	GUM	0.55								0.07			0.72	
80	Guyana	GUY	0.50	0.39	0.48	0.40	0.57	0.31		0.21	0.50	0.22	0.28	0.30	0.36
81	Hong Kong SAR, China	HKG	0.96		0.96	0.99	0.99	0.55		0.87	0.91		0.89	1.00	0.99
82	Honduras	HND	0.26	0.42	0.28	0.20	0.63	0.39		0.26	0.78	0.43	0.24	0.47	0.46
83	Hungary	HUN	0.72	0.77	0.70	0.54	0.62	0.94	0.41	0.67	0.72		0.73	0.78	0.73
84	Haiti	HTI	0.04		0.01	0.26	0.24	0.12		0.01	0.61	0.16	0.06	0.20	0.05
85	Iceland	ISL	0.91	0.98	0.84	0.77	0.80	0.89	0.44	0.93	0.44	0.67	0.93	0.83	0.94
86	India	IND	0.49	0.23	0.17	0.18	0.33	0.54		0.28	0.95	0.95	0.47	0.35	0.25
87	Isle of Man	IMN													
88	Indonesia	IDN	0.47	0.34	0.19	0.16	0.68	0.40		0.61	0.87	0.83	0.38	0.48	0.41
89	Iraq	IRQ	0.15	0.11	0.25	0.73	0.06	0.04		0.01	0.82	0.79	0.03	0.11	0.18
90	Iran, Islamic Rep.	IRN	0.29	0.30	0.68	0.35	0.22	0.01		0.28	0.27	0.70	0.20	0.06	0.32
91	Ireland	IRL	0.89	0.89	0.90	0.98	0.98	0.89	0.38	0.89	0.90		0.89	0.94	0.94
92	Israel	ISR	0.85	0.71	0.72	0.49	0.94	0.80	0.06	0.88	0.88	0.85	0.79	0.86	0.80
93	Italy	ITA	0.69	0.79	0.76	0.26	0.81	0.64	0.18	0.85	0.93		0.58	0.76	0.72
94	Jamaica	JAM	0.56	0.68	0.90	0.23	0.39	0.94		0.69	0.64	0.28	0.47	0.60	0.71
95	Japan	JPN	0.94	0.90	0.57	0.36	0.90	0.47	0.09	0.99	0.98	0.96	0.91	0.84	0.86
96	Jordan	JOR	0.51	0.44	0.55	0.77	0.72	0.75		0.24	0.68	0.65	0.66	0.57	0.39
97	Kazakhstan	KAZ	0.36	0.36	0.71	0.92	0.03	0.46		0.67	0.63	0.86	0.24	0.38	0.61
98	Kenya	KEN	0.38	0.23	0.25	0.47	0.19	0.08		0.30	0.60	0.60	0.15	0.40	0.28
99	Kuwait	KWT	0.53	0.70	0.21	0.95	0.38	0.41		0.33	0.82	0.76	0.62	0.51	0.56
100	Kyrgyz Republic	KGZ	0.30	0.30	0.96	0.29	0.04	0.38		0.17	0.16	0.27		0.43	0.47

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
101	Latvia	LVA	0.77	0.77	0.81	0.88	0.85	0.74		0.79	0.45		0.74	0.81	0.89
102	Kiribati	KIR	0.23		0.36	0.94	0.57			0.01	0.04	0.03		0.08	0.30
103	St. Kitts and Nevis	KNA	0.77		0.54	0.28	0.65			0.01	0.32	0.14		0.65	0.37
104	Korea, Rep.	KOR	0.82	0.80	0.92		0.99	0.67	0.50	0.98	0.97	0.96	0.74	0.81	0.98
105	Kosovo		0.42		0.78	0.68	0.37	0.70		0.14	0.06	0.36	0.35	0.54	0.62
106	Lebanon	LBN	0.43	0.38	0.38	0.80	0.49	0.21		0.29	0.55	0.72	0.20	0.51	0.46
107	Lao PDR	LAO	0.26	0.27	0.19	0.32	0.17	0.12		0.01	0.14	0.24	0.15	0.23	0.22
108	Lesotho	LSO	0.44	0.20	0.43	0.43	0.22	0.16		0.37	0.37	0.18	0.66	0.41	0.33
109	Liberia	LBR	0.09	0.10	0.85	0.60	0.21	0.10		0.11	0.34	0.41	0.44	0.22	0.08
110	Libya	LBY	0.05		0.24	0.18	0.26			0.01	0.46	0.86	0.05	0.02	0.01
111	St. Lucia	LCA	0.79		0.62	0.64	0.35	0.76		0.48	0.45			0.66	0.48
112	Liechtenstein	LIE	0.95								0.36	0.56		0.93	
113	Lithuania	LTU	0.75	0.76	0.95	0.78	0.89	0.98		0.65	0.58		0.77	0.85	0.88
114	Madagascar	MDG	0.15	0.11	0.81	0.66	0.42			0.32	0.33	0.46	0.23	0.28	0.14
115	Malawi	MWI	0.34	0.18	0.17	0.46	0.10	0.53		0.13	0.21	0.24	0.35	0.28	0.14
116	Luxembourg	LUX	0.94		0.57	0.90	0.82	0.45	0.03	0.68	0.62		0.95	0.96	0.70
117	Malaysia	MYS	0.82	0.67	0.94	0.84	0.95	0.63		0.81	0.91	0.88	0.71	0.74	0.91
118	Macao SAR, China	MAC	0.81								0.42	0.33		0.89	
119	St. Martin (French part)	MAF													
120	Mali	MLI	0.23	0.15	0.11	0.24	0.14	0.04		0.43	0.13	0.35	0.33	0.34	0.23
121	Monaco	MCO									0.25				
122	Mauritania	MRT	0.20	0.09	0.14	0.02	0.20	0.23		0.01	0.34	0.52	0.28	0.26	0.07
123	Mauritius	MUS	0.76	0.75	0.85	0.94	0.91	0.52		0.78	0.40	0.54	0.73	0.80	0.86
124	Maldives	MDV	0.46		0.74	0.30	0.30	0.17		0.29	0.13	0.19		0.37	0.39
125	Mexico	MEX	0.65	0.60	0.65	0.45	0.77	0.65	0.15	0.86	0.99	0.91	0.40	0.69	0.81
126	Marshall Islands	MHL	0.03		0.63	0.33	0.64	0.33		0.12	0.19	0.30		0.14	0.27
127	Macedonia, FYR	MKD	0.54	0.64	0.99	0.97	0.55	0.87		0.82	0.29	0.70	0.63	0.63	0.85
128	Moldova	MDA	0.42	0.39	0.82	0.64	0.19	0.73		0.70	0.16	0.62	0.40	0.50	0.68
129	Malta	MLT	0.87		0.29	0.87	0.78	0.95		0.55	0.54		0.74	0.88	0.52
130	Myanmar	MMR	0.05		0.01	0.39	0.45	0.06		0.16	0.28	0.29	0.10	0.06	0.07
131	Mongolia	MNG	0.36	0.33	0.78	0.56	0.09	0.41		0.53	0.27	0.30	0.52	0.45	0.63
132	Montenegro	MNE	0.61	0.61	0.71	0.48	0.73	0.88		0.83	0.08	0.43	0.56	0.55	0.82
133	Northern Mariana Islands	MNP													
134	Morocco	MAR	0.53	0.32	0.72	0.66	0.84	0.56		0.41	0.66	0.85	0.52	0.48	0.64
135	Mozambique	MOZ	0.32	0.12	0.44	0.36	0.31	0.05		0.44	0.41	0.55	0.30	0.37	0.34
136	Namibia	NAM	0.62	0.42	0.18	0.56	0.28	0.25		0.58	0.43	0.50	0.66	0.55	0.55
137	Nepal	NPL	0.19	0.24	0.45	0.34	0.10	0.09	0.29	0.57	0.22	0.15	0.24	0.23	0.44
138	Netherlands	NLD	0.97	0.98	0.89	0.89	0.94	0.74	0.29	0.94	0.94		0.96	0.97	0.87
139	New Zealand	NZL	0.96	1.00	1.00	0.89	0.86	0.97	0.82	0.86	0.75	0.72	0.99	0.98	0.99
140	New Caledonia	NCL									0.29	0.46			

