

INSEAD における
グローバルイノベーションインデックス(GII)の
変遷の調査

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Investigation into Changes in the Global Innovation Index (GII) in INSEAD

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Japan

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要旨

本調査は、日本のイノベーションの状況を測る指標を選択するための参考情報として、INSEADが作成している「The Global Innovation Index (以下GIIと呼ぶ)」という報告書におけるイノベーション指標の内容を把握することを目的とする。

GIIで用いられるイノベーション指標とはどのようなものか、選択されるイノベーション指標は、年毎にどのように変化しているのか、また、指標の選択の変化に応じて日本のグローバルイノベーションインデックスの順位はどのように変化したのか、といった視点から分析を試みた。

GIIで用いられている指標の種類は、GII2008-2009では定性データが46%、定量データが40%、指数データが14%であったが、GII2013では定量データが71%と増加し、定性データの割合は6%、指数データは23%となり、用いられる指標の性質が大きく変化している。

グローバルイノベーションインデックスにおける日本の順位は、GII2008-2009では9位であったが、GII2013では22位となった。また、イノベーションインプットとイノベーションアウトプットに分類して見ると、イノベーションインプットでの順位は大きな変動はないが、イノベーションアウトプットでの順位は下降している。なお、イノベーションアウトプットにおける中位分類の一つである「7:創造的な生産」における日本の順位は、GII2009-2010からGII2011にかけて大きく順位を下げている、これは用いられている指標の変化による影響があったと考えられる。

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Yumiko Kanda, Research Unit for Science and Technology Analysis and Indicators

ABSTRACT

This investigation aims to clarify the content of the innovation indicators contained in The Global Innovation Index (“GII”) report drafted by INSEAD, with the aim of providing reference information for the selection of indicators to measure the state of innovation in Japan.

I have carried out an analysis from the perspective of investigating what types of innovation indicators have been used in the GII, how the selected innovation indicators have changed each year, and how Japan’s global innovation index ranking has changed in accordance with the selected indices.

The types of indicators used in GII were as follows. In the 2008-09 GII, soft data accounted for 46%, hard data accounted for 40% and index data accounted for 14%. By the time of the 2013 GII, there had been significant changes in the indicators used, and hard data had increased to 71%, soft data accounted for just 6% and index data accounted for 23%.

Japan’s ranking in the GII was 9th in the 2008-09 GII, but in the 2013 GII its ranking had fallen to 22nd. When we look at Japan’s ranking based on innovation input and innovation output, its ranking did not change significantly in terms of innovation input, but in terms of innovation output its ranking fell significantly.

Japan’s ranking in “7. Creative outputs”, which is one of the sub-categories of innovation output, fell sharply from the 2009-2010 GII to the 2011 GII, and this can be considered to have been a result of changes in the indicators used.

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本編

1. 調査の目的

本調査は、日本のイノベーションの状況を測る指標を選択するための参考情報として、INSEAD が作成している「The Global Innovation Index (以下 GII と呼ぶ)」という報告書におけるイノベーション指標の内容を把握することを目的とする。

GII で用いられるイノベーション指標とはどのようなものか、選択されるイノベーション指標は、年毎にどのように変化しているのか、また選択された指標による日本のグローバルイノベーションインデックスのランキングはどのように変化したのか、といった視点から調査を試みた。

2. INSEAD, GII とは

2.1 INSEAD, GII のフレームワーク

本調査の対象である「The Global Innovation Index (GI I)」は、INSEAD が、毎年発表している国際競争力ランキングレポートである。INSEAD とは、ヨーロッパ(フランス)、アジア(シンガポール)、中東(アブダビ)にキャンパスを持つビジネススクール(私立の経営大学院大学)で、世界トップクラスの評価を得ている。たとえば、フィナンシャル・タイムズ誌の Global MBA Rankings 2013 では、世界第 6 位にランキングされている。

GI I には、イノベーションインプット及びイノベーションアウトプットという二つの視点から集めた様々な指標が掲載され、国・地域の国際競争力ランキング(グローバルイノベーションインデックス)が示されている。用いられている個々の指標は主に既存のデータを利用しており、比較的入手しやすい指標と考えられる。なお、GI I は構成、指標数ともに、毎年、若干変更されており、各国・地域の順位の変動に少なからず影響を与えていると考えられる。

2.2 GI I の全体図 (2013 版を例として)

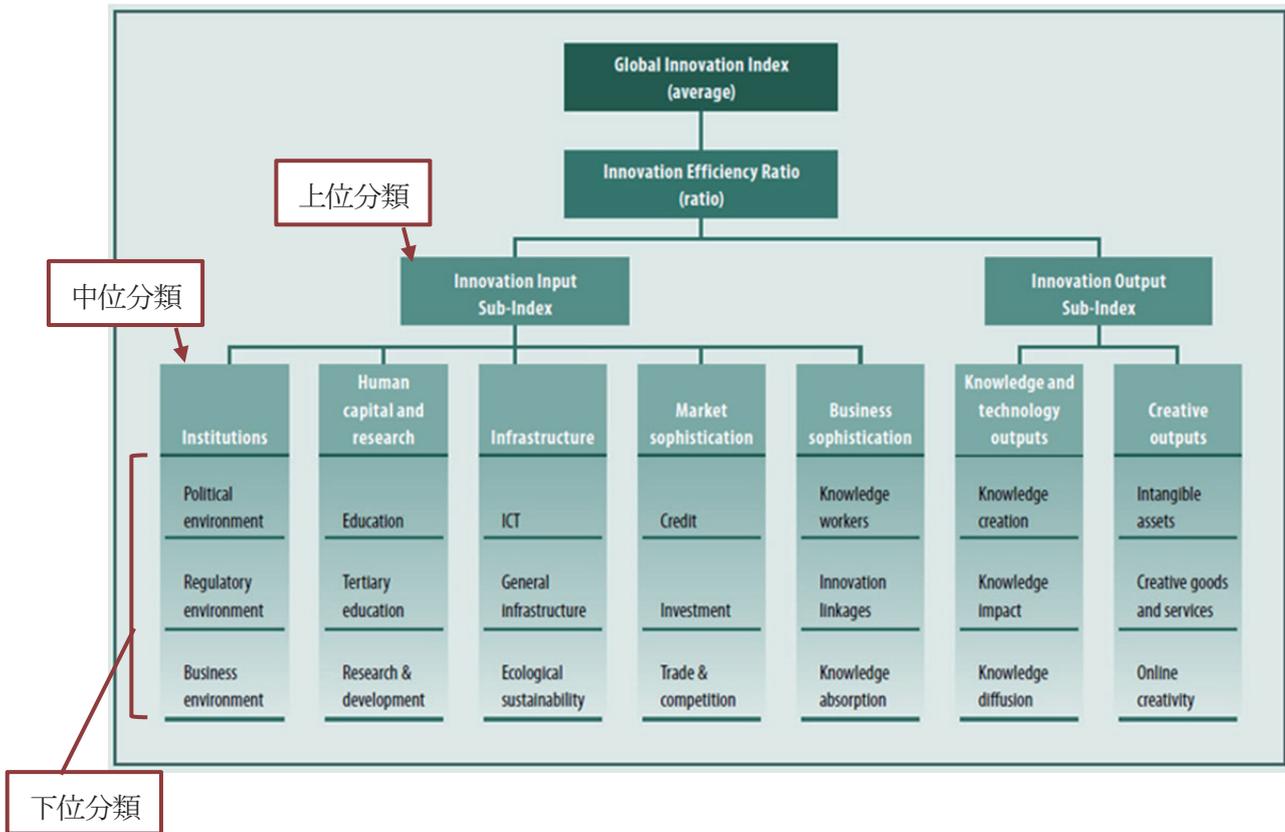
次にそのフレームワークを紹介する。図表 2-1(A)は「GI I 2013」の全体図である。グローバルイノベーションインデックスは、イノベーションインプットとイノベーションアウトプットという 2 つの上位分類があり、その下に 7 つ(GI I 2008-2009 は 8 つ)の中位分類で構成されている。各中位分類は 3 つの下位分類に分類されており、さらに下位分類は 3~6 程度の個別指標から構成されている(図表 2-1(B))。

全ての個別指標および各分類にスコアもしくは変数(定量データ)が付いており、それに基づいたランキングが示されている。各分類のランキングは個別指標に付いたスコアの単純平均で下位分類にランキングが付き、下位分類についたスコアの単純平均で中位分類にランキングが付き、中位分類に付いたスコアの単純平均でイノベーションインプットについてのランキングとイノベーションアウトプットについてのランキングが付く。最後にイノベーションインプットのランキングとイノベーションアウトプットのランキングの単純平均により、グローバルイノベーションインデックスが示される。

なお、指標名については、本来は英語で記述されているが、以下では日本語で示している。これらは仮訳であり、オリジナル表記及び詳細な記述については、「参考資料 2. 各報告書の定義とデータソース」を参照されたい。

【図表 2-1】GI2013 のフレームワーク

(A) 各分類の内訳



(B)個別指標の例(GII2013)

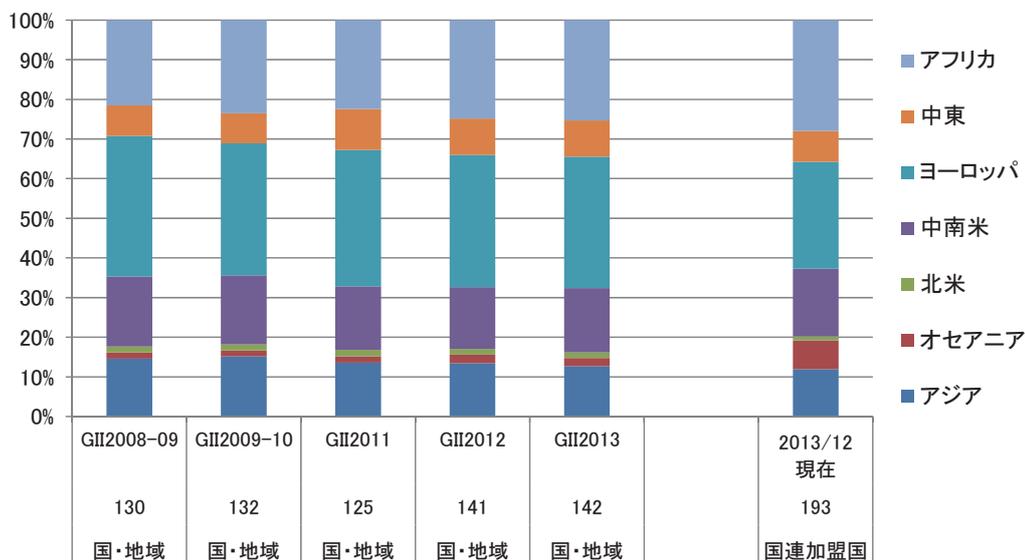


注: * は定性データ、†は指数データ、そのほかは定量データの指標である。
資料: INSEAD, 「GII2013」

2.3 調査対象国・地域数

調査対象国・地域数は GII2008-2009 では 130 であったが、GII2013 では 142 に増加している。大陸別の割合に大きな変化はないが、最も大きいのはヨーロッパである。国連加盟国の割合と比較してみても、その割合より大きい(図表 2-2)。

【図表 2-2】調査対象国・地域の大陸別割合の推移



資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

2.4 中位分類別指標数

図表 2-3 は、各年版 GII における中位分類別の個別指標数の変遷である。各報告書における中位分類番号及びタイトル名を標記し、それに付随する個別指標の数を示した。これを見ると、GII2008-2009 は全体で 92 あり、GII2009-2010 は 60 と少なくなり、GII2011 は 80 となった。GII2012 と GII2013 は 84 と同等の指標数である。

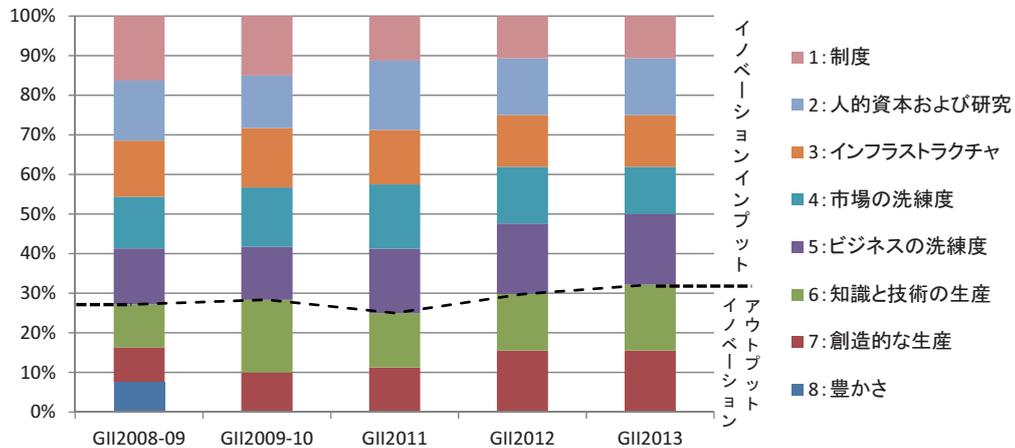
【図表 2-3】GII における中位分類別指標数の推移

上位分類	中位分類番号と中位分類名	GII2008-09	GII2009-10	GII2011	GII2012	GII2013
イノベーション ポジション	1: 制度	15	9	9	9	9
	2: 人的能力	14	8			
	2: 人的資本および研究			14	12	12
	3: 一般およびICTインフラストラクチャ	13				
	3: ICTとインフラストラクチャの取り込み		9			
イノベーション アウトポジション	3: インフラストラクチャ			11	11	11
	4: 市場の洗練度	12	9	13	12	10
	5: ビジネスの洗練度	13	8	13	15	15
	6: 知識	10				
	6: 科学的生産		11	11		
	6: 知識と技術の生産				12	14
	7: 競争力	8				
	7: 創造的な生産および福利厚生		6			
7: 創造的な生産			9	13	13	
8: 豊かさ	7					
合計		92	60	80	84	84

資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

図表 2-4 は、中位分類ごとの指標数の割合を示したものである。イノベーションインプットとイノベーションアウトプットの指標数の割合は、おおむね 7 対 3 である。中位分類別の推移を見ると、GII2008-2009 から GI2011 までの中位分類別の割合は様々な変化があったが、GII2012 からはその変化は少ない。

【図表 2-4】GII の中位分類別の個別指標数の割合の推移



注: 中位分類名は GI2013 を使用した。

資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

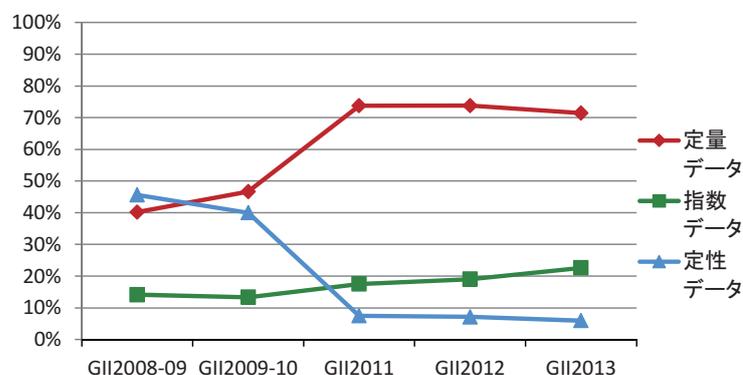
2.5 指標の種類

GII の指標は以下の 3 つの種類に分類される。

- ① 定量データ (Hard data): 国際連合 (UN) や世界知的所有権機関 (WIPO) や OECD 等から取得しているデータ。
- ② 指数データ (Index data): 世界銀行、国連行政機関ネットワーク (UNPAN) などの専門機関が作成した指標の結果を使用したデータ。
- ③ 定性データ (Soft data): 世界経済フォーラムの経営幹部意見調査 (EOS) を使用したデータ。

図表 2-5 に、その 3 種類の指標の数の割合を示した。これを見ると、GII2008-2009 では定性データが 46%、定量データが 40%であったが、GII2013 では定量データが 71%を占め、定性データの割合は 6%と用いられる指標の性質が大きく変化している。指数データについては 14%から 23%と微増している。

【図表 2-5】指標の種類別割合の推移



注: 科学技術・学術政策研究所において計測した。「GII2008-2009」、「GII2009-2010」については、資料に指標の種類の記事がないため、科学技術・学術政策研究所において分類した。

資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

2.6 中位分類別の個別指標の変遷

中位分類ごとの個別指標について、その変遷を見る。各中位分類のタイトルはその報告書年によって差異がある場合、表の上部に全てを記述した。個別指標名については、報告書によって若干の差異があるが、その意味が同様である場合は最新年である GII2013 の個別指標名を用いた。順番は各報告書における順番を規準とした。また、個別指標名のうち、**緑字は指数データ**、**青字は定性データ**であり、**黒字は定量データ**を意味している(指標の分類は報告書年によって異なることもある)。

各個別指標は、各報告書を通して同じ中位分類に付随している場合と、その年によって異なる中位分類へ付随している場合がある。ある指標が次年以降に異なる中位分類へ移動して行った場合、「→○○へ」と示し、ある指標が前年以前に異なる中位分類から移動して来た場合は「○○から→」と示した。

2.6.1 制度

図表2-6(A)は、各年報告書の中位分類1における個別指標をまとめたものである。これを見ると、指数データ及び定性データがほとんどを占めている。GII2008-2009 では定性データも多かったが、GII2013 になると無くなっており、指数データと定量データのみになっている。また、GII2008-2009 からGII2009-2010 にかけて終了した指標が多い。なお、他の中位分類へ移動した指標はイノベーションインプットの的中位分類間で移動している。