NO.	COUNTRY NAME	COUNTRY CODE	Governmental Effectiveness	Social Policies	Entry Mode Regulations	Tax Policies	Trade compliance	Implementation of Sanctions	Availability of FDI tax incentives	Exit Mode Regulations	Governmental Relationship with USA	Governmental Relationship with EU	Control of Corruption	Regulatory Quality	Conduciveness of business environment
141	Nicaragua	NIC	0.24	0.45	0.37	0.14	0.61	0.49		0.42	0.69	0.26	0.23	0.44	0.38
142	Niger	NER	0.29	0.05	0.07	0.19	0.06	0.19		0.33	0.15	0.38	0.40	0.30	0.12
143	Nigeria	NGA	0.17	0.08	0.32	0.06	0.16	0.16		0.31	0.76	0.90	0.20	0.26	0.11
144	Norway	NOR	0.98	0.97	0.89	0.93	0.87	0.93	0.91	0.96	0.77	0.98	0.97	0.95	0.97
145	Pakistan	PAK	0.25	0.07	0.39	0.10	0.43	0.30		0.59	0.70	0.74	0.24	0.25	0.33
146	Panama	PAN	0.65	0.72	0.80	0.13	0.96	0.16		0.31	0.79	0.63	0.44	0.64	0.74
147	Paraguay	PRY	0.21	0.46	0.34	0.42	0.21	0.09		0.44	0.62	0.51	0.14	0.43	0.53
148	Oman	OMN	0.62		0.35	0.96	0.69	0.83		0.41	0.65	0.69	0.63	0.69	0.66
149	Peru	PER	0.50	0.59	0.53	0.71	0.71	0.88		0.60	0.83	0.75	0.47	0.68	0.83
150	Philippines	PHL	0.58	0.58	0.15	0.34	0.65	0.35		0.74	0.84	0.75	0.47	0.53	0.51
151	Poland	POL	0.73	0.80	0.56	0.55	0.79	0.96	0.74	0.84	0.76		0.80	0.82	0.84
152	Portugal	PRT	0.86	0.84	0.95	0.67	0.85	0.91	0.71	0.95	0.69		0.81	0.77	0.88
153	Palau	PLW	0.33		0.42	0.31	0.44			0.12	0.08	0.03		0.17	0.41
154	Papua New Guinea	PNG	0.28		0.32	0.43	0.26	0.42		0.26	0.32	0.37	0.15	0.33	0.31
155	Romania	ROU	0.54	0.62	0.80	0.73	0.65	0.85		0.76	0.67		0.58	0.71	0.76
156	Puerto Rico	PRI	0.67		0.75	0.30	0.56			0.97			0.81	0.78	0.76
157	Korea, Dem. Rep.	PRK	0.01			0.88					0.09		0.01	0.00	
158	Rwanda	RWA	0.57	0.21	0.41	0.87	0.13			0.47	0.14	0.18	0.66	0.54	0.77
159	Saudi Arabia	SAU	0.59	0.52	0.43	0.99	0.51	0.53		0.14	0.94	0.94	0.66	0.56	0.75
160	French Polynesia	PYF									0.26	0.31			
161	Qatar	QAT	0.81		0.46	1.00	0.68	0.78		0.76	0.72	0.78	0.85	0.76	0.75
162	Senegal	SEN	0.39	0.27	0.53	0.04	0.58	0.61		0.48	0.28	0.62	0.58	0.53	0.15
163	Russian Federation	RUS	0.44	0.40	0.83	0.75	0.18	0.38		0.66		0.99	0.20	0.38	0.68
164	Serbia	SRB	0.51	0.70	0.66	0.13	0.49	0.70		0.75	0.39	0.80	0.56	0.52	0.53
165	South Asia	SAS													0.29
166	Slovak Republic	SVK	0.74	0.83	0.60	0.48	0.63	0.84	0.12	0.84	0.64		0.70	0.79	0.82
167	Slovenia	SVN	0.80	0.87	0.92	0.79	0.72	0.99	0.35	0.78	0.53		0.77	0.74	0.74
168	South Africa	ZAF	0.68	0.48	0.68	0.91	0.47	0.79		0.80	0.81	0.89	0.62	0.66	0.78
169	Spain	ESP	0.83	0.85	0.61	0.61	0.84	0.66	0.32	0.88	0.85		0.79	0.80	0.84
170	Singapore	SGP	1.00		0.97	0.98	1.00	0.78		0.90	0.92	0.92	0.97	1.00	1.00
171	Solomon Islands	SLB	0.22		0.51	0.70	0.54			0.27		0.10		0.13	0.55
172	Sierra Leone	SLE	0.13		0.52	0.32	0.29	0.18		0.25	0.20	0.27	0.30	0.27	0.26
173	Sri Lanka	LKA	0.47	0.36	0.45	0.17	0.64	0.34		0.62	0.66	0.64	0.47	0.49	0.49
174	San Marino	SMR			0.31	0.83	0.69			0.42	0.05	0.22			0.52
175	Somalia	SOM	0.00								0.12	0.08	0.01	0.01	
176	Sudan	SDN	0.04	0.04	0.27	0.27	0.14			0.18	0.17	0.42	0.02	0.07	0.16
177	South Sudan	SSD	0.06		0.06	0.48	0.02	0.07		0.01	0.07	0.08	0.03	0.05	0.02
178	Small states	SST													0.42
179	Sao Tome and Principe	STP	0.27		0.88	0.15	0.41	0.14		0.15	0.02	0.11	0.56	0.24	0.19
180	Suriname	SUR	0.57		0.05	0.63	0.43	0.45		0.32	0.51		0.42	0.42	0.15