【図表2-6】中位分類別個別指標の変遷

(A)中位分類1

制度 GII2008-2009～GII2013						
No.		GII2008 -2009	GII2009 -2010	GII2011	GII2012	GII2013
1-1	政治的な安定と暴力/テロが存在しないこと	○	○	○	○	○
1-2	許可の処理:期間(日数)	○				
1-3	意見および説明責任	○				
1-4	腐敗管理	○				
1-5	ICT関連法規	○				
1-6	法的枠組み	○				
1-7	銀行の健全性	○				
1-8	イノベーションの過去の実績	○				
1-9	GDPの割合としての研究開発支出	○				
				→「2: 人的資本及び研究」へ		
1-10	政府の効果	○	○	○	○	○
1-11	報道の自由		○	○	○	○
1-12	法的システムの効率		○			
1-13	規制の質	○	○	○	○	○
1-14	政府規制の負担	○	○			
1-15	法規制	○		○	○	○
1-16	監査および報告基準の強さ		○			
1-17	雇用の硬直性					
				「2: 人的能力」から→		
1-18	余剰人員削減コスト				○	○
1-19	起業の容易さ	○	○	○	○	○
1-20	起業のコスト			○		
1-21	破産処理の容易さ				○	○
1-22	合計税率			○		
1-23	知的財産保護	○	○			
1-24	納税の容易さ				○	○
	総計	15	9	9	9	9

注: 緑字は指数データ、青字は定性データ、黒字は定量データ。

資料: INSEAD, 「GII2008-2009」, 「GII2009-2010」, 「GII2011」, 「GII2012」, 「GII2013」

2.6.2 人的資本および研究

図表 2-6 (B) は、各年報告書の中位分類 2 をまとめたものである。GII2011 より中位分類名は「人的能力」に「研究」が加わるようになった。ここでは GI2008-2009 は指数データや定性データが多かったが、GII2011 から定量データが多くなっているのが見える。GII2008-2009 の個別指標のうち 3 つが他の中位分類へ移動している。また、GII2011 からの中位分類名が「人的資本および研究」に変更された時に、「1:制度」から「R&D に対する総支出(GERD)」が移動してきている。

【図表 2-6】(B)中位分類 2

人的能力 GI2008-2009～GII2009-2010
人的資本および研究 GI2011～GII2013

No.		GII2008 -2009	GII2009 -2010	GII2011	GII2012	GII2013
2-1	教育に対する支出	○	○	○	○	○
2-2	識字率、大人合計(15歳以上の割合)	○				
2-3	15～64歳の年齢構成	○				
2-4	雇用労働者:雇用の硬直性指標	○	→「1:制度」へ			
2-5	革新の文化	○	→「5:ビジネスの洗練度」へ			
2-6	頭脳流出	○				
2-7	ロールモデルとしての起業家	○				
2-8	電子参加指標	○	→「3:インフラストラクチャ」へ			
2-9	純移住率	○				
2-10	生徒1人当たりの教育に対する公共支出			○	○	○
2-11	社員研修の範囲	○	○	→「5:ビジネスの洗練度」へ		
2-12	平均教育期間			○	○	○
2-13	読み書き、数学、および科学の評価			○	○	○
2-14	生徒と教師の割合、中等教育			○	○	○
2-15	教育システムの質	○	○			
2-16	経営学部の質	○	○			
2-17	高等教育機関における学生		○	○	○	○
2-18	科学分野における高等教育機関卒業生			○		
2-19	科学および工学分野の卒業生				○	○
2-20	工学分野における高等教育機関卒業生			○		
2-21	高等教育機関在籍者における外国人留学生			○	○	○
2-22	高等教育を受ける人口における海外へ行く留学生			○	○	○
2-23	高等教育機関在籍者における海外へ行く留学生			○		
2-24	研究者		○	○	○	○
2-25	R&Dに対する総支出(GERD)			「1:制度」から → ○	○	○
2-26	科学者および工学者の利用可能性	○	○			
2-27	科学研究機関の質	○	○		○	
2-28	高い質の研究機関			○		
2-29	トップ3大学のQS大学ランキングでの平均スコア					○
	総計	14	8	14	12	12

注: 緑字は指数データ、青字は定性データ、黒字は定量データ。

資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

2.6.3 インフラストラクチャ

図表 2-6(C)は、各年報告書の中位分類 3 をまとめたものである。中位分類名は 2 回変更しているが、「インフラストラクチャ」がキーワードとなっている。

個別指標を見ると GII2008-2009、GII2009-2010 には定量データが多く、それに加えて定性データとで構成されていた。GII2011 からは定性データが指数データに代わり、その数も定量データと同等になっている。また、他の中位分類から移動して来た個別指標は、イノベーションインプットの中位分類から 2 つで、イノベーションアウトプットの中位分類から 1 つである。なお、イノベーションアウトプットの中位分類から来た「電力消費量」は全ての報告書を通じて用いられている。一方、中位分類 3 から他へ移動した個別指標はない。

【図表 2-6】(C)中位分類3

一般およびICTインフラストラクチャ GII2008-2009
ICTとインフラストラクチャの取り込み GII2009-2010
インフラストラクチャ GII2011~GII2013

No.		GI2008 -2009	GI2009 -2010	GI2011	GI2012	GI2013
3-1	国際インターネット帯域幅(1人当たりのビット数)	○				
3-2	テレビのある家庭(%)	○				
3-3	通信への合計年間投資(1,000人当たりの米ドル)	○				
3-4	学校でのインターネットアクセス	○				
3-5	インターネットプロバイダ部門の競争の質	○				
3-6	国内の主要ビジネス中核圏への交通機関	○				
3-7	住民100人当たりのブロードバンド登録者数	○	○			
3-8	ICTアクセス			○	○	○
3-9	住民100人当たりの携帯電話登録者数	○	○			
3-10	ICT利用			○	○	○
3-11	政府のオンラインサービス			○	○	○
3-12	住民100人当たりの主要(固定)電話回線	○	○			
3-13	オンライン電子参加			○	○	○
3-14	全体的なインフラストラクチャの質	○	○			
3-15	発電量			○	○	○
3-16	電力消費量		○	○	○	○
3-17	物流のパフォーマンス					○
3-18	貿易および輸送関連インフラストラクチャ			○	○	
3-19	エネルギー利用における再生可能エネルギーの割合			○		
3-20	総資本形成	○		○	○	○
3-21	インターネットユーザー(100人当たり)	○	○			
3-22	エネルギー利用の単位当たりGDP			○	○	○
3-23	パーソナルコンピュータ(100人当たり)	○	○			
3-24	環境のパフォーマンス				○	○
3-25	ICTおよび政府の生産性		○			
3-26	ISO 14001環境認証				○	○
3-27	生態面のフットプリントおよび生物学的受容能力			○		
3-28	ビジネスでのインターネット利用の範囲		○			
	総計	13	9	11	11	11

注: 緑字は指数データ、青字は定性データ、黒字は定量データ。

資料: INSEAD、「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

2.6.4 市場の洗練度

図表 2-6(D)は、各年報告書の中位分類 4 をまとめたものである。中位分類名は「市場の洗練度」であり、全報告書を通じて変更はない。個別指標を見ると GII2008-2009、GII2009-2010 には指数データ、定性データが多かったが、GII2011 から新たな定量データが増えてきている。また、個別指標の他の中位分類への移動は「5:ビジネスの洗練度」から来たものと行ったものが 1 つずつ、といった程度である。

【図表 2-6】(D)中位分類 4

市場の洗練度 GII2008-2009～GII2013						
No.		GI2008 -2009	GI2009 -2010	GI2011	GI2012	GI2013
4-1	総民間資本流入額(GDPの割合)	○				
4-2	経済特性:非公式な経済推定(GNPの割合)	○				
4-3	地域株式市場へのアクセス	○				
4-4	貿易障壁の存在	○				
4-5	海外所有の制限	○				
4-6	信用の獲得 - 法的権利指標	○	○			
4-7	信用のための法的権利の強さ			○		
4-8	信用獲得の容易さ				○	○
4-9	信用情報の詳細さ	○	○	○		
4-10	民間部門への国内信用	○	○	○	○	○
4-11	マイクロファイナンス機関の総融資ポートフォリオ			○	○	○
4-12	金融市場の洗練度	○	○			
4-13	ベンチャーキャピタルの利用可能性	○	○			
4-14	投資家保護の容易さ	○	○	○	○	○
4-15	マイクロファイナンス機関(MFI):債務者当たりの平均融資残高/1人当たりのGNI		○			
4-16	市場の資本化			○	○	○
4-17	公開株の合計価格			○	○	○
4-18	地域の株式市場による資金調達		○			
4-19	ベンチャーキャピタル取引			○	○	○
4-20	海外直接投資の純流入額(BoP、現在の米ドル)	○	○	→「5:ビジネスの洗練度」へ		
4-21	適用された関税率、加重平均			○	○	○
4-22	市場アクセス貿易制限			○		
4-23	非農業輸出の市場アクセス				○	○
4-24	商品とサービスの輸入			○	○	
4-25	商品とサービスの輸出			○	○	
4-26	地域競争の激しさ			→「5:ビジネスの洗練度」から	○	○
	総計	12	9	13	12	10

注:緑字は指数データ、青字は定性データ、黒字は定量データ。

資料:INSEAD、「GI2008-2009」、「GI2009-2010」、「GI2011」、「GI2012」、「GI2013」

2.6.5 ビジネスの洗練度

図表 2-6(E)は、各年報告書の中位分類 5 をまとめたものである。中位分類名は「ビジネスの洗練度」であり、全報告書を通じて変更はない。個別指標を見ると GII2008-2009 は定性データが多かったが、そのほとんどは同年で終了している。他の中位分類から移動してきた個別指標が 6 つあり、そのうち 4 つがイノベーションアウトプットの中位分類から来たものである。一方、他の中位分類へ移動した個別指標は 3 つである。また、「正式な研修を提供する企業」、「クラスタの発展の状態」、「海外直接投資の純流入額」は全ての報告書で用いられている。なお、「地域競争の激しさ」は、「7.競争力」→「5:ビジネスの洗練度」→「4:市場の洗練度」と移動しつつ、全ての報告書で用いられている。

「ビジネスの洗練度」はその中身を色々と変化させてきた中位分類であるといえる。

【図表 2-6】(E)中位分類 5

ビジネスの洗練度 GII2008-2009~GII2013						
No.		GI2008 -2009	GI2009 -2010	GI2011	GI2012	GI2013
5-1	安全なインターネットサーバー(100万人当たり)	○				
5-2	ICT支出(GDPの割合)	○				
5-3	電子政府対応指標	○				
5-4	製造輸入(商品輸入の割合)	○				
5-5	技術意識	○				
5-6	企業レベルの技術吸収	○				
5-7	政府調達と革新	○				
5-8	地域サプライヤの質	○				
5-9	顧客志向の度合い	○				
5-10	ビジネスでのインターネット利用の範囲	○				
						→「3:ICTとインフラストラクチャの取り込み」へ
5-11	地域競争の激しさ		○			
						←「7:競争力」から →
						→「4:市場の洗練度」へ
5-12	研究開発に対する企業支出	○	○			
5-13	知識集約型サービスの雇用					
						←「6:科学的生産」から →
5-14	公的研究開発費のGDP比率		○			
5-15	正式な研修を提供する企業					
						←「2:人的能力」から →
5-16	FDIおよび技術移転	○	○			
5-17	企業によって使用される研究開発費				○	○
5-18	企業によって資金提供される研究開発費				○	○
5-19	GMAT平均スコア				○	○
5-20	GMATテスト受験者				○	○
5-21	産学研究連携	○	○	○	○	○
5-22	クラスタの発展の状態		○	○	○	○
5-23	海外で資金提供される研究開発費				○	○
5-24	革新の文化					
						←「2:人的能力」から →
5-25	合併企業/戦略提携取引				○	○
5-26	3極パテントファミリー					○
5-27	海外発明者を含む特許の割合				○	○
5-28	ロイヤリティおよびライセンス料の支払い				○	○
						←「7:創造的な生産および福利厚生」から →
5-29	加重平均貿易関税率		○			
						→「4:市場の洗練度」へ
5-30	ハイテク輸入				○	○
5-31	コンピュータおよび通信サービスの輸入				○	○
5-32	海外直接投資の純流入額				○	○
						←「4:市場の洗練度」から →
	総計	13	8	13	15	15

注:緑字は指数データ、青字は定性データ、黒字は定量データ。

資料:INSEAD、「GI2008-2009」、「GI2009-2010」、「GI2011」、「GI2012」、「GI2013」

2.6.6 知識と技術の生産

図表 2-6(F)は、各年報告書の中位分類 6 をまとめたものである。中位分類名は「知識」から「科学的生産」、「知識と技術の生産」と変化している。GII2008-2009 の個別指標は定性データが多く、GII2009-2010 以降は定量データが増えている。論文数や特許数を用い始めたのは、「科学的生産」になった GI2011 からである。また、「ハイテク輸出」や「製造輸出」といった個別指標は「知識」の時からあったが、ハイテクだけでなくミディアムテクが加わったり、PCT や実用新案も用いられ始めたりしている。

【図表 2-6】(F)中位分類 6

知識 GI2008-2009						
科学的生産 GI2009-2010~GI2011						
知識と技術の生産 GI2012~GI2013						
No.		GI2008 -2009	GI2009 -2010	GI2011	GI2012	GI2013
6-1	ハイテク輸出(現在の米ドル)	○				
6-2	製造輸出(商品輸出の割合)	○				
6-3	保険および金融サービス(商業サービス輸出の割合)	○				
6-4	ICT輸出	○				
6-5	イノベティブな企業の存在	○				
6-6	地域のプロセス設備の利用可能性	○				
6-7	バリューチェーンの存在	○				
6-8	居住者の国内特許庁での特許出願		○	○	○	○
6-9	居住者のPCT(公開特許協力条約)出願			○	○	○
6-10	居住者の国内特許庁での実用新案の出願			○	○	○
6-11	地域の専門研究および研修サービスの利用可能性	○	○			
6-12	科学技術論文		○	○	○	○
6-13	イノベーション能力	○	○			
6-14	引用可能な文書 Hインデックス					○
6-15	労働人口1人当たりのGDPの成長率			○	○	○
6-16	生産プロセスの洗練度	○	○			
6-17	新規事業の密度		○	○	○	○
6-18	労働生産性の成長率		○			
6-19	コンピュータソフトウェア支出の計			○	○	○
6-20	工業付加価値		○			
6-21	ISO 9001品質認証				○	○
6-22	知識集約型サービスの雇用(労働力の割合)		○			
6-23	ハイテクとミディアムテクの生産量					○
6-24	製造輸出の割合としてのハイテク輸出(現在の米ドル)		○			
6-25	ロイヤリティおよびライセンス料の受け取り			○	○	○
6-26	ハイテク輸出(再輸出を差し引いたもの)			○	○	○
6-27	起業:総ビジネス密度		○			
6-28	コンピュータおよび通信サービスの輸出			○	○	
6-29	コンピュータおよび情報通信サービスの輸出					○
6-30	海外直接投資の純流出額			○	○	○
	総計	10	11	11	12	14

注: 緑字は指数データ、青字は定性データ、黒字は定量データ。

資料: INSEAD, 「GI2008-2009」、「GI2009-2010」、「GI2011」、「GI2012」、「GI2013」

2.6.7 創造的な生産

図表 2-6(G)は、各年報告書の中位分類 7 をまとめたものである。中位分類名は「競争力」から「創造的な生産および福利厚生」を経て、「創造的な生産」となっている。

GII2008-2009 の「7:競争力」では定性データが半数近くあったが、GII2009-2010 からは定量データが増え始めた。また、個別指標の数自体は GII2012 から増加した。なお、GII2008-2009 で用いられた個別指標は全てが GII2009-2010 以降用いられておらず、中位分類 7 については、テーマが大きく変更した箇所であると考えられる。

【図表 2-6】(G)中位分類 7

競争力 GII2008-2009
 創造的な生産および福利厚生 GII2009-2010
 創造的な生産 GII2011～GII2013

No.		GII2008 -2009	GII2009 -2010	GII2011	GII2012	GII2013
7-1	商品の輸出 (BoP、現在の米ドル)	○				
7-2	サービスの輸出 (BoP、現在の米ドル)	○				
7-3	商業サービスの輸出 (現在の米ドル)	○				
7-4	製品の輸出 (現在の米ドル)	○				
7-5	地域売上の範囲	○				
7-6	革新的な製品の存在	○				
7-7	国際市場の広さ	○				
7-8	地域競争の激しさ	○	→ 「5:ビジネスの洗練度」へ			
7-9	居住者の国内特許庁の商標登録		○	○	○	○
7-10	創造的な製品とサービス		○			
7-11	ロイヤリティ		○	→ 「5:ビジネスの洗練度」へ		
7-12	居住者によるマドリッド協定の商標登録			○	○	○
7-13	ICTおよびビジネスモデルの創出			○	○	○
7-14	創造産業の輸出収益		○			
7-15	ICTおよび組織モデルの創出			○	○	○
7-16	Gini指標		○			
7-17	娯楽および文化の消費			○	○	
7-18	視聴覚(オーディオ)と関連したサービス輸出					○
7-19	1人当たりのGDP		「8:豊かさ」から →	○		
7-20	国内フィーチャー映画制作数			○	○	○
7-21	日刊新聞の発行部数			○	○	○
7-22	創造的な商品の輸出			○	○	○
7-23	印刷物と出版物のアウトプット(製造業の輸出)					○
7-24	創造的なサービスの輸出			○	○	
7-25	ジェネリックトップレベルドメイン(gTLD)				○	○
7-26	国コードトップレベルドメイン(ccTLD)				○	○
7-27	ウィキペディアの毎月の編集数				○	○
7-28	YouTubeのビデオ・アップロード				○	○
	総計	8	6	9	13	13

注: 緑字は指数データ、青字は定性データ、黒字は定量データ。

資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

2.6.8 豊かさ

GII2008-2009は他の報告書より一つ中位分類が多く、8つまでである。図表2-6(F)は、「8:豊かさ」をまとめたものである。中位分類8は7つの個別指標すべてが定量データである。また、そのうち3つが他の中位分類に移動している。その移動先はイノベーションインプットの中位分類へ移動したものが1つ、イノベーションアウトプットの中位分類へ移動したものが2つある。

【図表2-6】(F)中位分類8

No.		GII2008 -2009	GII2009 -2010	GII2011	GII2012	GII2013
8-1	公開株式の市場価値	○				
8-2	GDP成長(年間%)	○				
8-3	1人当たりのGDP	○				
8-4	工業付加価値(現在の米ドル)	○	→			
8-5	サービスなどの付加価値(現在の米ドル)	○	→			
8-6	1人当たりのPPP最終消費支出(現在の米ドル)	○				
8-7	電力消費(1人当たりkWh)	○	→			
	総計	7				