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181	Swaziland	SWZ	0.41	0.19	0.24	0.62	0.32	0.05		0.58	0.19	0.21	0.58	0.39	0.43
182	Sweden	SWE	0.99	0.96	0.84	0.82	0.98	0.93	1.00	0.92	0.80		0.98	0.99	0.95
183	Switzerland	CHE	0.98	0.99	0.64	0.91	0.89	0.58	0.53	0.79	0.92	0.98	0.97	0.94	0.91
184	Sint Maarten (Dutch part)	SXM									0.52	0.09			
185	Seychelles	SYC	0.64		0.33	0.78	0.78	0.32		0.68	0.06	0.31	0.74	0.45	0.56
186	Syrian Arab Republic	SYR	0.09		0.20	0.39	0.23	0.51		0.23			0.09	0.05	0.08
187	Turks and Caicos Islands	TCA									0.35	0.04			
188	Taiwan, China	TWN	0.84		0.92	0.81	0.83	0.72		0.91	0.95	0.89	0.80	0.85	
189	Tajikistan	TJK	0.16	0.29	0.44	0.11	0.01	0.02		0.22	0.10	0.21	0.13	0.15	0.13
190	Tanzania	TZA	0.30	0.14	0.35	0.22	0.27	0.20		0.45	0.38	0.49	0.30	0.42	0.32
191	Thailand	THA	0.63	0.56	0.61	0.68	0.81	0.30		0.77	0.89	0.87	0.47	0.59	0.87
192	Togo	TGO	0.08	0.08	0.30	0.14	0.41	0.19		0.51	0.52	0.63	0.24	0.19	0.22
193	Turkmenistan	TKM	0.10								0.40	0.54	0.04	0.02	
194	Timor-Leste	TLS	0.11		0.49	0.72	0.50			0.01		0.05	0.23	0.18	0.09
195	Tonga	TON	0.48		0.74	0.62	0.59			0.30	0.09	0.02		0.31	0.65
196	Trinidad and Tobago	TTO	0.66	0.65	0.63	0.41	0.60	0.48		0.66	0.75	0.59	0.47	0.61	0.59
197	Tunisia	TUN	0.56	0.48	0.48	0.57	0.74	0.73		0.72	0.55	0.82	0.55	0.41	0.69
198	Turkey	TUR	0.67	0.52	0.59	0.71	0.52	0.42	0.65	0.43	0.84	0.97	0.63	0.67	0.72
199	Tuvalu	TUV	0.31								0.01	0.01		0.09	
200	Uganda	UGA	0.34	0.17	0.13	0.46	0.15	0.07		0.49	0.22	0.36	0.18	0.46	0.21
201	Ukraine	UKR	0.31	0.54	0.60	0.44	0.18	0.29		0.25	0.61	0.88	0.18	0.29	0.51
202	United Arab Emirates	ARE	0.83	0.73	0.70	1.00	0.96	0.37		0.52	0.86	0.92	0.87	0.77	0.89
203	United Kingdom	GBR	0.90	0.91	0.77	0.93	0.92	0.83	0.24	0.94	0.97		0.92	0.96	0.96
204	United States	USA	0.91	0.89	0.76	0.76	0.92	0.68	0.26	0.98		1.00	0.89	0.87	0.97
205	Uruguay	URY	0.68	0.81	0.69	0.27	0.56	0.71		0.70	0.59	0.61	0.88	0.70	0.58
206	St. Vincent and the Grenadines	VCT	0.77		0.58	0.52	0.77	0.65		0.01	0.18		0.84	0.62	0.47
207	Venezuela	VEN	0.14	0.50	0.04	0.01	0.08	0.34		0.13	0.90	0.73	0.06	0.03	0.04
208	Virgin Islands (U.S.)	VIR	0.87									0.15		0.72	
209	Vietnam	VNM	0.45		0.34	0.09	0.61	0.24		0.46	0.87	0.84	0.30	0.29	0.60
210	Vanuatu	VUT	0.48		0.28	0.76	0.40	0.40		0.46	0.11	0.12		0.32	0.61
211	West Bank and Gaza	PSE	0.25		0.15	0.74	0.31			0.01	0.01	0.14		0.58	0.25
212	Samoa	WSM	0.60		0.83	0.50	0.58	0.52		0.35	0.10		0.71	0.46	0.66
213	Yemen	YEM	0.12	0.06	0.26	0.29	0.29	0.11		0.19	0.39	0.51	0.06	0.25	0.28
214	Uzbekistan	UZB	0.19	0.31	0.66	0.38	0.01	0.63		0.60	0.31	0.50	0.05	0.04	0.26
215	Congo, Dem. Rep.	COD	0.02		0.10	0.12	0.08			0.01	0.37		0.12	0.10	0.03
216	Zambia	ZMB	0.39	0.22	0.65	0.60	0.07	0.13		0.50	0.26	0.40	0.47	0.35	0.43
217	Zimbabwe	ZWE	0.14		0.05	0.25	0.05	0.20		0.22	0.20	0.32	0.10	0.03	0.10
	AVERAGE		0.502379	0.50373	0.50245	0.505207	0.502615	0.50218	0.514706	0.497271	0.502513	0.502854	0.494625	0.502379	0.502548
	SUM		102.4853	66.49242	94.96296	95.48404	92.98378	80.85093	17.5	93.98413	100	84.98225	85.07558	102.4853	95.48421

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Appendix E Ranking of Countries

Table E-1 Consolidated Country Ranking

RANKED DRIVER COMPARISON
by fraction of countries index ranked

RANK	#	DRIVER CATEGORY	DRIVERS	3 Afghanistan AFG	11 Australia AUS	12 Austria AUT	13 Azerbaijan AZE	14 Bangladesh BGD	15 Belarus BLR	16 Belgium BEL	17 Benin BEN	18 Bolivia BOL	19 ...nia and Herzegovina BIH	20 Bahrain BHR
1	6	Political	Implementation of Sanctions	0.01	0.76	0.61	0.32	0.35	0.62	0.96	0.27	0.15	0.56	0.58
2	98	Business	Raw material cost		0.24		0.54		0.92				0.94	
3	5	Political	Trade compliance	0.03	0.75	0.90	0.12	0.25		0.86	0.36	0.34	0.45	0.66
4	66	Technology	High tech manufacturing capacity		0.74	0.74	0.32		0.30	0.72	0.11	0.70	0.29	0.07
5	90	Legal	Intellectual property protection		0.89	0.90	0.48	0.13		0.85	0.01	0.42	0.01	0.80
6	93	Business	Global presence of suppliers		0.64	0.95	0.58	0.26		0.73	0.01	0.45	0.01	0.91
7	96	Business	Timeliness of deliveries	0.08	0.84	0.86	0.11	0.54	0.43	0.99	0.29	0.13	0.64	0.26
8	97	Business	Rivalry between market suppliers		0.95	0.91	0.21	0.48		0.97	0.01	0.09	0.01	0.70
9	21	Economic	Growth rate of wages		0.17	0.69				0.53				
10	69	Technology	Perceived quallity & reputation of components / products		0.91	0.88		0.05		0.72				0.59
11	26	Economic	Currency Fluctuation and Volatility		0.26	0.49				0.54		0.10		0.71
12	2	Political	Social Policies		0.93	0.92	0.45	0.26	0.57	0.88	0.20	0.47	0.55	
13	13	Political	Conduciveness of business environment	0.04	0.95	0.90	0.59	0.09	0.71	0.79	0.21	0.17	0.45	0.73
14	45	Economic	Integration with China (Electronics)		0.90	0.83				0.47				
15	94	Business	Criticality of component (technology)		0.82	0.94	0.31	0.06		0.97	0.01	0.44	0.01	0.60
16	99	Business	Logistics cost		0.52	0.72		0.86	0.98	0.93	0.07	0.18	0.22	0.22
17	20	Economic	Inflation rates of Major Economies	0.52	0.68	0.78	0.51	0.20	0.01	0.80	0.58	0.37	0.91	0.77
18	71	Technology	Technological Maturity of Specific Industry		0.85	0.89	0.58	0.29		0.87	0.01	0.15	0.01	0.78
19	75	Technology	Manufacturing flexibility (Electronics)		0.22	0.82				0.51				
20	84	Environmental	Conflict mineral disclosures	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
21	31	Economic	Issuance of exploration permits		0.59							0.31		
22	34	Economic	Price of Natural gas		0.51	0.11	0.67	0.73	0.40	0.18				0.75
23	22	Economic	Demand for Drilling & Production		0.63	0.31	0.13	0.42	0.40	0.54				
24	70	Technology	R & D investment into sector (governmental & p		0.75	0.93	0.61	0.12		0.93	0.01	0.74	0.01	0.44
25	67	Technology	Existing & Extent of manufacturing & distribution		0.75	0.91	0.41	0.61		0.95	0.01	0.12	0.01	0.64
26	32	Economic	Ease of exportation for products	0.01	0.90	0.83	0.20	0.18		0.90	0.24	0.33	0.56	0.80
27	100	Business	Available Financing Options		0.88	0.85	0.40	0.38		0.93	0.01	0.31	0.01	0.91
28	41	Economic	Finding and development (F&D) spending of ups		0.59							0.31		
29	72	Technology	Capital Intensity of technology		0.20	0.09				0.53				
30	33	Economic	Establishment of products & service for the expo	0.15	0.90	0.86	0.71	0.69	0.73	0.91	0.26	0.58	0.48	0.67
31	11	Political	Control of Corruption	0.02	0.94	0.87	0.24	0.15	0.30	0.91	0.52	0.40	0.52	0.66
32	39	Economic	Trade weighted index		0.06	0.18	0.72			0.18		0.15		0.63
33	35	Economic	Diversity of customer base (prod sold to diff mar		0.79	0.81	0.54	0.60		0.89	0.01	0.46	0.01	0.50
34	65	Technology	Maintenance, replacement or overhaul facilties											
35	27	Economic	Adequacy of existing infrastructure to conduct b	0.02	0.93	0.85	0.58	0.14	0.47	0.96	0.33	0.18	0.48	0.70
36	4	Political	Tax Policies	0.59	0.80	0.63	0.84	0.57	0.69	0.58	0.06	0.01	0.21	0.97
37	47	Economic	Industrial production index (machinery)		0.83	0.69		0.41	0.61	0.66				
38	92	Legal	Protectionism (anti-dumping laws)		0.69	0.70	0.56	0.81		0.82	0.01	0.10	0.01	0.89
39	25	Economic	Country Debt Ratio / Risk of Default		0.75	0.28	0.99		0.81	0.19				0.78
40	81	Environmental	Risk of Natural disasters											

RANK	#	DRIVER CATEGORY	DRIVERS	3 Afghanistan AFG	11 Australia AUS	12 Austria AUT	13 Azerbaijan AZE	14 Bangladesh BGD	15 Belarus BLR	16 Belgium BEL	17 Benin BEN	18 Bolivia BOL	19 nia and Herzego BIH	20 Bahrain BHR
41	87	Legal	Competitive regulations		0.79	0.87	0.15	0.44		0.95	0.01	0.25	0.01	0.80
42	8	Political	Exit Mode Regulations	0.16	0.93	0.92	0.51	0.23	0.65	0.95	0.39	0.50	0.83	0.54
43	64	Technology	Technological level of equivalent industries											
44	54	Social	Local content		0.81	0.88	0.38	0.14		0.95	0.01	0.25	0.01	0.81
45	23	Economic	Financial Crisis		0.92	0.93	0.56	0.35	0.09	0.84		0.41	0.13	0.59
46	52	Social	Educational levels of population (Access to skilled labor force)											
47	3	Political	Entry Mode Regulations	0.88	0.97	0.47	0.94	0.40	0.79	0.93	0.39	0.10	0.23	0.31
48	68	Technology	Existing oil field services supply base											
49	9	Political	Governmental Relationship with USA	0.49	0.88	0.80	0.59	0.71	0.31	0.93	0.47	0.65	0.23	0.60
50	10	Political	Governmental Relationship with EU	0.33	0.91		0.80	0.77	0.76		0.40	0.45	0.73	0.57
51	74	Technology	Length of product life cycles											
52	56	Social	Risk of Terrorist activities											
53	77	Environmental	Environmental protection laws											
54	78	Environmental	Waste disposal laws											
55	95	Business	Marketshare concentration of supplier		0.74	0.98	0.40	0.30		0.97	0.01	0.57	0.01	0.63
56	88	Legal	Health & Safety regulations											
57	29	Economic	GDP allocation for Defense	0.93	0.61	0.16	0.92	0.35	0.41	0.25	0.23	0.54	0.38	0.83
58	48	Economic	Steel price (machinery)											
59	7	Political	Availability of FDI tax incentives		0.76	0.68				0.21				
60	38	Economic	Crude oil price											
61	57	Social	Demanding local customer base		0.69	0.83	0.81	0.60		0.87	0.01	0.67	0.01	0.84
62	46	Economic	Scrap recycling (Copper)											
63	89	Legal	Product regulations											
64	12	Political	Regulatory Quality	0.11	0.97	0.91	0.36	0.21	0.15	0.88	0.36	0.24	0.52	0.73
65	44	Economic	Regional competitiveness - Growth triangle (Electronics)		0.72	0.90	0.35	0.57		0.87	0.01	0.38	0.01	0.79
66	73	Technology	Revenue volatility of industry											
67	40	Economic	Prime rate											
68	36	Economic	Competition from Imports		0.11	0.66	0.17	0.23		0.97	0.01	0.37	0.01	0.52
69	58	Social	Governmental immigration policies		0.90	0.81	0.78	0.17		0.79	0.01	0.51	0.01	0.93
70	16	Economic	Disposal income of consumers											
71	37	Economic	Increase in demand from major consuming countries		0.33	0.30	0.52	0.93	0.37	0.22				
72	15	Political	Availability of Export rebates	1.00	0.01	0.01	0.63	0.78	1.00	0.01	1.00	0.63	1.00	0.55
73	1	Political	Governmental Effectiveness	0.08	0.95	0.93	0.40	0.24	0.18	0.93	0.35	0.43	0.40	0.72
74	91	Legal	Strength of rule of law											
75	28	Economic	GDP allocation for energy											
76	82	Environmental	Environmental opposition from local citizens & regulators											
77	49	Social	Population Demographics											
78	50	Social	Distribution of Wealth											
79	51	Social	Changes in lifestyle and trends											
80	55	Social	High risk nationalistic trends											