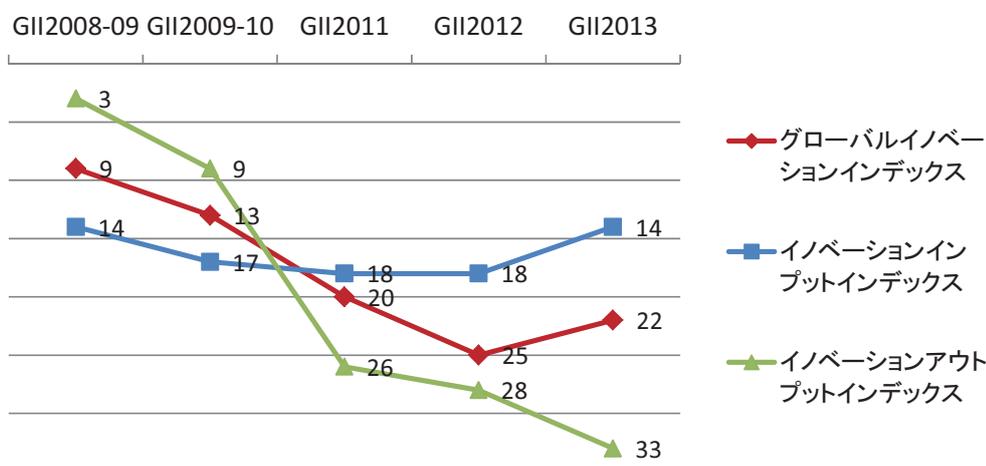
注: 緑字は指数データ、青字は定性データ、黒字は定量データ。
資料: INSEAD, 「GII2008-2009」

3. 日本のランキング

3.1 日本の総合ランキングの推移

過去5回分の調査対象国・地域の順位を見ると(図表3-1)、グローバルイノベーションインデックスにおける日本の順位は、GII2008-2009では9位であったがGII2013では22位となった。また、イノベーションインプットとイノベーションアウトプットに分類して順位を見ると、イノベーションインプットインデックスでは大きな変化はなく、GII2013では14位である。一方、イノベーションアウトプットインデックスについては、日本のGII2008-2009では3位と高い順位にあったが、その後、下がり続けGII2013では33位となっている。

【図表3-1】日本の総合ランキングの推移

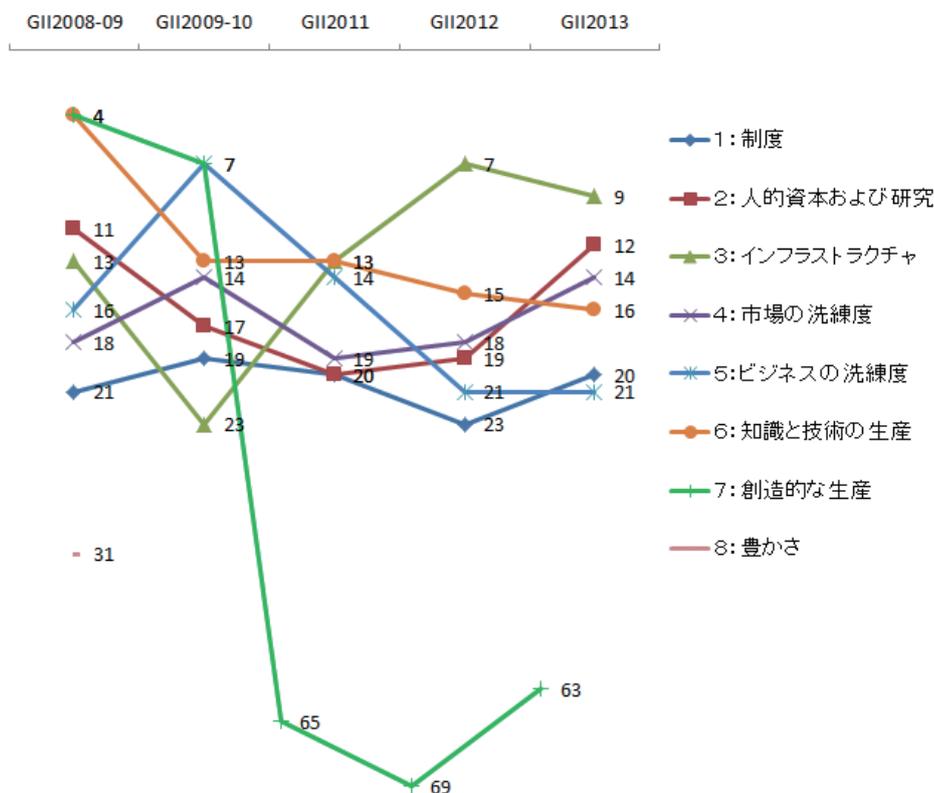


資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

3.2 日本の中位分類ランキングの推移

中位分類別でのランキングの推移を見ると(図表 3-2)、日本の順位に最も大きな変化があったのは「7:創造的な生産」であり、GII2009-2010 から GII2011 にかけて大きく順位を下げているのが見える。1 から6 までの中位分類を見ると、「3:インフラストラクチャ」の順位は上昇傾向にあり、「6:知識と技術の生産」や「5:ビジネスの洗練度」の順位は下降傾向にある。また、「1:制度」は比較的变化が少なく、一方、「2:人的資本および研究」や「4:市場の洗練度」の順位は GII2011 でいったん下がり、その後順位を上げている。

【図表 3-2】日本の中位分類別ランキングの推移



注: 中位分類名は GII2013 を使用。「豊かさ」については GII2008-2009 を使用。
資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

3.3 日本の中位分類別の個別指標ランキング

中位分類のランキングは各個別指標のランキングに影響される故、個別指標のランキングに着目する。以下に日本の中位分類別個別指標の順位を示した。なお、図表の形態は図表 2-6 に準じている。

3.3.1 制度

中位分類 1 での順位は比較的变化が少ない。GII2008-2009 では「GDP 割合としての研究開発支出」や「イノベーションの過去の実績」といった指標の順位が高い。比較的低いのは「銀行の健全性」である。GII2009-2010 の順位は極端に高低が飛び抜けているものはなく、GII2011 では「合計税率」が低い。一方、GII2012、GII2013 では、「余剰人員コスト」や「破産処理の容易さ」が 1 位と極めて高い指標があり、また「納税の容易さ」は 80 番台と比較的低い。なお、「起業の容易さ」は GII2008-2009 と GII2009-2010 での順位に大きな変化があり、その後順位も下がっている。元データは World Bank の“Doing business”を用い、データソースは共通である(図表 3-3(A))。

【図表 3-3】中位分類別個別指標での日本の順位

(A) 中位分類 1

制度 GII2008-2009～GII2013

No.		GII2008 -2009	GII2009 -2010	GII2011	GII2012	GII2013
1-1	政治的な安定と暴力/テロが存在しないこと	12	26	15	23	21
1-2	許可の処理: 期間(日数)	35				
1-3	意見および説明責任	25				
1-4	腐敗管理	n/a				
1-5	ICT関連法規	12				
1-6	法的枠組み	31				
1-7	銀行の健全性	75				
1-8	イノベーションの過去の実績	4				
1-9	GDPの割合としての研究開発支出	4	→「2: 人的資本及び研究」へ			
1-10	政府の効果	n/a	21	22	21	23
1-11	報道の自由		17	11	21	44
1-12	法的システムの効率		30			
1-13	規制の質	24	25	29	30	35
1-14	政府規制の負担	13	22			
1-15	法規制	n/a		21	22	23
1-16	監査および報告基準の強さ		37			
1-17	雇用の硬直性		「2: 人的能力」から →		33	
1-18	余剰人員削減コスト				1	1
1-19	起業の容易さ	22	64	81	80	77
1-20	起業のコスト			57		
1-21	破産処理の容易さ				1	1
1-22	合計税率			93		
1-23	知的財産保護	20	19			
1-24	納税の容易さ				84	85
	順位	21	19	20	23	20

注: 緑字は指数データ、青字は定性データ、黒字は定量データ。

資料: INSEAD、「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

3.3.2 人的資本および研究

中位分類 2 での順位はいったん落ち込んでその後高くなっている。GII2008-2009 では「科学研究機関の質」が 2 位であり、他にも経営学部や教育システムの質といった指標の順位が高かったが、GII2009-2010 や GI2011 では、その指標は、ほとんどが移動、もしくは無くなっている。

最も順位が落ち込んだ GI2011 では、単発で用いられている「科学分野における高等教育機関卒業生」、「高等教育機関在籍者における海外へ行く留学生」の順位が低い。また、「教育に対する支出」や「高等教育を受ける人口における海外へ行く留学生」も順位が下がった指標である。一方で、GI2011 から入った「読み書き、数学、および科学の評価」や「R&D に対する総支出」は、順位の高い指標である（図表 3-3(B)）。

【図表 3-3】(B)中位分類 2

人的能力 GI2008-2009～GI2009-2010
人的資本および研究 GI2011～GI2013

No.		GI2008 -2009	GI2009 -2010	GI2011	GI2012	GI2013
2-1	教育に対する支出	68	91	90	98	n/a
2-2	識字率、大人合計(15歳以上の割合)	n/a				
2-3	15～64歳の年齢構成	49				
2-4	雇用労働者：雇用の硬直性指標	6				
2-5	革新の文化	18				
2-6	頭脳流出	83				
2-7	ロールモデルとしての起業家	15				
2-8	電子参加指標	16				
2-9	純移住率	n/a				
2-10	生徒1人当たりの教育に対する公共支出			49	56	43
2-11	社員研修の範囲	62	5			
2-12	平均教育期間			34	31	32
2-13	読み書き、数学、および科学の評価			6	6	6
2-14	生徒と教師の割合、中等教育			43	45	40
2-15	教育システムの質	7	31			
2-16	経営学部の質	6	76			
2-17	高等教育機関における学生		29	32	36	36
2-18	科学分野における高等教育機関卒業生			85		
2-19	科学および工学分野の卒業生				53	44
2-20	工学分野における高等教育機関卒業生			14		
2-21	高等教育機関在籍者における外国人留学生			41	41	39
2-22	高等教育を受ける人口における海外へ行く留学生			67	89	88
2-23	高等教育機関在籍者における海外へ行く留学生			99		
2-24	研究者		4	8	6	9
2-25	R&Dに対する総支出 (GERD)			4	4	5
2-26	科学者および工学者の利用可能性	5	2			
2-27	科学研究機関の質	2	15		11	
2-28	高い質の研究機関			15		
2-29	トップ3大学のQS大学ランキングでの平均スコア					7
	順位	11	17	20	19	12

注：緑字は指数データ、青字は定性データ、黒字は定量データ。

資料：INSEAD、「GI2008-2009」、「GI2009-2010」、「GI2011」、「GI2012」、「GI2013」

3.3.3 インフラストラクチャ

中位分類3での順位は上昇傾向にある。GII2008-2009では「総資本形成」、「テレビのある家庭(%)」といった指標の順位が高かった。しかしながらGII2011から再び使用されている「総資本形成」は、極端に低い順位となっている。これは、GII2008-2009では「総資本形成」を実額(米ドル)で見っていたのに対し、GII2011からはGDPあたりで「総資本形成」を見ているためである。また、GII2013で比較的順位の高い指標は「政府のオンラインサービス」、「物流のパフォーマンス」といったところである(図表3-3(C))。

【図表3-3】(C) 中位分類3

一般およびICTインフラストラクチャ GI2008-2009
ICTとインフラストラクチャの取り込み GI2009-2010
インフラストラクチャ GI2011~GI2013

No.		GI2008 -2009	GI2009 -2010	GI2011	GI2012	GI2013
3-1	国際インターネット帯域幅(1人当たりのビット数)	33				
3-2	テレビのある家庭(%)	2				
3-3	通信への合計年間投資(1,000人当たりの米ドル)	n/a				
3-4	学校でのインターネットアクセス	28				
3-5	インターネットプロバイダ部門の競争の質	6				
3-6	国内の主要ビジネス中核圏への交通機関	9				
3-7	住民100人当たりのブロードバンド登録者数	18	21			
3-8	ICTアクセス			25	26	16
3-9	住民100人当たりの携帯電話登録者数	58	71			
3-10	ICT利用			4	5	16
3-11	政府のオンラインサービス			13	9	9
3-12	住民100人当たりの主要(固定)電話回線	32	32			
3-13	オンライン電子参加			6	11	11
				「2: 人的能力」から →		
3-14	全体的なインフラストラクチャの質	15	17			
3-15	発電量			21	20	20
3-16	電力消費量			17	20	21
				「7: 競争力」から →		
3-17	物流のパフォーマンス					8
3-18	貿易および輸送関連インフラストラクチャ			5	5	
3-19	エネルギー利用における再生可能エネルギーの割合			91		
3-20	総資本形成	1		70	88	89
3-21	インターネットユーザー(100人当たり)	10	12			
3-22	エネルギー利用の単位当たりGDP			36	35	30
3-23	パーソナルコンピュータ(100人当たり)	11	n/a			
3-24	環境のパフォーマンス				23	23
3-25	ICTおよび政府の生産性		77			
3-26	ISO 14001環境認証				11	16
3-27	生態面のフットプリントおよび生物学的受容能力			109		
3-28	ビジネスでのインターネット利用の範囲			10		
				「5: ビジネスの洗練度」から →		
	順位	13	23	13	7	9

注: 緑字は指数データ、青字は定性データ、黒字は定量データ。

資料: INSEAD, 「GI2008-2009」、「GI2009-2010」、「GI2011」、「GI2012」、「GI2013」

3.3.4 市場の洗練度

中位分類 4 での順位は GII2011 でいったん下がり、その後、上げている。個別指標を見ると GII2008-2009 から GII2011 まで、「信用情報の詳細さ」が 1 位と強かったが、GII2011 を最後に使用されていない。また、「民間部門への国内信用」も順位は、GII2008-2009 では 2 位であったが、GII2013 では 10 位となった。

最も順位の落ち込んだ GII2011 では「商品とサービスの輸入」、「商品とサービスの輸出」がかなり低い順位である。ただし、この二つは GII2012 を最後に使用されていない。また、GII2012 から「非農業輸出の市場アクセス」が加わったが、この指標もかなり低い順位である。なお、「地域競争の激しさ」は GII2011 から使用され、順位を上げており、GII2013 では 2 位と順位の高い指標となった。また、「適用された関税率、加重平均」も順位の高い指標である(図表 3-3(D))。

【図表 3-3】(D)中位分類 4

市場の洗練度 GII2008-2009～GII2013						
No.		GI2008 -2009	GI2009 -2010	GI2011	GI2012	GI2013
4-1	総民間資本流入額(GDPの割合)	n/a				
4-2	経済特性: 非公式な経済推定(GNPの割合)	8				
4-3	地域株式市場へのアクセス	9				
4-4	貿易障壁の存在	53				
4-5	海外所有の制限	70				
4-6	信用の獲得 - 法的権利指標	5	35			
4-7	信用のための法的権利の強さ			37		
4-8	信用獲得の容易さ				21	22
4-9	信用情報の詳細さ	1	1	1		
4-10	民間部門への国内信用	2	11	6	12	10
4-11	マイクロファイナンス機関の総融資ポートフォリオ			n/a	n/a	n/a
4-12	金融市場の洗練度	37	43			
4-13	ベンチャーキャピタルの利用可能性	38	53			
4-14	投資家保護の容易さ	8	15	16	16	21
4-15	マイクロファイナンス機関(MFI): 債務者当たりの平均融資残高/1人当たりのGNI		n/a			
4-16	市場の資本化			29	31	26
4-17	公開株の合計価格			15	12	13
4-18	地域の株式市場による資金調達		30			
4-19	ベンチャーキャピタル取引			60	53	30
4-20	海外直接投資の純流入額(BoP、現在の米ドル)	n/a	102	→「5:ビジネスの洗練度」へ		
4-21	適用された関税率、加重平均			38	10	10
4-22	市場アクセス貿易制限			33		
4-23	非農業輸出の市場アクセス				130	132
4-24	商品とサービスの輸入			124	140	
4-25	商品とサービスの輸出			119	130	
4-26	地域競争の激しさ			「5:ビジネスの洗練度」から→		
	順位	18	14	19	18	14

注: 緑字は指数データ、青字は定性データ、黒字は定量データ。

資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

3.3.5 ビジネスの洗練度

中位分類5での順位は下降傾向にある。個別指標では、GII2008-2009での「顧客志向の度合い」が2位と順位が高く、他にも高い指標があったが、そのほとんどが次年では使用されなくなっている。しかしながらGII2009-2010から使用され始めた「クラスタの発展の状態」やGII2011から使用され始めた「企業によって資金提供される研究開発費」の指標の順位は一貫して高い。GII2013から使用された「3 極パテントファミリー」も順位の高い指標である。また、「ロイヤリティおよびライセンス料の支払い」は順位を上げている。一方、「海外直接投資の純流入額」についてはその順位をどんどん下げている(図表3-3(E))。

【図表3-3】(E) 中位分類5

ビジネスの洗練度 GI2008-2009～GI2013

No.		GI2008 -2009	GI2009 -2010	GI2011	GI2012	GI2013
5-1	安全なインターネットサーバー(100万人当たり)	15				
5-2	ICT支出(GDPの割合)	12				
5-3	電子政府対応指標	10				
5-4	製造輸入(商品輸入の割合)	5				
5-5	技術意識	14				
5-6	企業レベルの技術吸収	4				
5-7	政府調達と革新	23				
5-8	地域サプライヤの質	4				
5-9	顧客志向の度合い	2				
5-10	ビジネスでのインターネット利用の範囲	7				
				→「3:ICTとインフラストラクチャの取り込み」へ		
5-11	地域競争の激しさ		8			
				→「7:競争力」から →「4:市場の洗練度」へ		
5-12	研究開発に対する企業支出	7	2			
5-13	知識集約型サービスの雇用			25	25	40
				「6:科学的生産」から →		
5-14	公的研究開発費のGDP比率		4			
5-15	正式な研修を提供する企業			n/a	n/a	n/a
				「2:人的能力」から →		
5-16	FDIおよび技術移転	33	56			
5-17	企業によって使用される研究開発費			4	3	4
5-18	企業によって資金提供される研究開発費			2	3	2
5-19	GMAT平均スコア				40	38
5-20	GMATテスト受験者				48	43
5-21	産学研究連携	19	20	18	15	15
5-22	クラスタの発展の状態		1	3	3	3
5-23	海外で資金提供される研究開発費			70	89	84
5-24	革新の文化		18			
				「2:人的能力」から →		
5-25	合併企業/戦略提携取引			35	34	43
5-26	3極/パテントファミリー					2
5-27	海外発明者を含む特許の割合			43	101	
				「7:創造的な生産および福利厚生」から →		
5-28	ロイヤリティおよびライセンス料の支払い			31	29	5
5-29	加重平均貿易関税率		43			
				→「4:市場の洗練度」へ		
5-30	ハイテク輸入			20	26	20
5-31	コンピュータおよび通信サービスの輸入			15	16	84
5-32	海外直接投資の純流入額			115	132	136
				「4:市場の洗練度」から →		
総計	順位	16	7	14	21	21