RANK	#	DRIVER CATEGORY	DRIVERS	NO. 3 Afghanistan AFG	11 Australia AUS	12 Austria AUT	13 Azerbaijan AZE	14 Bangladesh BGD	15 Belarus BLR	16 Belgium BEL	17 Benin BEN	18 Bolivia BOL	19 nia and Herzego BIH	20 Bahrain BHR
81	53	Social	No. of Strikes per year		0.28	0.93	0.57	0.32		0.49	0.01	0.21	0.01	0.87
82	86	Legal	Employment regulations		0.11	0.34	0.84	0.82		0.09	0.01	0.36	0.01	0.81
83	59	Technology	Innovations and Discoveries											
84	14	Political	Governmental funding for Industries		0.52	0.51	0.46	0.40		0.17	0.01	0.50	0.01	1.00
85	30	Economic	Private investment into public infrastructure (utilities, machinery, buildings and vehicles)											
86	61	Technology	Pace of technological obsolescence		0.86	0.82	0.58	0.30		0.91	0.01	0.15	0.01	0.81
87	63	Technology	Uniqueness of technology (niche)											
88	24	Economic	Domestic Consumption											
89	42	Economic	Housing demand (Copper)											
90	76	Technology	Government and military activities using satellitecommunications (electronics)		0.52	0.65	0.89	0.09		0.59	0.01	0.58	0.01	0.85
91	79	Environmental	In-country energy law											
92	83	Environmental	Public opposition to natural resource development											
93	60	Technology	Pace of technological Innovations and Advancement											
94	43	Economic	Growth of telecom & power industry (Copper)											
95	80	Environmental	Popular attitude towards the environment											
96	18	Economic	Unemployment Rates / Growth rate of Employment	0.34	0.69	0.77	0.67	0.76	0.65	0.42	0.98	0.92	0.02	0.47
97	17	Economic	Accessibility of Credit facilities	0.46	0.97	0.69	0.40	0.21	0.40	0.46	0.32	0.32	0.74	0.40
98	85	Environmental	Regulations towards hydraulic fracking											
99	19	Economic	Major Countries Economic Stimulus (Bond-buying) & Interest Rates control	0.02	0.49	0.17	0.67	0.96	0.42	0.06	0.90		0.14	0.65
100	62	Technology	New technological platforms											
		AVERAGE		0.331	0.687	0.709	0.530	0.421	0.537	0.698	0.222	0.374	0.280	0.680
		SUM		7.279	43.964	42.557	28.071	21.886	16.098	41.874	10.428	19.092	13.721	35.364

Table E-2 Country Ranking Based on 27 Drivers

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 27	RANKINGS 27
3	Afghanistan	AFG	0.06	186
4	Albania	ALB	0.27	101
5	Algeria	DZA	0.28	100
6	Angola	AGO	0.09	173
7	Argentina	ARG	0.39	74
8	Armenia	ARM	0.35	85
9	American Samoa	ASM	0.00	202
10	Antigua and Barbuda	ATG	0.14	155
11	Australia	AUS	0.71	14
12	Austria	AUT	0.73	8
13	Azerbaijan	AZE	0.32	93
14	Bangladesh	BGD	0.27	102
15	Belarus	BLR	0.23	115
16	Belgium	BEL	0.72	10
17	Benin	BEN	0.13	164
18	Bolivia	BOL	0.26	109
19	Bosnia and Herzegovina	BIH	0.24	112
20	Bahrain	BHR	0.48	54
21	Bahamas, The	BHS	0.19	134
22	Botswana	BWA	0.25	110
23	Brazil	BRA	0.52	44
24	Belize	BLZ	0.18	141
25	Bermuda	BMU	0.02	195

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 27	RANKINGS 27
26	Bhutan	0	0.18	140
27	Bulgaria	BGR	0.43	65
28	Burkina Faso	BFA	0.18	139
29	Barbados	BRB	0.32	92
30	Brunei Darussalam	BRN	0.20	131
31	Burundi	BDI	0.09	180
32	Cambodia	KHM	0.24	114
33	Cameroon	CMR	0.26	106
34	Canada	CAN	0.81	2
35	Channel Islands	CHI	0.00	202
36	Central African Republic	CAF	0.07	183
37	Chad	TCD	0.11	170
38	Cote d'Ivoire	CIV	0.26	103
39	Chile	CHL	0.52	43
40	Congo, Rep.	COG	0.06	185
41	China	CHN	0.59	27
42	Comoros	COM	0.09	178
43	Cabo Verde	CPV	0.21	122
44	Colombia	COL	0.47	57
45	Costa Rica	CRI	0.47	59
46	Curacao	CUW	0.00	202
47	Cayman Islands	CYM	0.00	202
48	Cyprus	CYP	0.49	49
49	Croatia	HRV	0.50	48
50	Cuba	CUB	0.02	197

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NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 27	RANKINGS 27
51	Czech Republic	CZE	0.64	23
52	Dominica	DMA	0.22	121
53	Denmark	DNK	0.73	9
54	Djibouti	DJI	0.14	158
55	Dominican Republic	DOM	0.40	71
56	Ecuador	ECU	0.22	119
57	Egypt, Arab Rep.	EGY	0.38	75
58	Eritrea	ERI	0.05	189
59	El Salvador	SLV	0.40	68
60	Estonia	EST	0.59	25
61	Ethiopia	ETH	0.17	144
62	Finland	FIN	0.70	15
63	Fiji	FJI	0.17	143
64	France	FRA	0.76	7
65	Faeroe Islands	FRO	0.00	202
66	Micronesia, Fed. Sts.	FSM	0.07	184
67	Gabon	GAB	0.20	125
68	Georgia	GEO	0.38	76
69	Germany	DEU	0.77	6
70	Ghana	GHA	0.33	88
71	Greece	GRC	0.52	41
72	Gambia, The	GMB	0.32	91
73	Guinea-Bissau	GNB	0.10	172
74	Equatorial Guinea	GNQ	0.09	179
75	Guatemala	GTM	0.38	77

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 27	RANKINGS 27
76	Grenada	GRD	0.20	130
77	Greenland	GRL	0.03	193
78	Guinea	GIN	0.11	167
79	Guam	GUM	0.00	202
80	Guyana	GUY	0.32	94
81	Hong Kong SAR, China	HKG	0.56	36
82	Honduras	HND	0.35	84
83	Hungary	HUN	0.56	34
84	Haiti	HTI	0.11	168
85	Iceland	ISL	0.57	30
86	India	IND	0.48	53
87	Isle of Man	IMN	0.00	202
88	Indonesia	IDN	0.51	46
89	Iraq	IRQ	0.14	160
90	Iran, Islamic Rep.	IRN	0.29	96
91	Ireland	IRL	0.65	21
92	Israel	ISR	0.57	32
93	Italy	ITA	0.66	20
94	Jamaica	JAM	0.39	73
95	Japan	JPN	0.78	3
96	Jordan	JOR	0.48	51
97	Kazakhstan	KAZ	0.36	82
98	Kenya	KEN	0.36	83
99	Kuwait	KWT	0.40	69
100	Kyrgyz Republic	KGZ	0.17	142

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 27	RANKINGS 27
101	Latvia	LVA	0.48	50
102	Kiribati	KIR	0.15	148
103	St. Kitts and Nevis	KNA	0.15	153
104	Korea, Rep.	KOR	0.68	16
105	Kosovo	0	0.15	154
106	Lebanon	LBN	0.33	89
107	Lao PDR	LAO	0.23	116
108	Lesotho	LSO	0.21	123
109	Liberia	LBR	0.09	176
110	Libya	LBY	0.15	149
111	St. Lucia	LCA	0.17	145
112	Liechtenstein	LIE	0.00	202
113	Lithuania	LTU	0.55	38
114	Madagascar	MDG	0.20	128
115	Malawi	MWI	0.23	117
116	Luxembourg	LUX	0.51	47
117	Malaysia	MYS	0.67	18
118	Macao SAR, China	MAC	0.02	198
119	St. Martin (French part)	MAF	0.00	202
120	Mali	MLI	0.22	120
121	Monaco	MCO	0.00	202
122	Mauritania	MRT	0.14	159
123	Mauritius	MUS	0.47	58
124	Maldives	MDV	0.09	174
125	Mexico	MEX	0.57	33

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 27	RANKINGS 27
126	Marshall Islands	MHL	0.09	175
127	Macedonia, FYR	MKD	0.46	61
128	Moldova	MDA	0.24	113
129	Malta	MLT	0.52	40
130	Myanmar	MMR	0.15	150
131	Mongolia	MNG	0.22	118
132	Montenegro	MNE	0.34	87
133	Northern Mariana Islands	MNP	0.00	202
134	Morocco	MAR	0.41	67
135	Mozambique	MOZ	0.20	127
136	Namibia	NAM	0.29	97
137	Nepal	NPL	0.20	132
138	Netherlands	NLD	0.78	5
139	New Zealand	NZL	0.64	22
140	New Caledonia	NCL	0.05	190
141	Nicaragua	NIC	0.26	108
142	Niger	NER	0.11	165
143	Nigeria	NGA	0.29	99
144	Norway	NOR	0.71	13
145	Pakistan	PAK	0.34	86
146	Panama	PAN	0.47	56
147	Paraguay	PRY	0.25	111
148	Oman	OMN	0.47	60
149	Peru	PER	0.44	64
150	Philippines	PHL	0.45	63

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 27	RANKINGS 27
151	Poland	POL	0.59	26
152	Portugal	PRT	0.57	31
153	Palau	PLW	0.08	182
154	Papua New Guinea	PNG	0.13	163
155	Romania	ROU	0.47	55
156	Puerto Rico	PRI	0.38	78
157	Korea, Dem. Rep.	PRK	0.00	202
158	Rwanda	RWA	0.26	107
159	Saudi Arabia	SAU	0.58	28
160	French Polynesia	PYF	0.02	194
161	Qatar	QAT	0.58	29
162	Senegal	SEN	0.33	90
163	Russian Federation	RUS	0.45	62
164	Serbia	SRB	0.30	95
165	South Asia	SAS	0.04	191
166	Slovak Republic	SVK	0.51	45
167	Slovenia	SVN	0.48	52
168	South Africa	ZAF	0.53	39
169	Spain	ESP	0.67	17
170	Singapore	SGP	0.63	24
171	Solomon Islands	SLB	0.15	147
172	Sierra Leone	SLE	0.14	156
173	Sri Lanka	LKA	0.43	66
174	San Marino	SMR	0.13	162
175	Somalia	SOM	0.00	201

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 27	RANKINGS 27
176	Sudan	SDN	0.08	181
177	South Sudan	SSD	0.01	199
178	Small states	SST	0.03	192
179	Sao Tome and Principe	STP	0.11	169
180	Suriname	SUR	0.20	126
181	Swaziland	SWZ	0.21	124
182	Sweden	SWE	0.72	12
183	Switzerland	CHE	0.72	11
184	Sint Maarten (Dutch part)	SXM	0.00	202
185	Seychelles	SYC	0.26	104
186	Syrian Arab Republic	SYR	0.10	171
187	Turks and Caicos Islands	TCA	0.01	200
188	Taiwan, China	TWN	0.52	42
189	Tajikistan	TJK	0.19	135
190	Tanzania	TZA	0.19	133
191	Thailand	THA	0.56	35
192	Togo	TGO	0.14	161
193	Turkmenistan	TKM	0.06	187
194	Timor-Leste	TLS	0.11	166
195	Tonga	TON	0.14	157
196	Trinidad and Tobago	TTO	0.37	80
197	Tunisia	TUN	0.40	70
198	Turkey	TUR	0.55	37
199	Tuvalu	TUV	0.00	202
200	Uganda	UGA	0.20	129

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 27	RANKINGS 27
201	Ukraine	UKR	0.39	72
202	United Arab Emirates	ARE	0.67	19
203	United Kingdom	GBR	0.78	4
204	United States	USA	0.84	1
205	Uruguay	URY	0.37	79
206	St. Vincent and the Grenadines	VCT	0.19	136
207	Venezuela	VEN	0.26	105
208	Virgin Islands (U.S.)	VIR	0.00	202
209	Vietnam	VNM	0.37	81
210	Vanuatu	VUT	0.17	146
211	West Bank and Gaza	PSE	0.09	177
212	Samoa	WSM	0.15	152
213	Yemen	YEM	0.18	138
214	Uzbekistan	UZB	0.15	151
215	Congo, Dem. Rep.	COD	0.02	196
216	Zambia	ZMB	0.29	98
217	Zimbabwe	ZWE	0.19	137

Table E-3 Country Ranking Based on 36 Drivers

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 36	RANKINGS 36
1	Aruba	ABW	0.10	183
2	Andorra	AND	0.02	203
3	Afghanistan	AFG	0.09	185
4	Albania	ALB	0.32	113
5	Algeria	DZA	0.41	92
6	Angola	AGO	0.21	147
7	Argentina	ARG	0.57	67
8	Armenia	ARM	0.42	91
9	American Samoa	ASM	0.01	210
10	Antigua and Barbuda	ATG	0.17	162
11	Australia	AUS	0.90	12
12	Austria	AUT	0.89	15
13	Azerbaijan	AZE	0.45	85
14	Bangladesh	BGD	0.35	103
15	Belarus	BLR	0.32	114
16	Belgium	BEL	0.91	11
17	Benin	BEN	0.17	163
18	Bolivia	BOL	0.33	109
19	Bosnia and Herzegovina	BIH	0.31	115
20	Bahrain	BHR	0.63	54
21	Bahamas, The	BHS	0.27	126
22	Botswana	BWA	0.35	104
23	Brazil	BRA	0.72	36
24	Belize	BLZ	0.24	140
25	Bermuda	BMU	0.03	198
26	Bhutan		0.25	134