注:緑字は指数データ、青字は定性データ、黒字は定量データ。

資料:INSEAD、「GI2008-2009」、「GI2009-2010」、「GI2011」、「GI2012」、「GI2013」

3.3.6 知識と技術の生産

中位分類 6 での順位は下降傾向にある。個別指標を見ると、GII2008-2009 では「地域プロセス設備の利用可能性」や「生産プロセスの洗練度」が1位、「バリューチェーンの存在」が2位とそのほかにも順位の高い指標が多かったが、そのほとんどが次年で使用されなくなっている。GII2009-2010 から使用された「居住者の国内特許庁での特許出願」はGII2009-2010、GII2012 およびGII2013 で1位と順位の高い指標である。また、「居住者の PCT(公開特許協力条約)出願」も高く、「ロイヤリティおよびライセンス料の受け取り」は順位を上げ、GII2013 では2位と順位の高い指標となっている。一方で「労働人口1人当たりの GDP の成長率」は順位を下げ、GII2013 から用いられた「コンピューターおよび情報通信サービスの輸出」についてはかなり低い順位である(図表 3-3(F))。

【図表 3-3】(F) 中位分類 6

知識 GI2008-2009
科学的生産 GI2009-2010~GI2011
知識と技術の生産 GI2012~GI2013

No.		GI2008 -2009	GI2009 -2010	GI2011	GI2012	GI2013
6-1	ハイテク輸出(現在の米ドル)	13				
6-2	製造輸出(商品輸出の割合)	4				
6-3	保険および金融サービス(商業サービス輸出の割合)	20				
6-4	ICT輸出	37				
6-5	イノベティブな企業の存在	8				
6-6	地域のプロセス設備の利用可能性	1				
6-7	バリューチェーンの存在	2				
6-8	居住者の国内特許庁での特許出願		1	2	1	1
6-9	居住者のPCT(公開特許協力条約)出願			4	4	4
6-10	居住者の国内特許庁での実用新案の出願			18	23	22
6-11	地域の専門研究および研修サービスの利用可能性	10	13			
6-12	科学技術論文		20	32	31	53
6-13	イノベーション能力	6	1			
6-14	引用可能な文書 Hインデックス					6
6-15	労働人口1人当たりのGDPの成長率			86	35	106
6-16	生産プロセスの洗練度	1	1			
6-17	新規事業の密度		41	48	52	59
6-18	労働生産性の成長率		86			
6-19	コンピューターソフトウェア支出の計			35	33	42
6-20	工業付加価値			54		
6-21	ISO 9001品質認証				38	36
6-22	知識集約型サービスの雇用(労働力の割合)		25			
6-23	ハイテクとミディアムテクの生産量					8
6-24	製造輸出の割合としてのハイテク輸出(現在の米ドル)		21			
6-25	ロイヤリティおよびライセンス料の受け取り			13	12	2
6-26	ハイテク輸出(再輸出を差し引いたもの)			13	16	14
6-27	起業:総ビジネス密度		n/a			
6-28	コンピューターおよび通信サービスの輸出			11	12	
6-29	コンピューターおよび情報通信サービスの輸出					133
6-30	海外直接投資の純流出額			32	39	33
	順位	4	13	13	15	16

注: 緑字は指数データ、青字は定性データ、黒字は定量データ。

資料: INSEAD, 「GI2008-2009」、「GI2009-2010」、「GI2011」、「GI2012」、「GI2013」

3.3.7 創造的な生産

中位分類 7 での順位は下降傾向にある。GII2008-2009 で使用された個別指標はそのほとんどが順位の高い指標であったが、次年になると使用されていない。GII2009-2010 では使用されている指標数が少ない。順位の高い指標もあったが、GII2011 では使用されていない。このように GI2009-2010 以前と GI2011 以後では、用いられている指標に大きく乖離があり、この中位分類での順位の変動は、用いられている個別指標の変化による影響があったと考えられる。なお、GII2009-2010 から用いられている指標もあるが、その「居住者の国内特許庁の商標登録」は順位を大幅に下げている。GII2012 以降で順位の高い指標は「日刊新聞の発行部数」であり、GII2013 では 1 位となっている。その他の指標では順位が高いにしろ、低いにしろ突出した指標もなく、GII2012 から用いられたその他の指標は 40 位から 50 位程度の順位をつけられている指標が多い(図表 3-3(G))。

【図表 3-3】(G) 中位分類 7

競争力 GI2008-2009
創造的な生産および福利厚生 GI2009-2010
創造的な生産 GI2011~GI2013

No.		GII2008 -2009	GII2009 -2010	GII2011	GII2012	GII2013
7-1	商品の輸出 (BoP、現在の米ドル)	4				
7-2	サービスの輸出 (BoP、現在の米ドル)	5				
7-3	商業サービスの輸出 (現在の米ドル)	5				
7-4	製品の輸出 (現在の米ドル)	4				
7-5	地域売上の範囲	9				
7-6	革新的な製品の存在	14				
7-7	国際市場の広さ	6				
7-8	地域競争の激しさ	3				
7-9	居住者の国内特許庁の商標登録		32	68	87	93
7-10	創造的な製品とサービス		45			
7-11	ロイヤリティ		8			
7-12	居住者によるマドリッド協定の商標登録			42	40	41
7-13	ICTおよびビジネスモデルの創出			24	52	26
7-14	創造産業の輸出収益		48			
7-15	ICTおよび組織モデルの創出			43	40	49
7-16	Gini指標		2			
7-17	娯楽および文化の消費			9	10	
7-18	視聴覚(オーディオ)と関連したサービス輸出					50
7-19	1人当たりのGDP					
7-20	国内フィーチャー映画制作数			20	23	31
7-21	日刊新聞の発行部数			n/a	2	1
7-22	創造的な商品の輸出			73	83	23
7-23	印刷物と出版物のアウトプット(製造業の輸出)					34
7-24	創造的なサービスの輸出			87	99	
7-25	ジェネリックトップレベルドメイン(gTLD)				41	33
7-26	国コードトップレベルドメイン(ccTLD)				48	48
7-27	ウィキペディアの毎月の編集数				43	46
7-28	YouTubeのビデオ・アップロード				46	47
	順位	4	7	65	69	63

注: 緑字は指数データ、青字は定性データ、黒字は定量データ。

資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

3.3.8 豊かさ

中位分類8はGII2008-2009のみであり、そこでの日本の順位は31位である。また、7つあるうちの2つはデータがないが、「工業付加価値(現在の米ドル)」は63ヶ国、「サービスなどの付加価値(現在の米ドル)」の指標については130ヶ国すべてについてデータがない(図表3-3(F))。

【図表3-3】(F) 第8中位分類

豊かさ GI2008-2009						
No.		GI2008 -2009	GI2009 -2010	GI2011	GI2012	GI2013
8-1	公開株式の市場価値	32				
8-2	GDP成長(年間%)	60				
8-3	1人当たりのGDP	23	→ 「7: 創造的な生産および福利厚生」へ			
8-4	工業付加価値(現在の米ドル)	n/a	→ 「6: 科学的生産」へ			
8-5	サービスなどの付加価値(現在の米ドル)	n/a				
8-6	1人当たりのPPP最終消費支出(現在の米ドル)	23				
8-7	電力消費(1人当たりkWh)	17	→ 「3: ICTとインフラストラクチャの取り込み」			
	順位	31	-	-	-	-

注: 緑字は指数データ、青字は定性データ、黒字は定量データ。

資料: INSEAD, 「GI2008-2009」

4. INSEAD GII における各国・地域の「強み」と「弱み」のつけ方

INSEAD GII では、各国・地域の各指標に「強み：●」と「弱み：○」のマークが GII2012 から示されている。ただし、以下に示すように、ここでいう「強み」、「弱み」は、国・地域ごとに決められており、国・地域間の比較には意味がないと言える。「強み」、「弱み」の示し方は次のように決められている。

①各指標(GII2013 の場合 84)における国・地域の得点をパーセントランクで表す。②各指標のパーセントランクを国・地域ごとに集計し、その各国・地域内における上位 10%を「強み」、下位 10%を「弱み」としている。ここで上位 10%に入るパーセントランクを A、下位 10%に入るパーセントランクを B とする。③下位分類、中位分類、その他上位分類についても、それぞれについて世界におけるパーセントランクを導き出し、A に含まれるものは「強み」、B に含まれるものは「弱み」としている。

これからわかるように、INSEAD GII における「強み」、「弱み」は、国・地域内での基準である。各指標における得点がそれなりに高くても、その国・地域内での他の指標がそれ以上のレベルであった場合は、必ずしも「強み」となるとは限らない。

図表 4-1 は、GII2013 における主要国の「強み」と「弱み」を示したものである。

これを見ると、日本の場合は、中位分類自体に「強み：●」、「弱み：○」が記されていない。ただし、「ビジネスの洗練度」及び「知識と技術の生産」の中の指標を見ると「強み：●」が4つと多いが、「弱み：○」もある。一方、「創造的な生産」での指標には「弱み：○」が3つ、「強み：●」が1つある。なお、「イノベーション効率割合」には「弱み：○」がついている。この「イノベーション効率割合」とは、「より少ないリソースで多くのことを達成した」経済及びイノベーションの可能性と実現という点で遅れをとっている経済を示している。

米国は、中位分類である「ビジネスの洗練度」や「市場の洗練度」自体に「強み：●」が記されており、それらが米国内での「強み」であるといえる。また、米国は「イノベーションインプットインデックス」の項目のみに「強み：●」が記されている。そのせいか「イノベーション効率割合」には「弱み：○」が記されている。

ドイツ、フランスについては中位分類への印は記されていない。ドイツでは、「インフラストラクチャ」、「知識と技術の生産」での指標を見ると「強み：●」が4つと多く、一方、「市場の洗練度」での指標では「弱み：○」が3つある。フランスでは「知識と技術の生産」での指標において「強み：●」、「弱み：○」ともに3つあり、この中位分類における指標での「強み」、「弱み」のばらつきがある。

イギリスでは、「インフラストラクチャ」、「市場の洗練度」に「強み：●」が記されており、これらの中位分類がイギリス内での「強み」であるといえる。また、イギリスは「グローバルイノベーションインデックス」、「イノベーションアウトプットインデックス」、「イノベーションインプットインデックス」に「強み：●」が記されており、全体的に「強み」があるといえるが、「イノベーション効率割合」については「弱み：○」が記されている。

中国では、「知識と技術の生産」の中位分類に「強み：●」が記されており、ここが中国内での「強み」であるといえる。一方、中位分類には記されていないが、「制度」における指標には「弱み：○」が5つあり、ここは中国内で弱い箇所であると考えられる。

韓国では、「人的資本および研究」、「インフラストラクチャ」の中位分類に「強み：●」が記されており、この箇所が韓国内で「強み」であるといえる。また、「イノベーション効率割合」には「弱み：○」が記されている。

【図表 4】GI2013 における主要国の「強み」と「弱み」

(A) 全体

	日本	米国	ドイツ	フランス	イギリス	中国	韓国
グローバルイノベーションインデックス					●		
イノベーションアウトプットインデックス					●		
イノベーションインプットインデックス		●			●		
イノベーション効率割合	○	○			○		○

(B) イノベーションインプットインデックス

	日本	米国	ドイツ	フランス	イギリス	中国	韓国
1 制度							
政治的な環境							
政治的な安定と暴力/テロが存在しないこと						○	
政府の効果						○	
報道の自由						○	
規制環境							
規制の質						○	
法規制						○	
余剰人員削減コスト			○			○	○
ビジネス環境							
起業の容易さ			○			○	
破産処理の容易さ	●						
納税の容易さ							●
2 人的資本および研究							
教育							
教育に対する支出							
生徒1人当たりの教育に対する公共支出							
平均教育期間							
読み書き、数学、および科学の評価						●	
生徒と教師の割合、中等教育					○		○
高等教育							
高等教育機関における学生		●					○
科学および工学分野の卒業生		○					○
高等教育機関在籍者における外国人留学生		○				○	
高等教育を受ける人口における海外へ行く留学生	○	○			○		
研究開発(R&D)							
研究者	●	●					●
R&Dに対する総支出 (GERD)							●
トップ3大学のQS大学ランキングでの平均スコア		●	●	●	●		●
3 インフラストラクチャ							
情報通信技術(ICTs)							
ICTアクセス							●
ICT利用			●		●		●
政府のオンラインサービス		●	●	●	●		●
オンライン電子参加							●
一般インフラストラクチャ							
発電量							
電力消費量							
物流のパフォーマンス			●				
総資本形成	○	○	○		○	●	
環境持続可能性							
エネルギー利用の単位当たりGDP						○	○
環境のパフォーマンス				●		○	
ISO 14001環境認証		○					
4 市場の洗練度							
信用							
信用獲得の容易さ		●			●		
民間部門への国内信用					●		
マイクロファイナンス機関の総融資ポートフォリオ							
投資							
投資家保護の容易さ		●			●		
市場の資本化			○	○			
公開株の合計価格							●
ベンチャーキャピタル取引		●		●			
貿易および競争							
適用された関税率、加重平均							○
非農業輸出の市場アクセス	○		○	○	○	○	○
地域競争の激しさ	●		●		●		
5 ビジネスの洗練度							
知識労働者							
知識集約型サービスの雇用				●	●	○	
正式な研修を提供する企業			○			●	
企業によって使用される研究開発費						●	●
ビジネス企業によって資金提供されるGERD	●				○	●	●
GMAT平均スコア						●	
GMATテスト受験者		●					
技術革新の関連性							
産学研究連携		●			●		
クラスターの発展の状態	●	●	●		●		
海外で資金提供されるGERD	○		○	○		○	○
合併企業/戦略提携取引							
3極パテントファミリー	●			●			●
知識の吸収							
ロイヤリティおよびライセンス料の支払い	●					●	
ハイテク輸入							○
コンピュータおよび通信サービスの輸入	○						○
海外直接投資の純流入額	○	○	○	○	○		○

(C)イノベーションアウトプットインデックス

	日本	米国	ドイツ	フランス	イギリス	中国	韓国
6 知識と技術の生産						●	
知識の創出			●			●	●
居住者の国内特許庁の特許出願	●		●			●	●
居住者のPCT(公開特許協力条約)出願	●						
居住者の国内特許庁での実用新案の出願				○			
科学技術論文							
引用可能な文書 Hインデックス	●	●	●	●	●		
知識の影響							
労働人口1人当たりのGDPの成長率	○	○	○	○	○	●	
新規事業の密度			○				
合計コンピュータソフトウェア支出		●					
ISO 9001品質認証		○					
ハイテクとミディアムテクの生産量			●				
知識の普及							
ロイヤリティおよびライセンス料の受け取り	●			●			
ハイテク輸出				●		●	
コンピュータおよび通信サービスの輸出	○	○		○	○		○
海外直接投資の純流出額							
7 創造的な生産							
無形資産	○	○					
居住者の国内特許庁の商標登録	○	○		○	○		
居住者によるマドリッド協定の商標登録		○			○		○
ICTおよびビジネスモデルの創出				●	●		●
ICTおよび組織モデルの創出					●		
創造的な財とサービス							
視聴覚(オーディオ)と関連したサービス輸出	○						
国内フィーチャー映画制作数						○	
日刊新聞の発行部数	●						
創造的な商品の輸出			○	○		○	○
印刷物と出版物のアウトプット(製造業の輸出)						●	
オンライン創造					●	○	
ジェネリックトップレベルドメイン(.gTLD)		●					
国コードトップレベルドメイン(.ccTLD)			●				
ウィキペディアの毎月の編集数						○	
YouTubeのビデオ・アップロード		●				○	

注: ●は「強み」、○は「弱み」を表す。イノベーション効率割合は「イノベーションアウトプットインデックス/イノベーションインプットインデックス」の比率である。

資料: INSEAD, 「GI2013」

5. 調査結果のまとめ

- INSEAD の GII (The Global Innovation Index) には、イノベーションインプット及びイノベーションアウトプットという二つの視点から集めた様々な指標があり、国・地域の国際競争力ランキング (グローバルイノベーションインデックス) が示されている。
- 調査対象国・地域数は GII2008-2009 では 130 であったが、GII2013 では 142 に増加している。また、各国・地域を大陸別に割合で見ると、最も大きいのはヨーロッパである。
- イノベーションインプットとイノベーションアウトプットの指標数の割合は、おおむね 7 対 3 である。
- 中位分類別の指標数割合は、GII2008-2009 から GII2011 までは様々な変化があったが、GII2012 からはその変化は少ない。
- GII で用いられている指標の種類は、GII2008-2009 では定性データが 46%、定量データが 40%、指数データが 14% であったが、GII2013 では定量データが 71% と増加し、定性データの割合は 6%、指数データは 23% となり、用いられる指標の性質が大きく変化している。
- 各個別指標は年によって属する中位分類を移動している場合がある。属している指標の変化が多い中位分類は「5: ビジネスの洗練度」である。一方、属している指標の変化が少ないのは「1: 制度」、「4: 市場の洗練度」である。
- グローバルイノベーションインデックスにおける日本の順位は、GII2008-2009 では 9 位であったが、GII2013 では 22 位となった。また、イノベーションインプットとイノベーションアウトプットに分類した順位を見ると、イノベーションインプットでの順位に大きな変動はないが、イノベーションアウトプットでの順位は下降している。
- 中位分類別の日本の順位を見ると、「7: 創造的な生産」の順位は下降傾向にあり、特に GII2009-2010 から GII2011 にかけて大きく順位を下げている。他の中位分類では、「3: インフラストラクチャ」の順位は上昇傾向にあり、「5: ビジネスの洗練度」の順位は下降傾向にある。また、「6: 知識と技術の生産」の順位は GII2009-2010 にいったん下がった後は比較的安定している。一方、「2: 人的資本および研究」や「4: 市場の洗練度」の順位は GII2011 でいったん下がり、その後順位を上げている。
- 日本の場合、イノベーションアウトプットの中位分類である「7: 創造的な生産」の順位の変動は、用いられている指標の変化による影響があったと考えられる。「7: 創造的な生産」において、GII2008-2009 及び GII2009-2010 で用いられた指標での順位は高かったが、その指標は GII2011 以降ではすべて用いられておらず、新たに用いられた指標での順位は低くなっている。
- INSEAD GII が各指標につけた「強み」と「弱み」は、各国・地域内での基準であり、国・地域間の比較には意味がないと言える。各指標における得点がそれなりに高くても、その国・地域の他の指標が相対的にそれ以上のレベルであった場合は、必ずしも「強み」となるとは限らない。

參考資料

1. 調査対象国・地域のランキングの推移

【図表1】調査対象国・地域のランキング
(A)グローバルイノベーションインデックス

No.	調査対象国・地域	GII2008-09	GII2009-10	GII2011	GII2012	GII2013	No.	調査対象国・地域	GII2008-09	GII2009-10	GII2011	GII2012	GII2013
1	スイス	7	4	1	1	1	76	ベトナム	64	71	51	76	76
2	スウェーデン	3	2	2	2	2	77	ベラルーシ	—	—	—	78	77
3	イギリス	4	14	10	5	3	78	ガイアナ	103	113	61	77	78
4	オランダ	10	8	9	6	4	79	ドミニカ共和国	91	85	—	86	79
5	米国	1	11	7	10	5	80	オマーン	52	65	57	47	80
6	フィンランド	13	6	5	4	6	81	トリニダード・トバゴ	65	55	72	81	81
7	香港	12	3	4	8	7	82	ジャマイカ	73	70	92	91	82
8	シンガポール	5	7	3	3	8	83	エクアドル	109	126	93	98	83
9	デンマーク	8	5	6	7	9	84	カザフスタン	72	63	84	83	84
10	アイルランド	21	19	13	9	10	85	インドネシア	49	72	99	100	85
11	カナダ	11	12	8	12	11	86	パナマ	67	66	77	87	86
12	ルクセンブルグ	17	15	17	11	12	87	グアテマラ	81	95	86	99	87
13	アイスランド	20	1	11	18	13	88	エルサルバドル	88	91	90	93	88
14	イスラエル	23	23	14	17	14	89	ウガンダ	100	108	106	117	89
15	ドイツ	2	16	12	15	15	90	フィリピン	63	76	91	95	90
16	ノルウェー	14	10	18	14	16	91	ボツワナ	77	86	79	85	91
17	ニュージーランド	27	9	15	13	17	92	モロッコ	82	94	94	88	92
18	韓国	6	20	16	21	18	93	アルバニア	121	81	80	90	93
19	オーストラリア	22	18	21	23	19	94	ガーナ	—	105	70	92	94
20	フランス	19	22	22	24	20	95	ボリビア	123	129	112	114	95
21	ベルギー	18	17	24	20	21	96	セネガル	90	106	100	97	96
22	日本	9	13	20	25	22	97	フィジー	—	—	—	101	97
23	オーストリア	15	21	19	22	23	98	スリランカ	58	79	82	94	98
24	マルタ	38	31	—	16	24	99	ケニア	78	83	89	96	99
25	エストニア	29	29	23	19	25	100	パラグアイ	118	127	74	84	100
26	スペイン	28	30	32	29	26	101	タジキスタン	112	115	116	108	101
27	キプロス	45	32	28	28	27	102	ベリーズ	—	—	—	80	102
28	チェコ	33	27	27	27	28	103	カーボヴェルデ	127	—	—	—	103
29	イタリア	31	38	35	36	29	104	エジプト	76	74	87	103	103
30	スロベニア	36	26	30	26	30	105	スワジランド	—	—	101	82	104
31	ハンガリー	47	36	25	31	31	106	アゼルバイジャン	57	57	88	89	105
32	マレーシア	25	28	31	32	32	107	マリ	97	107	107	119	106
33	ラトビア	60	44	36	30	33	108	ホンジュラス	83	112	98	111	107
34	ポルトガル	40	34	33	35	34	109	ナミビア	95	92	78	73	109
35	中国	37	43	29	34	35	110	カンボジア	117	102	111	129	110
36	ボスニア・ヘルツェゴビナ	107	116	76	72	35	111	ガボン	—	—	—	106	111
37	スロバキア	35	37	37	40	36	112	ルワンダ	—	—	109	102	112
38	クロアチア	62	45	44	42	37	113	イラン	—	—	95	104	113
39	アラブ首長国連邦	26	24	34	37	38	114	ベネズエラ	101	124	102	118	114
40	コスタリカ	48	41	45	60	39	115	ニカラグア	114	117	110	105	115
41	リトアニア	42	39	40	38	40	116	ブルキナファソ	115	122	120	122	116
42	ブルガリア	74	49	42	43	41	117	キルギス	122	104	85	109	117
43	サウジアラビア	32	54	54	48	42	118	ザンビア	96	111	114	107	118
44	カタール	24	35	26	33	43	119	マラウイ	—	97	108	120	119
45	モンテネグロ	71	59	—	45	44	120	ナイジェリア	70	96	96	123	120
46	モルドバ	116	—	39	50	45	121	モザンビーク	125	100	—	110	121
47	チリ	39	42	38	39	46	122	ガンビア	87	110	—	130	122
48	バルバドス	53	50	—	—	47	123	タンザニア	86	98	104	128	123
49	ルーマニア	69	52	50	52	48	124	レソト	128	93	—	116	124
50	ポーランド	56	47	43	44	49	125	カメルーン	106	119	103	121	125
51	クウェート	30	33	52	55	50	126	ギニア	—	—	—	—	126
52	マケドニア	89	77	67	62	51	127	ベナン	99	118	118	125	127
53	ウルグアイ	80	53	64	67	52	128	ネパール	124	130	—	113	128
54	モーリシャス	66	73	53	49	53	129	エチオピア	120	123	121	131	129
55	セルビア	92	101	55	46	54	130	バングラデシュ	111	120	97	112	130
56	ギリシャ	54	46	63	66	55	131	ニジェール	—	—	122	140	131
57	アルゼンチン	84	75	58	70	56	132	ジンバブエ	126	131	119	115	132
58	タイ	44	60	48	57	57	133	ウズベキスタン	59	—	—	127	133
59	南アフリカ	43	51	59	54	58	134	シリア	94	132	115	132	134
60	アルメニア	104	82	69	69	59	135	アンゴラ	—	—	—	135	135
61	コロンビア	75	90	71	65	60	136	コートジボワール	—	89	117	134	136
62	ヨルダン	55	58	41	56	61	137	パキスタン	93	103	105	133	137
63	ロシア	68	64	56	51	62	138	アルジェリア	108	121	125	124	138
64	メキシコ	61	69	81	79	63	139	トーゴ	—	—	—	136	139
65	ブラジル	50	68	47	58	64	140	マダガスカル	113	125	113	126	140
66	インド	41	56	62	64	66	141	スーダン	—	—	124	141	141
67	パレーン	34	40	46	41	67	142	イエメン	—	—	123	139	142
68	トルコ	51	67	65	74	68	143	ブルンジ	130	128	—	137	—
69	ペルー	85	88	83	75	69	144	ラオス	—	—	—	138	—
70	チュニジア	46	62	66	59	70	145	台湾	16	25	—	—	—
71	ウクライナ	79	61	60	63	71	146	モリタニア	102	78	—	—	—
72	モンゴル	105	87	68	68	72	147	スリナム	110	80	—	—	—
73	グルジア	98	84	73	71	73	148	東ティモール	129	99	—	—	—
74	ブルネイ	—	48	75	53	74	149	リビア	119	109	—	—	—
75	レバノン	—	—	49	61	75	150	チャド	—	114	—	—	—
								総計	130	132	125	141	142

資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

(A)イノベーションインプットインデックス

No.	調査対象国・地域	GII2008-09	GII2009-10	GII2011	GII2012	GII2013	No.	調査対象国・地域	GII2008-09	GII2009-10	GII2011	GII2012	GII2013
1	シンガポール	5	3	1	1	1	76	モルドバ	107	—	77	79	76
2	香港	9	12	2	2	2	77	アルバニア	110	87	78	82	77
3	米国	2	5	11	9	3	78	アルゼンチン	89	85	82	76	78
4	イギリス	4	10	10	5	4	79	ナミビア	84	63	49	56	79
5	スウェーデン	3	1	5	3	5	80	チュニジア	39	56	79	64	80
6	フィンランド	11	4	6	6	6	81	トルコ	51	66	80	81	81
7	スイス	6	6	3	4	7	82	トリニダード・トバゴ	70	52	58	74	82
8	デンマーク	1	2	7	8	8	83	ウクライナ	82	73	67	78	83
9	カナダ	7	7	8	10	9	84	カーボヴェルデ	130	—	—	—	84
10	オランダ	12	11	16	15	10	85	ジャマイカ	60	62	73	77	85
11	オーストラリア	13	16	12	13	11	86	レソト	128	100	—	92	86
12	アイルランド	22	19	4	7	12	87	インド	49	54	87	96	87
13	ノルウェー	18	9	14	11	13	88	エルサルバドル	88	72	91	94	88
14	日本	14	17	18	18	14	89	ベトナム	66	77	63	83	89
15	ニュージーランド	19	13	15	12	15	90	モロッコ	77	89	86	88	90
16	韓国	8	23	17	16	16	91	グアテマラ	79	86	97	98	91
17	オーストリア	15	18	19	21	17	92	アゼルバイジャン	65	71	83	85	92
18	ルクセンブルグ	24	25	9	14	18	93	ドミニカ共和国	90	96	—	93	93
19	イスラエル	17	22	20	17	19	94	ガイアナ	103	94	75	86	94
20	ドイツ	10	14	21	23	20	95	ベリーズ	—	—	—	87	95
21	アイスランド	16	8	13	19	21	96	ホンジュラス	72	91	98	105	96
22	ベルギー	21	20	22	20	22	97	キルギス	117	103	89	90	97
23	フランス	23	21	23	22	23	98	ケニア	74	65	69	89	98
24	スペイン	28	31	29	26	24	99	ガーナ	—	92	65	91	99
25	エストニア	26	24	24	24	25	100	エクアドル	114	122	100	109	100
26	アラブ首長国連邦	31	26	25	28	26	101	エジプト	75	84	88	104	101
27	チェコ	35	30	26	31	27	102	ルワンダ	—	—	90	95	102
28	イタリア	46	47	37	34	28	103	ニカラグア	111	111	105	102	103
29	スロベニア	34	27	32	32	29	104	パラグアイ	119	114	92	103	104
30	キプロス	42	33	30	25	30	105	シリア	94	127	111	123	105
31	ポルトガル	33	32	34	33	31	106	ボリビア	126	119	109	108	106
32	マレーシア	25	29	27	29	32	107	イラン	—	—	106	97	107
33	ラトビア	50	44	38	36	33	108	フィリピン	80	98	93	106	108
34	マルタ	30	36	—	27	34	109	ウガンダ	98	102	112	121	109
35	リトアニア	37	37	39	38	35	110	タンザニア	92	101	108	117	110
36	ハンガリー	45	38	33	37	36	111	モザンビーク	123	108	—	107	111
37	スロバキア	36	42	35	40	37	112	アルジェリア	99	128	101	101	112
38	カタール	29	34	31	30	38	113	タジキスタン	109	116	120	111	113
39	ポーランド	59	46	41	41	39	114	ウズベキスタン	67	—	—	100	114
40	モンテネグロ	64	45	—	48	40	115	インドネシア	63	70	95	113	115
41	チリ	32	40	36	43	41	116	セネガル	95	90	107	114	116
42	バルバドス	40	28	—	—	42	117	ガボン	—	—	—	112	117
43	クロアチア	57	58	45	44	43	118	スリランカ	58	81	96	115	118
44	サウジアラビア	44	41	44	39	44	119	ブルキナファソ	113	115	117	120	119
45	ギリシャ	53	49	50	50	45	120	カンボジア	118	117	103	119	120
46	中国	47	67	43	55	46	121	ベナン	104	105	118	132	121
47	バーレーン	27	39	28	35	47	122	トーゴ	—	—	—	135	122
48	マケドニア	102	76	61	52	48	123	マダガスカル	112	118	104	116	123
49	モンゴル	97	95	52	53	49	124	スワジランド	—	—	85	99	124
50	ブルガリア	69	61	47	47	50	125	マラウイ	—	97	99	110	125
51	南アフリカ	38	35	40	45	51	126	エチオピア	120	124	116	124	126
52	ロシア	76	82	59	60	52	127	ガンビア	83	88	—	128	127
53	オマーン	56	48	42	42	53	128	ザンビア	96	93	94	122	128
54	ブルネイ	—	74	70	46	54	129	ネパール	124	126	—	127	129
55	ルーマニア	71	57	55	51	55	130	ニジェール	—	—	102	136	130
56	レバノン	—	—	57	62	56	131	カメルーン	121	121	110	125	131
57	タイ	41	60	48	59	57	132	マリ	101	106	113	131	132
58	ボスニア・ヘルツェゴビナ	100	110	54	66	58	133	コートジボワール	—	113	125	139	133
59	コロンビア	68	79	74	58	59	134	ベネズエラ	105	130	115	126	134
60	モリシャス	62	43	46	49	60	135	バングラデシュ	115	120	114	118	135
61	ヨルダン	48	51	56	72	61	136	スーダン	—	—	124	141	136
62	グルジア	93	80	76	63	62	137	ナイジェリア	85	104	119	134	137
63	セルビア	91	75	71	65	63	138	ジンバブエ	122	125	122	130	138
64	ウルグアイ	73	59	66	68	64	139	ギニア	—	—	—	—	139
65	ボツワナ	78	64	62	54	65	140	アンゴラ	—	—	—	133	140
66	コスタリカ	52	50	53	71	66	141	イエメン	—	—	121	138	141
67	ブラジル	54	69	68	69	67	142	パキスタン	87	107	123	140	142
68	メキシコ	61	78	81	70	68	143	ラオス	—	—	—	129	—
69	カザフスタン	81	68	64	67	69	144	ブルンジ	129	129	—	137	—
70	ペルー	86	83	72	57	70	145	台湾	20	15	—	—	—
71	アルメニア	106	99	84	73	71	146	スリナム	108	109	—	—	—
72	フィジー	—	—	—	84	72	147	リビア	125	112	—	—	—
73	パナマ	55	55	60	75	73	148	モリタニア	116	123	—	—	—
74	クウェート	43	53	—	61	74	149	東ティモール	127	131	—	—	—
75	ベラルーシ	—	—	—	80	75	150	チャド	—	132	—	—	—
	総計		130	132	124	141	142						