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NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS	RANKING
			36	36
27	Bulgaria	BGR	0.58	65
28	Burkina Faso	BFA	0.24	138
29	Barbados	BRB	0.40	95
30	Brunei Darussalam	BRN	0.28	122
31	Burundi	BDI	0.13	178
32	Cambodia	KHM	0.34	107
33	Cameroon	CMR	0.30	116
34	Canada	CAN	1.08	2
35	Channel Islands	CHI	0.00	214
36	Central African Republic	CAF	0.10	184
37	Chad	TCD	0.16	166
38	Cote d'Ivoire	CIV	0.33	110
39	Chile	CHL	0.70	38
40	Congo, Rep.	COG	0.12	180
41	China	CHN	0.84	21
42	Comoros	COM	0.11	181
43	Cabo Verde	CPV	0.30	119
44	Colombia	COL	0.62	58
45	Costa Rica	CRI	0.62	57
46	Curacao	CUW	0.01	206
47	Cayman Islands	CYM	0.01	205
48	Cyprus	CYP	0.62	59
49	Croatia	HRV	0.65	50
50	Cuba	CUB	0.06	190
51	Czech Republic	CZE	0.81	26
52	Dominica	DMA	0.27	129

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS	RANKING
			36	36
53	Denmark	DNK	0.92	9
54	Djibouti	DJI	0.18	158
55	Dominican Republic	DOM	0.52	71
56	Ecuador	ECU	0.35	102
57	Egypt, Arab Rep.	EGY	0.57	68
58	Eritrea	ERI	0.06	189
59	El Salvador	SLV	0.52	72
60	Estonia	EST	0.76	30
61	Ethiopia	ETH	0.24	141
62	Finland	FIN	0.86	18
63	Fiji	FJI	0.21	148
64	France	FRA	0.97	7
65	Faeroe Islands	FRO	0.01	208
66	Micronesia, Fed. Sts.	FSM	0.08	188
67	Gabon	GAB	0.29	121
68	Georgia	GEO	0.47	81
69	Germany	DEU	0.98	6
70	Ghana	GHA	0.46	84
71	Greece	GRC	0.67	47
72	Gambia, The	GMB	0.34	105
73	Guinea-Bissau	GNB	0.13	179
74	Equatorial Guinea	GNQ	0.13	175
75	Guatemala	GTM	0.47	82
76	Grenada	GRD	0.22	146
77	Greenland	GRL	0.04	194
78	Guinea	GIN	0.14	171

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS	RANKING
			36	36
79	Guam	GUM	0.00	212
80	Guyana	GUY	0.37	100
81	Hong Kong SAR, China	HKG	0.74	33
82	Honduras	HND	0.41	94
83	Hungary	HUN	0.74	34
84	Haiti	HTI	0.14	172
85	Iceland	ISL	0.69	42
86	India	IND	0.69	43
87	Isle of Man	IMN	0.00	214
88	Indonesia	IDN	0.71	37
89	Iraq	IRQ	0.24	139
90	Iran, Islamic Rep.	IRN	0.43	89
91	Ireland	IRL	0.83	25
92	Israel	ISR	0.70	40
93	Italy	ITA	0.84	22
94	Jamaica	JAM	0.49	77
95	Japan	JPN	1.01	4
96	Jordan	JOR	0.62	56
97	Kazakhstan	KAZ	0.48	80
98	Kenya	KEN	0.46	83
99	Kuwait	KWT	0.62	60
100	Kyrgyz Republic	KGZ	0.21	149
101	Latvia	LVA	0.63	52
102	Kiribati	KIR	0.19	155
103	St. Kitts and Nevis	KNA	0.18	159
104	Korea, Rep.	KOR	0.85	20

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS	RANKING
			36	36
105	Kosovo	0	0.19	154
106	Lebanon	LBN	0.44	88
107	Lao PDR	LAO	0.28	123
108	Lesotho	LSO	0.27	125
109	Liberia	LBR	0.16	167
110	Libya	LBY	0.26	132
111	St. Lucia	LCA	0.23	144
112	Liechtenstein	LIE	0.02	204
113	Lithuania	LTU	0.70	39
114	Madagascar	MDG	0.25	133
115	Malawi	MWI	0.30	117
116	Luxembourg	LUX	0.66	48
117	Malaysia	MYS	0.90	14
118	Macao SAR, China	MAC	0.03	200
119	St. Martin (French part)	MAF	0.00	214
120	Mali	MLI	0.27	128
121	Monaco	MCO	0.01	207
122	Mauritania	MRT	0.18	156
123	Mauritius	MUS	0.57	66
124	Maldives	MDV	0.13	176
125	Mexico	MEX	0.80	27
126	Marshall Islands	MHL	0.11	182
127	Macedonia, FYR	MKD	0.60	62
128	Moldova	MDA	0.36	101
129	Malta	MLT	0.66	49
130	Myanmar	MMR	0.23	145

			# OF DRIVERS	RANKING
			0.36	1.11
NO.	COUNTRY	COUNTRY CODE	36	36
	131 Mongolia	MNG	0.30	118
	132 Montenegro	MNE	0.44	86
	133 Northern Mariana Islands	MNP	0.00	211
	134 Morocco	MAR	0.52	69
	135 Mozambique	MOZ	0.26	131
	136 Namibia	NAM	0.38	98
	137 Nepal	NPL	0.24	137
	138 Netherlands	NLD	1.01	3
	139 New Zealand	NZL	0.83	24
	140 New Caledonia	NCL	0.06	191
	141 Nicaragua	NIC	0.34	108
	142 Niger	NER	0.15	170
	143 Nigeria	NGA	0.42	90
	144 Norway	NOR	0.93	8
	145 Pakistan	PAK	0.44	87
	146 Panama	PAN	0.59	63
	147 Paraguay	PRY	0.32	112
	148 Oman	OMN	0.63	53
	149 Peru	PER	0.62	61
	150 Philippines	PHL	0.58	64
	151 Poland	POL	0.77	29
	152 Portugal	PRT	0.74	35
	153 Palau	PLW	0.09	186
	154 Papua New Guinea	PNG	0.18	157
	155 Romania	ROU	0.67	45

			# OF DRIVERS	RANKING
			0.36	1.11
NO.	COUNTRY	COUNTRY CODE	36	36
	156 Puerto Rico	PRI	0.50	75
	157 Korea, Dem. Rep.	PRK	0.05	193
	158 Rwanda	RWA	0.34	106
	159 Saudi Arabia	SAU	0.83	23
	160 French Polynesia	PYF	0.03	201
	161 Qatar	QAT	0.75	32
	162 Senegal	SEN	0.38	97
	163 Russian Federation	RUS	0.65	51
	164 Serbia	SRB	0.41	93
	165 South Asia	SAS	0.04	196
	166 Slovak Republic	SVK	0.67	46
	167 Slovenia	SVN	0.63	55
	168 South Africa	ZAF	0.70	41
	169 Spain	ESP	0.88	16
	170 Singapore	SGP	0.86	19
	171 Solomon Islands	SLB	0.20	150
	172 Sierra Leone	SLE	0.18	160
	173 Sri Lanka	LKA	0.50	76
	174 San Marino	SMR	0.18	161
	175 Somalia	SOM	0.01	209
	176 Sudan	SDN	0.13	174
	177 South Sudan	SSD	0.03	199
	178 Small states	SST	0.03	197
	179 Sao Tome and Principe	STP	0.16	168
	180 Suriname	SUR	0.26	130