資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

(B)イノベーションアウトプットインデックス

No.	調査対象国・地域	GII2008-09	GII2009-10	GII2011	GII2012	GII2013	No.	調査対象国・地域	GII2008-09	GII2009-10	GII2011	GII2012	GII2013
1	スイス	12	3	2	1	1	76	スリランカ	58	83	65	76	76
2	オランダ	8	5	3	3	2	77	フィリピン	55	57	84	83	77
3	スウェーデン	4	4	1	2	3	78	ボスニア・ヘルツェゴビナ	116	106	111	80	78
4	イギリス	5	16	9	6	4	79	ベラルーシ	—	—	—	75	79
5	マルタ	47	26	—	4	5	80	セネガル	85	114	82	78	80
6	ルクセンブルグ	9	7	25	10	6	81	アラブ首長国連邦	20	24	56	51	81
7	アイスランド	23	2	13	12	7	82	ギリシャ	57	48	72	82	82
8	フィンランド	15	11	6	5	8	83	グルジア	103	96	75	81	83
9	イスラエル	30	23	8	13	9	84	ジャマイカ	90	102	115	107	84
10	ドイツ	2	19	4	7	10	85	タジキスタン	109	87	99	109	85
11	アイルランド	22	18	22	14	11	86	ボリビア	120	127	105	120	86
12	米国	1	15	5	16	12	87	トリニダード・トバゴ	61	63	87	84	87
13	カナダ	16	13	10	20	13	88	レバノン	—	—	41	63	88
14	デンマーク	21	8	7	9	14	89	ブルネイ	—	33	94	69	89
15	香港	18	1	12	25	15	90	バーレーン	52	53	92	60	90
16	ノルウェー	10	10	18	17	16	91	グアテマラ	82	111	73	101	91
17	フランス	14	21	21	26	17	92	ベネズエラ	102	88	74	103	92
18	シンガポール	6	12	17	11	18	93	モンゴル	119	75	81	79	93
19	ニュージーランド	37	6	15	15	19	94	パラグアイ	117	126	64	62	94
20	キプロス	43	40	27	32	20	95	ガーナ	—	110	76	93	95
21	エストニア	48	41	20	8	21	96	エルサルバドル	91	124	86	91	96
22	ベルギー	19	17	28	18	22	97	ナイジェリア	59	89	62	102	97
23	ハンガリー	45	36	16	29	23	98	ギニア	—	—	—	—	98
24	韓国	7	14	11	24	24	99	モロッコ	84	100	102	90	99
25	中国	29	31	14	19	25	100	ケニア	80	117	114	114	100
26	チェコ	32	27	24	23	26	101	カンボジア	115	64	108	132	101
27	オーストリア	17	22	23	21	27	102	ベリーズ	—	—	—	74	102
28	モルドバ	123	—	29	30	28	103	ザンビア	96	116	120	96	103
29	イタリア	25	32	39	39	29	104	ガボン	—	—	—	106	104
30	マレーシア	24	30	35	38	30	105	マラウイ	—	101	113	122	105
31	コスタリカ	40	42	37	53	31	106	カザフスタン	67	62	103	105	106
32	オーストラリア	28	20	31	31	32	107	ガンビア	97	123	—	125	107
33	日本	3	9	26	28	33	108	パナマ	83	97	101	100	108
34	スロベニア	35	29	30	22	34	109	ブルキナファソ	113	112	118	123	109
35	スペイン	31	28	34	35	35	110	カメルーン	93	85	85	111	110
36	クウェート	26	25	—	54	36	111	オマーン	41	103	78	55	111
37	ラトビア	69	55	45	27	37	112	エジプト	72	68	89	99	112
38	ブルガリア	78	44	43	42	38	113	パキスタン	99	86	67	110	113
39	ポルトガル	54	45	36	33	39	114	アゼルバイジャン	38	54	100	94	114
40	ルーマニア	65	50	47	57	40	115	ホンジュラス	87	122	96	116	115
41	クロアチア	66	43	48	45	41	116	ジンバブエ	130	131	107	92	116
42	インド	34	69	44	40	42	117	アンゴラ	—	—	—	127	117
43	アルゼンチン	68	66	40	66	43	118	アルバニア	127	72	95	98	118
44	サウジアラビア	27	98	66	70	44	119	バングラデシュ	101	92	69	104	119
45	スロバキア	33	37	54	43	45	120	イラン	—	—	71	117	120
46	ウルグアイ	86	56	61	67	46	121	ルワンダ	—	—	119	113	121
47	アルメニア	105	61	60	68	47	122	カーボヴェルデ	108	—	—	—	122
48	チリ	51	59	57	34	48	123	ネパール	124	120	—	95	123
49	バルバドス	73	115	—	—	49	124	モザンビーク	125	79	—	115	124
50	モンテネグロ	76	93	—	44	50	125	ボツワナ	75	125	104	121	125
51	セルビア	89	129	38	36	51	126	エチオピア	122	94	121	128	126
52	カタール	11	46	19	41	52	127	タンザニア	71	91	90	129	127
53	トルコ	49	76	53	61	53	128	ニカラグア	114	107	106	119	128
54	ベトナム	63	67	42	59	54	129	フィジー	—	—	—	124	129
55	ガイアナ	111	119	49	64	55	130	ベナン	98	118	112	108	130
56	リトアニア	46	47	59	37	56	131	ニジェール	—	—	124	140	131
57	モーリシャス	74	128	63	48	57	132	コートジボワール	—	60	79	118	132
58	ウクライナ	77	58	52	47	58	133	キルギス	126	95	80	131	133
59	チュニジア	53	78	58	58	59	134	ナミビア	112	130	116	87	134
60	メキシコ	62	65	88	86	60	135	マダガスカル	106	121	109	126	135
61	タイ	42	71	46	56	61	136	レソト	121	74	—	133	136
62	インドネシア	36	80	97	89	62	137	トーゴ	—	—	—	136	137
63	ヨルダン	64	81	33	46	63	138	ウズベキスタン	44	—	—	137	138
64	ポーランド	56	52	55	50	64	139	イエメン	—	—	123	138	139
65	コロンビア	81	109	70	72	65	140	シリア	88	132	110	130	140
66	マケドニア	70	84	68	71	66	141	アルジェリア	118	77	125	134	141
67	エクアドル	100	113	77	85	67	142	スーダン	—	—	122	141	142
68	ブラジル	39	73	32	52	68	143	ブルンジ	129	108	—	135	—
69	ドミニカ共和国	95	70	—	77	69	144	ラオス	—	—	—	139	—
70	ペルー	79	105	98	88	70	145	モーリタニア	92	34	—	—	—
71	南アフリカ	50	99	83	73	71	146	チャド	—	35	—	—	—
72	ロシア	60	51	50	49	72	147	東ティモール	128	38	—	—	—
73	マリ	94	90	93	97	73	148	台湾	13	39	—	—	—
74	スワジランド	—	—	117	65	74	149	スリナム	107	49	—	—	—
75	ウガンダ	104	104	91	112	75	150	リビア	110	82	—	—	—
								総計	130	132	124	141	142

資料: INSEAD, 「GII2008-2009」、「GII2009-2010」、「GII2011」、「GII2012」、「GII2013」

2. 各報告書の定義とデータソース

2.1 GII2008-2009

GII2008-2009								
Sub-Index	Pillar	Indicator No.	Indicators	Definition	Source		†: soft data *: index data others: hard data	本文表の 番号
Innovation Input	Institutions	1.1.01	Starting a business - Time (days)	The measure captures the median duration that incorporation lawyers indicate is necessary to complete a procedure.	Ease of Doing Business Report Database	World Bank		1-19
Innovation Input	Institutions	1.1.02	Dealing with licences - Time (days)	Time is recorded in calendar days. The measure captures the median duration that local experts indicate is necessary to complete a procedure. It is assumed that the minimum time required for each procedure is 1 day. If a procedure can be accelerated legally for an additional cost, the fastest procedure is chosen. It is assumed that BuildCo does not waste time and commits to completing each remaining procedure without delay. The time that BuildCo spends on gathering information is ignored. It is assumed that BuildCo is aware of all building requirements and their sequence from the beginning.	Governance Indicators	World Bank	*	1-2
Innovation Input	Institutions	1.1.03	Voice & Accountability	This is a composite indicator and comprises a number of individual indicators measuring various aspects of the political process, civil liberties and political rights. This index measures the extent to which citizens of a country are able to participate in the selection of governments. Also, included are indicators measuring the independence of the media, which serves an important role in monitoring those in authority and holding them accountable for their actions.	Governance Indicators	World Bank	*	1-3
Innovation Input	Institutions	1.1.04	Political Stability	This index combines several indicators which measure perceptions of the likelihood that the government in power will be destabilized or overthrown by possibly unconstitutional means and/or violent means. This index captures the idea that the quality of governance in a country is compromised by the likelihood of wrenching changes in government, which not only has a direct effect on the continuity of policies, but also at a deeper level undermines the ability of the citizens to peacefully select and replace those in power.	Governance Indicators	World Bank	*	1-1
Innovation Input	Institutions	1.1.05	Government Effectiveness	This indicator combines into one grouping perceptions of the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies.	Governance Indicators	World Bank	*	1-10
Innovation Input	Institutions	1.1.06	Regulatory Quality	This indicator measures the incidence of market-unfriendly policies such as price controls or inadequate bank supervision, as well as perceptions of the burdens imposed by excessive regulation in areas such as foreign trade and business development.	Governance Indicators	World Bank	*	1-13
Innovation Input	Institutions	1.1.07	Rule of Law	This indicator includes several indicators which measure the extent to which agents have confidence in and abide by the rules of society. These include perceptions of the incidence of both violent and non-violent crime, the effectiveness and predictability of the judiciary, and the enforceability of contracts.	Governance Indicators	World Bank	*	1-15
Innovation Input	Institutions	1.1.08	Control of Corruption	This indicator corresponds to "graft" measures of corruption. Notably, corruption measured by the frequency of "additional payments to get things done" and the effects of corruption on the business environment.	Governance Indicators	World Bank	*	1-4
Innovation Input	Institutions	1.1.09	Laws relating to ICT	Laws relating to the use of information technology (electronic commerce, digital signatures, consumer protection) are 1: Non-existent, 7: Well-developed and enforced	Executive Opinion Survey	World Economic Forum	†	1-5
Innovation Input	Institutions	1.1.10	Burden of government regulation	Complying with administrative requirements (permits, regulations, reporting) issued by the government in your country is 1: Burdensome, 7: Not burdensome	Executive Opinion Survey	World Economic Forum	†	1-14
Innovation Input	Institutions	1.1.11	Intellectual property protection	How would you rate the adequacy of the laws/ regulations surrounding Intellectual Property issues in your country? 1: Very poor, 5: Very good	Executive Opinion Survey	World Economic Forum	†	1-23
Innovation Input	Institutions	1.1.12	Legal Framework	How efficiently do you feel that the legal framework in your country for private businesses to settle disputes and challenge the legality of government actions / regulations is operating? 1: Not efficiently at all, 5: Very efficiently.	Executive Opinion Survey	World Economic Forum	†	1-6
Innovation Input	Institutions	1.1.13	Soundness of banks	Banks in your country are 1: Insolvent and may require a government bailout, 7: Generally healthy with sound balance sheets	Executive Opinion Survey	World Economic Forum	†	1-7
Innovation Input	Institutions	1.1.14	Legacy of innovation	Global Innovation Index for 2006	Global Innovation Index for 2006	INSEAD	†	1-8
Innovation Input	Institutions	1.1.15	R&D expenditure as a % of GDP	Research and development expenditure (% of GDP) for the years 2000-2005	World Development Indicators 2007	World Bank		1-9
Innovation Input	Human Capacity	1.2.01	Education expenditure (% of GNI)	Education expenditure refers to the current operating expenditures in education, including wages and salaries and excluding capital investments in buildings and equipment. Here the average of the education expenditure for the years 2000 to 2007 has been taken	UNESCO Institute of Statistics, Data Centre.	UNESCO Institute of Statistics		2-1

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資料: INSEAD, 「GII2008-2009」

GI2008-2009								
Sub-index	Pillar	Indicator No.	Indicators	Definition	Source		T: soft data *: index data others: hard data	本文表の 番号
Innovation Input	Human Capacity	1.2.02	Literacy rate, adult total (% of people ages 15 and above)	Adult literacy rate is the percentage of people ages 15 and above who can, with understanding, read and write a short, simple statement on their everyday life.	UNESCO Institute of Statistics, Data Centre.	UNESCO Institute of Statistics		2-2
Innovation Input	Human Capacity	1.2.03	Age structure 15-64 years	Population ages 15 to 64 is the percentage of the total population that is in the age group 15 to 64.	CIA world factbook 2008	CIA		2-3
Innovation Input	Human Capacity	1.2.04	Employing Workers - Rigidity of Employment Index	The rigidity of employment index is the average of three subindices: a difficulty of hiring index, a rigidity of hours index and a difficulty of firing index. All the subindices have several components. And all take values between 0 and 100, with higher values indicating more rigid regulation.	Ease of Doing Business Report Database	World Bank	*	2-4
Innovation Input	Human Capacity	1.2.05	Culture to innovate	To what extent do you feel that companies in your own country have fostered a culture that expects everyone to contribute to innovation? 1: Not at all, 5: Definitely	Executive Opinion Survey	World Economic Forum	†	2-5
Innovation Input	Human Capacity	1.2.06	Quality of the educational system	In your opinion, to what extent does the education system in your country meet the needs of a competitive economy? 1: Not at all, 5: Definitely	Executive Opinion Survey	World Economic Forum	†	2-15
Innovation Input	Human Capacity	1.2.07	Availability of scientists and engineers	To what extent do you agree that scientists and engineers in your country are widely available? 1: Disagree strongly, 5: Agree strongly	Executive Opinion Survey	World Economic Forum	†	2-26
Innovation Input	Human Capacity	1.2.08	Brain drain	Your country's talented people 1: Normally leave to pursue opportunities in other countries, 7: Almost always remain in the country	Executive Opinion Survey	World Economic Forum	†	2-6
Innovation Input	Human Capacity	1.2.09	Extent of staff training	The e general approach of companies in your country to human resources is 1: To invest little in training and employee development, 7: To invest heavily to attract, train and retain employees	Executive Opinion Survey	World Economic Forum	†	2-11
Innovation Input	Human Capacity	1.2.10	Entrepreneurs as role models	Corporate Activity in your country is 1: Dominated by a few business groups, 7: Spread among many firms	Executive Opinion Survey	World Economic Forum	†	2-7
Innovation Input	Human Capacity	1.2.11	E-participation Index	The e-participation index assesses the quality, relevance, usefulness and the willingness of government websites for providing online information and participatory tools and services to the people.	Global E-government Readiness Report	United Nations	*	2-8
Innovation Input	Human Capacity	1.2.12	Net Migration Rate	The difference between the number of persons entering and leaving a country during the year per 1,000 persons (based on midyear population).	CIA world factbook 2008	CIA		2-9
Innovation Input	Human Capacity	1.2.13	Quality of scientific research institutions	To what extent do you agree that your country has adequate scientific research institutions available? 1: Disagree strongly, 5: Agree strongly	Executive Opinion Survey	World Economic Forum	†	2-27
Innovation Input	Human Capacity	1.2.14	Quality of management schools	In terms of academic institutions, in your view, how would you rate management / business schools in your country? 1: Very poor, 5: Very good	Executive Opinion Survey	World Economic Forum	†	2-16
Innovation Input	General and ICT Infrastructure	1.3.01	International Internet bandwidth (bits per capita)	International Internet bandwidth is the contracted capacity of international connections between countries for transmitting Internet traffic.	World Development Indicators	World Bank		3-1
Innovation Input	General and ICT Infrastructure	1.3.02	Internet users (per 100 people)	Internet users are people with access to the worldwide network.	ITU World Telecommunication Indicators	International Telecommunication Union (ITU)		3-21
Innovation Input	General and ICT Infrastructure	1.3.03	Mobile phone subscribers (per 100 people)	Mobile telephone subscribers are subscribers to a public mobile telephone service using cellular technology.	ITU World Telecommunication Indicators	International Telecommunication Union (ITU)		3-9
Innovation Input	General and ICT Infrastructure	1.3.04	Personal computers (per 100 people)	Personal computers are self-contained computers designed to be used by a single individual.	World Development Indicators	World Bank		3-23
Innovation Input	General and ICT Infrastructure	1.3.05	Households with televisions (%)	-	World Development Indicators	World Bank		3-2
Innovation Input	General and ICT Infrastructure	1.3.06	Main telephone lines (fixed lines) per 100 people	Fixed lines are telephone mainlines connecting a customer's equipment to the public switched telephone network. Mobile phone subscribers refer to users of portable telephones subscribing to an automatic public mobile telephone service using cellular technology that provides access to the public switched telephone network.	ITU World Telecommunication Indicators	International Telecommunication Union (ITU)		3-12
Innovation Input	General and ICT Infrastructure	1.3.07	Gross capital formation (current US\$)	Gross capital formation (formerly gross domestic investment) consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and "work in progress." According to the 1993 SNA, net acquisitions of valuables are also considered capital formation.	World Investment Report	United Nations Conference on Trade and Development (UNCTAD)		3-20

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資料: INSEAD, 「GI2008-2009」

GII2008-2009								
Sub-Index	Pillar	Indicator No.	Indicators	Definition	Source		†: soft data *: index data others: hard data	本文表の 番号
Innovation Input	General and ICT Infrastructure	1.3.08	Internet subscribers (Total broadband) per 100 people	-	ITU World Telecommunication Indicators	International Telecommunication Union (ITU)		3-7
Innovation Input	General and ICT Infrastructure	1.3.09	Total annual investment in telecom (US\$ per 1000 people)	-	World Development Indicators	World Bank		3-3
Innovation Input	General and ICT Infrastructure	1.3.10	Overall infrastructure quality	General infrastructure in your country is 1: Underdeveloped, 7: As extensive and efficient as the world's best	Executive Opinion Survey	World Economic Forum	†	3-14
Innovation Input	General and ICT Infrastructure	1.3.11	Internet access in schools	Internet access in schools is 1: Very limited, 7: Extensive – most children have frequent access	Executive Opinion Survey	World Economic Forum	†	3-4
Innovation Input	General and ICT Infrastructure	1.3.12	Quality of competition in ISP sector	Is there sufficient competition among Internet Service Providers in your country to ensure high quality, infrequent interruptions and low prices? 1: No, 7: Yes, equal to the best in the world	Executive Opinion Survey	World Economic Forum	†	3-5
Innovation Input	General and ICT Infrastructure	1.3.13	Transportation to key business centres within the country	Does your country's national ground transport network (buses, trains, taxis, etc.) offer efficient, accessible transportation to a wide range of travellers to key business centres and tourist attractions within your country? 1: No, not at all, 7: Yes, it is equal to the best in the world	Executive Opinion Survey	World Economic Forum	†	3-6
Innovation Input	Market Sophistication	1.4.01	Foreign direct investment, net inflows (BoP, Current US\$)	Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows in the reporting economy and is divided by GDP.	Handbook of Statistics 2008	United Nations Conference on Trade and Development (UNCTAD)		4-20
Innovation Input	Market Sophistication	1.4.02	Domestic credit to private sector (% of GDP)	Domestic credit to private sector refers to financial resources provided to the private sector, such as through loans, purchases of nonequity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries these claims include credit to public enterprises.	World Development Indicators	World Bank		4-10
Innovation Input	Market Sophistication	1.4.03	Getting Credit - Legal Rights Index	A Legal Rights Index, which measures the degree to which collateral and bankruptcy laws facilitate lending. The index ranges from 0 to 10, with higher scores indicating that collateral and bankruptcy laws are better designed to expand access to credit.	Ease of Doing Business	World Bank	*	4-6
Innovation Input	Market Sophistication	1.4.04	Getting Credit - Credit Information Index	A Credit Information Index, which measures rules affecting the scope, access, and quality of credit information. The index ranges from 0 to 6, with higher values indicating the availability of more credit information, from either a public registry or a private bureau, to facilitate lending decisions.	Ease of Doing Business	World Bank	*	4-9
Innovation Input	Market Sophistication	1.4.05	Gross private capital flows (% of GDP)	A Credit Information Index, which measures rules affecting the scope, access, and quality of credit information. The index ranges from 0 to 6, with higher values indicating the availability of more credit information, from either a public registry or a private bureau, to facilitate lending decisions. Gross private capital flows are the sum of the absolute values of direct, portfolio, and other investment inflows and outflows recorded in the balance of payments financial account, excluding changes in the assets and liabilities of monetary authorities and general government. The indicator is calculated as a ratio to GDP in U.S. dollars.	Handbook of Statistics, 2008	United Nations Conference on Trade and Development (UNCTAD)		4-1
Innovation Input	Market sophistication	1.4.06	Economy Characteristics - Informal economy estimate (%GNP)	Informal economy estimate (%GNP)	Ease of Doing Business	World Bank		4-2
Innovation Input	Market Sophistication	1.4.07	Protecting Investors – Investor Protection Index	The strength of investor protection index is the average of the extent of disclosure index, the extent of director liability index and the ease of shareholder suits index. The index ranges from 0 to 10, with higher values indicating better investor protection.	Ease of Doing Business	World Bank	*	4-14
Innovation Input	Market Sophistication	1.4.08	Financial market sophistication	The level of sophistication of financial markets in your country is 1: Lower than international norms, 7: Higher than international norms	Executive Opinion Survey	World Economic Forum	†	4-12
Innovation Input	Market Sophistication	1.4.09	Venture capital availability	To what extent would you agree that in your country, entrepreneurs who have innovative, yet risky products, generally find venture capital funding in order to take their ideas forward? 1: Disagree strongly, 5: Agree strongly	Executive Opinion Survey	World Economic Forum	†	4-13
Innovation Input	Market Sophistication	1.4.10	Local equity market access	Raising money by issuing shares on the local stock market is 1: Nearly impossible, 7: Quite possible for a good company	Executive Opinion Survey	World Economic Forum	†	4-3

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資料: INSEAD, 「GII2008-2009」

GI2008-2009								
Sub-index	Pillar	Indicator No.	Indicators	Definition	Source		†: soft data *: index data others: hard data	本文表の 番号
Innovation Input	Market Sophistication	1.4.11	Prevalence of trade barriers	In your country, tariff and non-tariff barriers significantly reduce the ability of imported goods to compete in the domestic market 1: Strongly agree, 7: Strongly disagree	Executive Opinion Survey	World Economic Forum	†	4-4
Innovation Input	Market Sophistication	1.4.12	Foreign ownership restrictions	Foreign ownership of companies in your country is 1: Rare, limited to minority stakes and often prohibited in key sectors, 7: Prevalent and encouraged	Executive Opinion Survey	World Economic Forum	†	4-5
Innovation Input	Business Sophistication	1.5.01	Secure Internet servers (per 1 million people)	Secure servers are servers using encryption technology in Internet transactions.	World Development Indicators	World Bank		5-1
Innovation Input	Business Sophistication	1.5.02	ICT spending (Percentage of GDP)	Expenditure on computer hardware, software, computer services, communication services and wired and wireless communications as a percentage of GDP	World Development Indicators	World Bank		5-2
Innovation Input	Business Sophistication	1.5.03	E-government readiness Index	The state of e-government readiness.	Global E-government Readiness Report	United Nations	*	5-3
Innovation Input	Business Sophistication	1.5.04	Manufactures imports (% of merchandise imports)	Manufactures comprise the commodities in SITC sections 5 (chemicals), 6 (basic manufactures), 7 (machinery and transport equipment), and 8 (miscellaneous manufactured goods), excluding division 68 (nonferrous metals).	Handbook of Statistics 2008	United Nations Conference on Trade and Development (UNCTAD)		5-4
Innovation Input	Business Sophistication	1.5.05	Technological awareness	To what extent do you agree that the use of latest technologies in your country lags behind other countries? 1: Disagree strongly, 5: Agree strongly	Executive Opinion Survey	World Economic Forum	†	5-5
Innovation Input	Business Sophistication	1.5.06	Firm level technology absorption	Companies in your country are 1: Not able to absorb new technology, 7: Aggressive in absorbing new technology	Executive Opinion Survey	World Economic Forum	†	5-6
Innovation Input	Business Sophistication	1.5.07	FDI and technology transfer	Foreign direct investment in your country 1: Brings little new technology, 7: Is an important source of new technology	Executive Opinion Survey	World Economic Forum	†	5-16
Innovation Input	Business Sophistication	1.5.08	Company spending on R&D	How important do you feel that it is for companies within your own country, to spend more heavily on Research & Development in comparison to their international peers? 1: Very unimportant, 5: Very important	Executive Opinion Survey	World Economic Forum	†	5-12
Innovation Input	Business Sophistication	1.5.09	University/industry research collaboration	In relation to Research & Development activity in your country, to what intensity level do you feel that businesses collaborate with local universities? 1: Not at all intensively, 5: Very intensively	Executive Opinion Survey	World Economic Forum	†	5-21
Innovation Input	Business Sophistication	1.5.10	Government procurement and innovation	Do Government purchase decisions result in technological innovation in your country? 1: Strongly Disagree, 7: Strongly Agree	Executive Opinion Survey	World Economic Forum	†	5-7
Innovation Input	Business Sophistication	1.5.11	Extent of business internet use	In your country, companies use the Internet extensively for buying/selling goods and services and for interaction with customers 1: Strongly disagree, 7: Strongly agree	Executive Opinion Survey	World Economic Forum	†	5-10
Innovation Input	Business Sophistication	1.5.12	Local supplier quality	The quality of local suppliers in your country is 1: Poor as they are inefficient and have little technological capability, 7: Very good as they are internationally competitive and assist in new product and process development	Executive Opinion Survey	World Economic Forum	†	5-8
Innovation Input	Business Sophistication	1.5.13	Degree of customer orientation	Customer orientation: Firms in your country 1: Generally treat their customers badly, 7: Are highly responsive to customers and customer retention	Executive Opinion Survey	World Economic Forum	†	5-9
Innovation Output	Knowledge	2.1.01	High-technology exports (current US\$)	High-technology exports are products with high R&D intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery. Data are in current U.S. dollars.	World Development Indicators Database	World Bank		6-1
Innovation Output	Knowledge	2.1.02	Manufactures exports (% of merchandise exports)	*Components may not sum to 100 percent because of unclassified trade. Manufactures comprise commodities in SITC sections 5 (chemicals), 6 (basic manufactures), 7 (machinery and transport equipment), and 8 (miscellaneous manufactured goods), excluding division 68 (non-ferrous metals).*	Handbook of Statistics	United Nations Conference on Trade and Development (UNCTAD)		6-2
Innovation Output	Knowledge	2.1.03	Insurance and financial services (% of commercial service exports)	Insurance and financial services cover freight insurance on goods exported and other direct insurance such as life insurance; financial intermediation services such as commissions, foreign exchange transactions, and brokerage services; and auxiliary services such as financial market operational and regulatory services.	Handbook of Statistics	United Nations Conference on Trade and Development (UNCTAD)		6-3
Innovation Output	Knowledge	2.1.04	ICT Exports	Computer, communications and other services (% of commercial service exports) include such activities as international telecommunications, and postal and courier services; computer data; news-related service transactions between residents and nonresidents; construction services; royalties and license fees; miscellaneous business, professional, and technical services; and personal, cultural, and recreational services.	Handbook of Statistics	United Nations Conference on Trade and Development (UNCTAD)		6-4
Innovation Output	Knowledge	2.1.05	Presence of clusters	To what extent would you agree that in your country, strong and deep clusters of innovative companies are widespread throughout the economy? 1: Disagree strongly, 5: Agree strongly	Executive Opinion Survey	World Economic Forum	†	6-5

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資料: INSEAD, 「GI2008-2009」

GII2008-2009								
Sub-index	Pillar	Indicator No.	Indicators	Definition	Source		†: soft data *: index data others: hard data	本文表の 番号
Innovation Output	Knowledge	2.1.06	Local availability of process machinery	How is process equipment and machinery specific to your field obtained in your country? 1: Specialized process equipment and machinery are almost always imported, 7: Specialized process equipment and machinery are almost always locally available from capable suppliers	Executive Opinion Survey	World Economic Forum	†	6-6
Innovation Output	Knowledge	2.1.07	Local availability of specialized research and training services	In your country, specialized research and training services are 1: Not available, 7: Available from world-class local institutions	Executive Opinion Survey	World Economic Forum	†	6-11
Innovation Output	Knowledge	2.1.08	Value chain presence	Exporting companies in your country 1: Are primarily involved in resource extraction or production, 7: Not only produce but also perform product design, marketing sales, logistics and after-sales services	Executive Opinion Survey	World Economic Forum	†	6-7
Innovation Output	Knowledge	2.1.09	Innovation in new technologies	To what extent would you agree that companies in your country obtain new technology by conducting formal research and pioneering their own new products and processes? 1: Disagree strongly, 5: Agree strongly	Executive Opinion Survey	World Economic Forum	†	6-13
Innovation Output	Knowledge	2.1.10	Production process sophistication	Production processes use 1: Labour-intensive methods or previous generations of process technology, 7: The world's best and most efficient process technology	Executive Opinion Survey	World Economic Forum	†	6-16
Innovation Output	Competitiveness	2.2.01	Goods exports (BoP, current US\$)	Goods exports refer to all movable goods (including nonmonetary gold) involved in a change of ownership from residents to nonresidents. The category includes goods previously included in services: goods received or sent for processing and their subsequent export or import in the form of processed goods, repairs on goods, and goods procured in ports by carriers. Data are in current U.S. dollars.	Handbook of Statistics 2008	NCTAD		7-1
Innovation Output	Competitiveness	2.2.02	Service exports (BoP, current US\$)	Services (previously nonfactor services) refer to economic output of intangible commodities that may be produced, transferred, and consumed at the same time. International transactions in services are defined by the IMF's Balance of Payments Manual (1993), but definitions may nevertheless vary among reporting economies. Data are in current U.S. dollars.	Handbook of Statistics 2008	NCTAD		7-2
Innovation Output	Competitiveness	2.2.03	Commercial service exports (current US\$)	Commercial service exports are total service exports minus exports of government services not included elsewhere. International transactions in services are defined by the IMF's Balance of Payments Manual (1993) as the economic output of intangible commodities that may be produced, transferred, and consumed at the same time. Definitions may vary among reporting economies.	Handbook of Statistics 2008	NCTAD		7-3
Innovation Output	Competitiveness	2.2.04	Merchandise exports (current US\$)	Merchandise exports show the f.o.b. value of goods provided to the rest of the world valued in U.S. dollars. Data are in current U.S. dollars.	Handbook of Statistics 2008	NCTAD		7-4
Innovation Output	Competitiveness	2.2.05	Intensity of local competition	To what extent do you agree that in your country, competition in the local market is intense in most industries as market leadership changes over time? 1: Disagree strongly, 5: Agree strongly	Executive Opinion Survey	World Economic Forum	†	7-8
Innovation Output	Competitiveness	2.2.06	Extent of regional sales	Exports from your country to neighbouring countries are 1: Limited, 7: Substantial and growing	Executive Opinion Survey	World Economic Forum	†	7-5
Innovation Output	Competitiveness	2.2.07	Presence of innovative products	To what extent would you agree that companies in your country are competitive primarily due the unique and innovative nature of our products/services? 1: Disagree strongly, 5: Agree strongly	Executive Opinion Survey	World Economic Forum	†	7-6
Innovation Output	Competitiveness	2.2.08	Breadth of international markets	Exporting companies from your country sell 1: Primarily in a small number of foreign markets, 7: In virtually all international country markets	Executive Opinion Survey	World Economic Forum	†	7-7
Innovation Output	Wealth	2.3.01	Market value of publicly traded shares	This entry gives the value of shares issued by publicly traded companies at a price determined in the national stock markets on the final day of the period indicated. It is simply the latest price per share multiplied by the total number of outstanding shares, cumulated over all companies listed on the particular exchange.	CIA World Factbook 2008	CIA		8-1
Innovation Output	Wealth	2.3.02	GDP growth (annual %)	Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2000 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.	CIA World Factbook	CIA		8-2
Innovation Output	Wealth	2.3.03	GDP per capita, PPP (current international \$)	GDP per capita based on purchasing power parity (PPP). PPP GDP is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current international dollars.	CIA World Factbook	CIA		7-19

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資料: INSEAD, 「GII2008-2009」

GII2008-2009							
Sub-Index	Pillar	Indicator No.	Indicators	Definition	Source		† : soft data * : index data others : hard data 本文表の 番号
Innovation Output	Wealth	2.3.04	Industry, value added (current US\$)	Industry corresponds to ISIC divisions 10-45 and includes manufacturing (ISIC divisions 15-37). It comprises value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3.	World Development Indicators Database	World Bank	8-4
Innovation Output	Wealth	2.3.05	Services, etc., value added (current US\$)	Services correspond to ISIC divisions 50-99. They include value added in wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services. Also included are imputed bank service charges, import duties, and any statistical discrepancies noted by national compilers as well as discrepancies arising from rescaling. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The industrial origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Data are in current U.S. dollars.	CIA World Factbook	World Bank	8-5
Innovation Output	Wealth	2.3.06	PPP Final consumption expenditure per capita (current US\$)	General government final consumption expenditure (formerly general government consumption) includes all government current expenditures for purchases of goods and services (including compensation of employees). It also includes most expenditures on national defense and security, but excludes government military expenditures that are part of government capital formation. Data are in current U.S. dollars and divided by mid-year population.	World Development Indicators 2008	World Bank	8-6
Innovation Output	Wealth	2.3.07	Electric power consumption (kWh per capita)	Electric power consumption measures the production of power plants and combined heat and power plants less transmission, distribution, and transformation losses and own use by heat and power plants.	CIA World Factbook	CIA	8-7

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資料: INSEAD, 「GII2008-2009」

2.2 GII2009-2010

GII2009-2010								
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	T: soft data *: index data others: hard data	本文表の番号
Innovation Input	Institutions	Political environment	1.1.1	Political Stability	This index combines several indicators which measure perceptions of the likelihood that the government in power or overthrown by possibly unconstitutional means and/or violent means. This index captures the idea that the quality of governance is compromised by the likelihood of wrenching changes in the government, which not only has a direct effect on the continuity of policies, but also at the deeper level undermines the ability of the citizens to peacefully select and replace those in power.	Governance Indicators World Bank	*	1-1
Innovation Input	Institutions	Political environment	1.1.2	Government Effectiveness	This index combines into one grouping perceptions of the quality of the public service provision, the quality of bureaucracy, the competence of civil servants, The independence of the civil service from the political pressures, and the credibility of the government's commitment to policies.	Governance Indicators World Bank	*	1-10
Innovation Input	Institutions	Political environment	1.1.3	Efficiency of legal framework	How efficient is the legal framework in your country for private businesses to settle disputes? 1 = Extremely inefficient, 7 = Highly efficient	Executive Opinion Survey World Economic Forum	†	1-12
Innovation Input	Institutions	Regulatory environment	1.2.1	Regulatory Quality	This indicator measures the incidence of the market unfriendly policies such as price controls or inadequate bank supervision, as well as the perception of the burdens imposed by excessive regulation in areas such as foreign trade and business development.	Governance Indicators World Bank	*	1-13
Innovation Input	Institutions	Regulatory environment	1.2.2	Burden of government regulation	How burdensome is it for businesses in your country to comply with governmental administrative requirements (e.g. permits, regulations, reporting)? 1 = Extremely burdensome, 7 = Not burdensome at all	Executive Opinion Survey World Economic Forum	†	1-14
Innovation Input	Institutions	Regulatory environment	1.2.3	Strength of auditing and reporting standards	In your country, how would you assess financial auditing and reporting standards regarding company financial performance? 1 = Extremely weak, 7 = Extremely strong	Executive Opinion Survey World Economic Forum	†	1-16
Innovation Input	Institutions	Conditions for business provided by public institutions	1.3.1	Starting a business - Time (days)	The measure captures the median duration that incorporation lawyers indicate is necessary to complete a procedure.	Ease of Doing Business Report, 2009 World Bank		1-19
Innovation Input	Institutions	Conditions for business provided by public institutions	1.3.2	Press Freedom Index	The Press Freedom index is an annual ranking of countries compiled and published by 'Reporters without Borders' based upon the organization's assessment of the press freedom records.	Wikipedia Wikipedia	*	1-11
Innovation Input	Institutions	Conditions For Business Provided By Public Institutions	1.3.3	Intellectual property protection	How would you rate intellectual property protection, including anti-counterfeiting measures, in your country? 1 = Very weak, 7 = Very strong	Executive Opinion Survey World Economic Forum	†	1-23
Innovation Input	Human Capacity	Investment in Education	2.1.1	Education expenditure (% of GNI)	Education Expenditure (% of GNI) for the year	World Development Indicators World Bank		2-1
Innovation Input	Human Capacity	Investment in Education	2.1.2	Extent of staff training	To what extent do companies in your country invest in training and employee development? 1 = Hardly at all, 7 = To a great extent	Executive Opinion Survey World Economic Forum	†	2-11
Innovation Input	Human Capacity	Quality Of Education Institutes	2.2.1	Quality of the educational system	In your opinion, to what extent does the education system in your country meet the needs of a competitive economy? 1: Not at all, 5: Definitely	Executive Opinion Survey World Economic Forum	†	2-15
Innovation Input	Human Capacity	Quality Of Education Institutes	2.2.2	Quality of scientific research institutions	To what extent do you agree that your country has adequate scientific research institutions available? 1: Disagree strongly, 5: Agree strongly	Executive Opinion Survey World Economic Forum	†	2-27
Innovation Input	Human Capacity	Quality Of Education Institutes	2.2.3	Quality of management schools	In terms of academic institutions, in your view, how would you rate management / business schools in your country? 1: Very poor, 5: Very good	Executive Opinion Survey World Economic Forum	†	2-16
Innovation Input	Human Capacity	Innovation Potential	2.3.1	Researchers in R&D Per Million of Population	Number of researchers per million of population	World Development Indicators World Bank		2-24
Innovation Input	Human Capacity	Innovation Potential	2.3.2	Availability of scientists and engineers	To what extent do you agree that scientists and engineers in your country are widely available? 1: Disagree strongly, 5: Agree strongly	Executive Opinion Survey World Economic Forum	†	2-26
Innovation Input	Human Capacity	Innovation Potential	2.3.3	Enrolment in tertiary education	The reported value corresponds to the total enrollment in tertiary education expressed as a percentage of the population of the five-year age group following on from the secondary school-leaving age.	UNESCO		2-17
Innovation Input	ICT and Uptake of Infrastructure	ICT Infrastructure	3.1.1	Broadband Subscribers per 100 inhabitants	Number of broadband subscribers per 100 inhabitants.	ITU World Telecommunication / ICT Indicators Database. International Telecommunication Union (ITU)		3-7