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 36	RANKING 36
181	Swaziland	SWZ	0.27	127
182	Sweden	SWE	0.92	10
183	Switzerland	CHE	0.90	13
184	Sint Maarten (Dutch part)	SXM	0.00	214
185	Seychelles	SYC	0.33	111
186	Syrian Arab Republic	SYR	0.14	173
187	Turks and Caicos Islands	TCA	0.02	202
188	Taiwan, China	TWN	0.69	44
189	Tajikistan	TJK	0.23	143
190	Tanzania	TZA	0.29	120
191	Thailand	THA	0.77	28
192	Togo	TGO	0.16	164
193	Turkmenistan	TKM	0.08	187
194	Timor-Leste	TLS	0.15	169
195	Tonga	TON	0.16	165
196	Trinidad and Tobago	TTO	0.52	73
197	Tunisia	TUN	0.52	70
198	Turkey	TUR	0.75	31
199	Tuvalu	TUV	0.00	213
200	Uganda	UGA	0.25	135
201	Ukraine	UKR	0.51	74
202	United Arab Emirates	ARE	0.88	17
203	United Kingdom	GBR	1.00	5
204	United States	USA	1.13	1
205	Uruguay	URY	0.49	78

NO.	COUNTRY	COUNTRY CODE	# OF DRIVERS 36	RANKING 36
206	St. Vincent and the Grenadines	VCT	0.24	136
207	Venezuela	VEN	0.40	96
208	Virgin Islands (U.S.)	VIR	0.04	195
209	Vietnam	VNM	0.48	79
210	Vanuatu	VUT	0.20	151
211	West Bank and Gaza	PSE	0.13	177
212	Samoa	WSM	0.20	152
213	Yemen	YEM	0.28	124
214	Uzbekistan	UZB	0.19	153
215	Congo, Dem. Rep.	COD	0.05	192
216	Zambia	ZMB	0.37	99
217	Zimbabwe	ZWE	0.23	142

Table E-4 Final Ranking of Countries Based on 27 and 36 Drivers

# OF DRIVERS	27	36
RANK		
1	United States	United States
2	Canada	Canada
3	Japan	Netherlands
4	United Kingdom	Japan
5	Netherlands	United Kingdom
6	Germany	Germany
7	France	France
8	Austria	Norway
9	Denmark	Denmark
10	Belgium	Sweden
11	Switzerland	Belgium
12	Sweden	Australia
13	Norway	Switzerland
14	Australia	Malaysia
15	Finland	Austria
16	Korea, Rep.	Spain
17	Spain	United Arab Emirates
18	Malaysia	Finland
19	United Arab Emirates	Singapore
20	Italy	Korea, Rep.
21	Ireland	China
22	New Zealand	Italy
23	Czech Republic	Saudi Arabia
24	Singapore	New Zealand
25	Estonia	Ireland
26	Poland	Czech Republic
27	China	Mexico
28	Saudi Arabia	Thailand
29	Qatar	Poland
30	Iceland	Estonia

# OF DRIVERS	27	36	# OF DRIVERS	27	36
RANK			RANK		
31	Portugal	Turkey	61	Macedonia, FYR	Peru
32	Israel	Qatar	62	Russian Federation	Macedonia, FYR
33	Mexico	Hong Kong SAR, China	63	Philippines	Panama
34	Hungary	Hungary	64	Peru	Philippines
35	Thailand	Portugal	65	Bulgaria	Bulgaria
36	Hong Kong SAR, China	Brazil	66	Sri Lanka	Mauritius
37	Turkey	Indonesia	67	Morocco	Argentina
38	Lithuania	Chile	68	El Salvador	Egypt, Arab Rep.
39	South Africa	Lithuania	69	Kuwait	Morocco
40	Malta	Israel	70	Tunisia	Tunisia
41	Greece	South Africa	71	Dominican Republic	Dominican Republic
42	Taiwan, China	Iceland	72	Ukraine	El Salvador
43	Chile	India	73	Jamaica	Trinidad and Tobago
44	Brazil	Taiwan, China	74	Argentina	Ukraine
45	Slovak Republic	Romania	75	Egypt, Arab Rep.	Puerto Rico
46	Indonesia	Slovak Republic	76	Georgia	Sri Lanka
47	Luxembourg	Greece	77	Guatemala	Jamaica
48	Croatia	Luxembourg	78	Puerto Rico	Uruguay
49	Cyprus	Malta	79	Uruguay	Vietnam
50	Latvia	Croatia	80	Trinidad and Tobago	Kazakhstan
51	Jordan	Russian Federation	81	Vietnam	Georgia
52	Slovenia	Latvia	82	Kazakhstan	Guatemala
53	India	Oman	83	Kenya	Kenya
54	Bahrain	Bahrain	84	Honduras	Ghana
55	Romania	Slovenia	85	Armenia	Azerbaijan
56	Panama	Jordan	86	Pakistan	Montenegro
57	Colombia	Costa Rica	87	Montenegro	Pakistan
58	Mauritius	Colombia	88	Ghana	Lebanon
59	Costa Rica	Cyprus	89	Lebanon	Iran, Islamic Rep.
60	Oman	Kuwait	90	Senegal	Nigeria

# OF DRIVERS	27	36	# OF DRIVERS	27	36
RANK			RANK		
91	Gambia, The	Armenia	121	Dominica	Gabon
92	Barbados	Algeria	122	Cabo Verde	Brunei Darussalam
93	Azerbaijan	Serbia	123	Lesotho	Lao PDR
94	Guyana	Honduras	124	Swaziland	Yemen
95	Serbia	Barbados	125	Gabon	Lesotho
96	Iran, Islamic Rep.	Venezuela	126	Suriname	Bahamas, The
97	Namibia	Senegal	127	Mozambique	Swaziland
98	Zambia	Namibia	128	Madagascar	Mali
99	Nigeria	Zambia	129	Uganda	Dominica
100	Algeria	Guyana	130	Grenada	Suriname
101	Albania	Moldova	131	Brunei Darussalam	Mozambique
102	Bangladesh	Ecuador	132	Nepal	Libya
103	Cote d'Ivoire	Bangladesh	133	Tanzania	Madagascar
104	Seychelles	Botswana	134	Bahamas, The	Bhutan
105	Venezuela	Gambia, The	135	Tajikistan	Uganda
106	Cameroon	Rwanda	136	St. Vincent and the Grer	St. Vincent and the Grer
107	Rwanda	Cambodia	137	Zimbabwe	Nepal
108	Nicaragua	Nicaragua	138	Yemen	Burkina Faso
109	Bolivia	Bolivia	139	Burkina Faso	Iraq
110	Botswana	Cote d'Ivoire	140	Bhutan	Belize
111	Paraguay	Seychelles	141	Belize	Ethiopia
112	Bosnia and Herzegovina	Paraguay	142	Kyrgyz Republic	Zimbabwe
113	Moldova	Albania	143	Fiji	Tajikistan
114	Cambodia	Belarus	144	Ethiopia	St. Lucia
115	Belarus	Bosnia and Herzegovina	145	St. Lucia	Myanmar
116	Lao PDR	Cameroon	146	Vanuatu	Grenada
117	Malawi	Malawi	147	Solomon Islands	Angola
118	Mongolia	Mongolia	148	Kiribati	Fiji
119	Ecuador	Cabo Verde	149	Libya	Kyrgyz Republic
120	Mali	Tanzania	150	Myanmar	Solomon Islands