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資料: INSEAD, 「GII2009-2010」

GI2009-2010									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		†: soft data *: index data others: hard data	本文表の番号
Innovation Input	ICT and Uptake of Infrastructure	ICT Infrastructure	3.1.2	Mobile phone subscribers (per 100 people)	Mobile phone subscribers are subscribers to a public mobile telephone service using cellular technology.	ITU World Telecommunication / ICT Indicators Database.	International Telecommunication Union (ITU)		3-9
Innovation Input	ICT and Uptake of Infrastructure	ICT Infrastructure	3.1.3	Main telephone lines (fixed) per 100 people	Fixed lines are telephone mainlines connecting a customer's equipment to the public switched telephone network. Mobile phone subscribers refer to users of portable telephones subscribing to an automatic public mobile telephone service using cellular technology that provides access to public switched telephone network.	ITU World Telecommunication / ICT Indicators Database.	International Telecommunication Union (ITU)		3-12
Innovation Input	ICT and Uptake of Infrastructure	General Infrastructure	3.2.1	Quality of overall infrastructure	How would you assess general infrastructure (e.g. transport, telephony and energy) in your country? 1= Extremely underdeveloped, 7= Extensive and efficient by international standards	Executive Opinion Survey	World Economic Forum	†	3-14
Innovation Input	ICT and Uptake of Infrastructure	General Infrastructure	3.2.2	Per capita Electricity production	Electric Power Production measures the production of power plants and combined heat and power plant less transmissions, distribution, and transformation losses and own use by heat and power plants.	World Development Indicators	World Bank		3-16
Innovation Input	ICT and Uptake of Infrastructure	Uptake and use of infrastructure	3.3.1	Internet users (per 100 people)	Internet users are people with access to worldwide network.	ITU World Telecommunication / ICT Indicators Database.	International Telecommunication Union (ITU)		3-21
Innovation Input	ICT and Uptake of Infrastructure	Uptake and use of infrastructure	3.3.2	Personal computers (per 100 people)	Personal computers are self contained computers designed to be used by one user.	World Development Indicators	World Bank		3-23
Innovation Input	ICT and Uptake of Infrastructure	Uptake and use of infrastructure	3.3.3	ICT and Government productivity	To what extent has the use of information and communication technologies by the government improved the efficiency of government services in your country? 1 = No effect, 7 = Has generated considerable improvements	Executive Opinion Survey	World Economic Forum	†	3-25
Innovation Input	ICT and Uptake of Infrastructure	Uptake and use of infrastructure	3.3.4	Extent of business Internet use	To what extent do companies within your country use the Internet in their business activities (e.g. buying and selling goods, interacting with customers and suppliers)? 1 = Not at all, 7 = Extensively	Executive Opinion Survey	World Economic Forum	†	3-28
Innovation Input	Market sophistication	Investor and creditor conditions	4.1.1	Getting Credit -Legal rights Index	A legal rights index, which measures the degree to which collateral and bankruptcy laws facilitate lending. The index ranges from 0 to 10 with higher scores indicating that collateral and bankruptcy laws are better designed to expand access to business.	Ease of Doing Business Report 2009	World Bank	*	4-6
Innovation Input	Market sophistication	Investor and creditor conditions	4.1.2	Getting Credit -Credit Information Index	A Credit Information Index which measures rules affecting the scope access and quality of credit information. The index ranges from 0 to 6, with higher values indicating the availability of more credit information, from either a public registry or a private bureau to facilitate lending decisions.	Ease of Doing Business Report 2009	World Bank	*	4-9
Innovation Input	Market sophistication	Investor and creditor conditions	4.1.3	Protecting Investors: Investor Protection Index	The strength of investor protection index is the average of the extent of disclosure index, the extent of director liability index and the ease of shareholder's suit index. The index ranges from 0 to 10, with higher values indicating better investor protection.	Ease of Doing Business Report 2009	World Bank	*	4-14
Innovation Input	Market sophistication	Investor and creditor conditions	4.1.4	Financial market sophistication	How would you assess the level of sophistication of financial markets in your country? 1= Poor by international standards, 7 = Excellent by international standards	Executive Opinion Survey	World Economic Forum	†	4-12
Innovation Input	Market sophistication	Access to private credit	4.2.1	Venture capital availability	In your country, how easy is it for entrepreneurs with innovative but risky projects to find venture capital? 1 = Very difficult, 7 = Very easy	Executive Opinion Survey	World Economic Forum	†	4-13
Innovation Input	Market sophistication	Access to private credit	4.2.2	Microfinance Institutions (MFIs) - Average loan balance per borrower / GNI per capita	Microfinance Institutions (MFIs) -Average loan balance per borrower / GNI per capita in microfinance institutes.	Mix Market	Microfinance Information Exchange (MIX)		4-15
Innovation Input	Market sophistication	Access to private credit	4.2.3	Financing through local equity market	How easy is it to raise money by issuing shares on the stock market in your country? 1 = Very difficult, 7 = Very easy	Executive Opinion Survey	World Economic Forum	†	4-18
Innovation Input	Market sophistication	Access to private credit	4.2.4	Domestic credit to private sector (% of GDP)	Domestic credit to private sector refers to financial resources provided to the private sector, such as through loans, purchases of non-equity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries these claims include credit to public enterprises.	World Development Indicators	World Bank		4-10
Innovation Input	Market sophistication	Access to private credit	4.2.5	Foreign direct investment, net inflows (BoP, Current US\$)	Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of the equity capital, reinvestment of earnings, other long-term capital, and short term capitals shown in the balance of payments This series shows net inflows in the reporting economy.	World Development Indicators,	World Bank		4-20
Innovation Input	Business sophistication	Innovation environment in firms	5.1.1	Company spending on R&D	To what extent do companies in your country spend on R&D? 1 = Do not spend on R&D, 7 = Spend heavily on R&D	Executive Opinion Survey	World Economic Forum	†	5-12
Innovation Input	Business sophistication	Innovation environment in firms	5.1.2	Public R&D Expenditure as % of GDP	2005 or preceding latest year available	World Development Indicators	World Bank		5-14

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資料: INSEAD, 「GI2009-2010」

GII2009-2010									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		† : soft data * : index data others : hard data 本文表の番号	
Innovation Input	Business sophistication	Innovation environment in firms	5.1.3	FDI and technology transfer	To what extent does foreign direct investment (FDI) bring new technology into your country? 1 = Not at all, 7 = FDI is a key source of new technology	Executive Opinion Survey	World Economic Forum	†	5-16
Innovation Input	Business sophistication	Innovation Ecosystem	5.2.1	State of cluster development	"In your country, how extensive is collaboration among firms, suppliers, partners, and associated institutions within clusters? 1 = Collaboration is non-existent, 7 = Collaboration is extensive	Executive Opinion Survey	World Economic Forum	†	5-22
Innovation Input	Business sophistication	Innovation Ecosystem	5.2.2	University-industry collaboration	To what extent do business and universities collaborate on research and development (R&D) in your country? 1 = Do not collaborate at all, 7 = Collaborate extensively	Executive Opinion Survey	World Economic Forum	†	5-21
Innovation Input	Business sophistication	Innovation Ecosystem	5.2.3	Culture to innovate	To what extent do you feel that companies in your country have fostered a culture that expects everyone to contribute to innovation? 1: not at all, 5: definitely	Executive Opinion Survey	World Economic Forum	†	5-24
Innovation Input	Business sophistication	Openness to Foreign and Domestic Competition	5.3.1	Trade weighted average tariff rate	This indicator is calculated as the average of the applied tariff rates, including preferential rates that a country applies to the rest of the world. The trade pattern of the importing country's reference group (2007 data) is used as a weighting.		International Trade Centre (ITC)		5-29
Innovation Input	Business sophistication	Openness to Foreign and Domestic Competition	5.3.2	Intensity of local competition	How would you assess the intensity of competition in the local markets in your country? 1 = Limited in most industries, 7 = Intense in most industries	Executive Opinion Survey	World Economic Forum	†	5-11
Innovation Output	Scientific outputs	Knowledge Creation	6.1.1	Number of Patents	Total number patents applied by a country in a year.		World Intellectual Property Organization (WIPO)		6-8
Innovation Output	Scientific outputs	Knowledge Creation	6.1.2	Publications	Scientific and technical journal articles refer to the number of scientific and engineering articles published in the following fields: physics, biology, chemistry, mathematics, clinical medicine, biomedical research, engineering and technology, and earth and space sciences.	World Development Indicators	World Bank		6-12
Innovation Output	Scientific outputs	Knowledge Creation	6.1.3	Local availability of specialized research and training services	In your country, to what extent are high quality specialised training services available? 1= not available, 7= widely available	Executive Opinion Survey	World Economic Forum	†	6-11
Innovation Output	Scientific outputs	Knowledge Creation	6.1.4	Capacity for innovation	In your country, how do companies obtain technology? 1 = Exclusively from licensing or imitating foreign companies, 7 = By conducting formal research and pioneering their own new products and processes	Executive Opinion Survey	World Economic Forum	†	6-13
Innovation Output	Scientific outputs	Knowledge application	6.2.1	Production process sophistication	In your country, how sophisticated are production processes? 1 = Not at all – labour-intensive methods or previous generations of process technology prevail, 7 = Highly – the world's best and most efficient process technology prevails	Executive Opinion Survey	World Economic Forum	†	6-16
Innovation Output	Scientific outputs	Knowledge application	6.2.2	Growth rate of Labor Productivity	Growth rate of GDP per person employed.	Labour productivity (Key Indicator of Labor Market 18)	International Labour Organization (ILO)		6-18
Innovation Output	Scientific outputs	Knowledge application	6.2.3	Industry value added	Industry corresponds to ISIC divisions 10-45 and includes manufacturing (ISIC divisions 15-37). It compares the value added in mining manufacturing (also reported as a separate sub group), construction electricity, water and gas. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion or degradation of natural resources. The origin of value is determined by the International Standard Industrial Classification (ISIC), revision 3.	World Development Indicators	World Bank		6-20
Innovation Output	Scientific outputs	Knowledge application	6.2.4	Employment in knowledge- intensive services per cent of workforce	Sum total of people employed as legislators, senior officials, managers, professionals, technicians and associate professionals as a percentage of total people employed	Laborsta	International Labour Organization (ILO)		6-22
Innovation Output	Scientific outputs	Exports and employment	6.3.1	High-technology exports (current US\$) as % of manufacturing exports	High technology exports are products with high R&D intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery.	World Development Indicators	World Bank		6-24
Innovation Output	Scientific outputs	Exports and employment	6.3.2	Entrepreneurship: Total Business Density	Business Density: Is the number of total registered corporations divided by total working age population.	Entrepreneurship Data	World Bank		6-27
Innovation Output	Scientific outputs	Exports and employment	6.3.3	New business ownership rate	"New Density": Is the number of newly registered corporations divided by total working age population.	Entrepreneurship Data	World Bank		6-17
Innovation Output	Creative outputs & well-being	Creative outputs	7.1.1	Creative products and services	Creative industries international trade by product groups	UNCTAD Creative Economy Report	United Nations Conference on Trade and Development (UNCTAD)		7-10

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GI2009-2010									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		† : soft data * : index data others : hard data	本文表の番号
Innovation Output	Creative outputs & well-being	Creative outputs	7.1.2	Royalties	Exports of Royalty and License fees-Royalties and license fees (Royalties): *Royalties and license fees covers receipts (exports) and payments (imports) of residents and nonresidents for (i) the authorized use of intangible non-produced, non-financial assets and proprietary rights – such as trademarks, copyrights, patents, processes, techniques, designs, manufacturing rights, franchises, etc. and (ii) the use, through licensing agreements, of produced originals or prototypes – such as manuscripts, films, etc.	UNCTAD Creative Economy Report	United Nations Conference on Trade and Development (UNCTAD)		7-11
Innovation Output	Creative outputs & well-being	Creative outputs	7.1.3	Trademarks	Total trademarks by residents and non-residents.	World Development Indicators	World Bank		7-9
Innovation Output	Creative outputs & well-being	Creative outputs	7.1.4	Exports earnings of creative industries	Export earnings from creative industries cover the value of exports of all creative-industry products, comprising tangible goods and intangible services	UNCTAD Creative Economy Report	United Nations Conference on Trade and Development (UNCTAD)		7-14
Innovation Output	Creative outputs & well-being	Benefits to social welfare	7.2.1	Gini Index	The Gini coefficient is a measure of inequality in the economy. It can range from 0 to 1; it is sometimes multiplied by 100 to range between 0 and 100. A low Gini coefficient indicates a more equal distribution, with 0 corresponding to perfect equality, while higher Gini coefficients indicate more unequal distribution, with 1 corresponding to perfect inequality.	Human Development Index Report, 2009	United Nations Development Programme	*	7-16
Innovation Output	Creative outputs & well-being	Benefits to social welfare	7.2.2	GDP per capita	An approximation of the value of goods produced per-person in the country, equal to the country's GDP divided by the total number of people in the country.	World Development Indicators	World Bank		7-19

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資料: INSEAD, 「GI2009-2010」

2.3 GII2011

GII2011									
Sub-index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		1: soft data *: index data others: hard data 本文の番号	
Innovation Input	Institutions	Political environment	1.1.1	Political stability	Index that captures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism. It ranges from 0 to 100 (higher values indicating better outcomes).	World Governance Indicators 2009	World Bank	*	1-1
Innovation Input	Institutions	Political environment	1.1.2	Government effectiveness	Index that captures perceptions of the quality of public and civil services and the degree of their independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. It ranges from 0 to 100 (higher values indicating better outcomes).	World Governance Indicators 2009	World Bank	*	1-10
Innovation Input	Institutions	Political environment	1.1.3	Press freedom	Index that captures perceptions on violations of press freedom in the world. It reflects the degree of freedom that journalists and news organizations enjoy in each country, and the efforts made by the authorities to respect and ensure respect for this freedom. It is based on events between 1 September 2009 and 1 September 2010. The lower the index the better, with a lower bound of 0 and no upper bound.	Press Freedom Index 2010	Reporters Without Borders	*	1-11
Innovation Input	Institutions	Regulatory environment	1.2.1	Regulatory quality	Index that captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private-sector development. It ranges from 0 to 100 (higher values indicating better outcomes).	World Governance Indicators 2009	World Bank	*	1-13
Innovation Input	Institutions	Regulatory environment	1.2.2	Rule of law	Index that captures perceptions of the extent to which agents have confidence in, and abide by, the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. It ranges from 0 to 100 (higher values indicating better outcomes).	World Governance Indicators 2009	World Bank	*	1-15
Innovation Input	Institutions	Regulatory environment	1.2.3	Rigidity of employment	Rigidity of employment index that measures the regulation of employment, specifically the hiring and firing of workers and the rigidity of working hours. It is calculated as the average of three sub-indices: a difficulty of hiring index, a rigidity of hours index, and a difficulty of firing index. It ranges from 0 to 100 (higher values indicating more rigid regulations).	Doing Business 2009 and 2010 (2008-09)	World Bank	*	1-17
Innovation Input	Institutions	Business environment	1.3.1	Time to start a business	Measure that captures the median duration that incorporation lawyers indicate is necessary to complete a procedure with minimum follow-up with government agencies and no extra payments.	Ease of Doing Business Index 2011, Doing Business 2011.	World Bank		1-19
Innovation Input	Institutions	Business environment	1.3.2	Cost to start a business	The company law, the commercial code, and specific regulations and fee schedules used as sources for calculating costs. Costs include all official fees and fees for legal or professional services if such services are required by law. Fees for purchasing and legalizing company books are included if these transactions are required by law. In the absence of fee schedules, a government officer's estimate is taken as an official source. In the absence of a government officer's estimate, estimates of incorporation lawyers are used. If several incorporation lawyers provide different estimates, the median reported value is applied. In all cases the cost excludes bribes.	Ease of Doing Business Index 2011, Doing Business 2011.	World Bank		1-20
Innovation Input	Institutions	Business environment	1.3.3	Total tax rate	Amount of taxes and mandatory contributions borne by business case in the second year of operation, expressed as a share of commercial profit. Doing Business 2011 reports the total tax rate for 2009. The total amount of taxes borne is the sum of all the different taxes and contributions payable after accounting for allowable deductions and exemptions. The taxes withheld or collected by the company and remitted to the tax authorities but not borne by the company are excluded. The taxes included can be divided into 5 categories: profit or corporate income tax, social contributions and labour taxes paid by the employer, property taxes, turnover taxes and other taxes (such as municipal fees and vehicle and fuel taxes).	Ease of Doing Business Index 2011, Doing Business 2011.	World Bank		1-22
Innovation Input	Human capital & research	Education	2.1.1	Expenditure on education	Current operating expenditures in education, including wages and salaries and excluding capital investments in buildings and equipment, as a percentage of gross national income (GNI). UNESCO series supplemented World Bank estimates based on UN and UNESCO data (same year).	UIS online database (2004-10)	UNESCO Institute for Statistics		2-1
Innovation Input	Human capital & research	Education	2.1.2	Public expenditure on education per pupil	Public current spending on education divided by the total number of students by level, as a percentage of GDP per capita. Public expenditure (current and capital) includes government spending on educational institutions (both public and private), education administration and subsidies for private entities (students/households and other private entities).	UIS online database (2000-09)	UNESCO Institute for Statistics		2-10
Innovation Input	Human capital & research	Education	2.1.3	School life expectancy	Total number of years of schooling that a child of a certain age can expect to receive in the future, assuming that the probability of his or her being enrolled in school at any particular age is equal to the current enrolment ratio for that age.	UIS online database (2000-10)	UNESCO Institute for Statistics		2-12

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資料: INSEAD, 「GII2011」

GI2011									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		†: soft data *: index data others: hard data	本文表の番号
Innovation Input	Human capital & research	Education	2.1.4	Assessment in reading, mathematics, and science	The OECD Programme for International Student Assessment (PISA) develops three-yearly surveys that examine 15-year-old students' performance in reading, mathematics and science. The scores are calculated in each year so that the mean is 500 and the standard deviation 100. In 2009, 65 countries participated; Macedonia participated in 2000. The scores for China come from Shanghai; those of the United Arab Emirates from Dubai.	①OECD Programme for International Student Assessment (PISA) 2009 and 2000 ②Institute for Statistics, UIS online database (2000-09)	①OECD ②UNESCO Institute for Statistics		2-13
Innovation Input	Human capital & research	Education	2.1.5	Pupil-teacher ratio	The number of pupils enrolled in secondary school divided by the number of secondary school teachers (regardless of their teaching assignment). Where the data are missing for some countries, the ratio for upper-secondary is reported instead.	①UIS online database ②World Development Indicators database (2000-10).	①UNESCO Institute for Statistics ②World Bank		2-14
Innovation Input	Human capital & research	Tertiary education	2.2.1	Tertiary school enrolment	The ratio of total tertiary enrolment, regardless of age, to the population of the age group that officially corresponds to the tertiary level of education. Tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level. UNESCO data supplemented by World Bank data (same source).	UIS online database (2000-10)	UNESCO Institute for Statistics		2-17
Innovation Input	Human capital & research	Tertiary education	2.2.2	Tertiary graduates in science	The share of all tertiary graduates in science over all tertiary graduates.	UIS online database (2000-10)	UNESCO Institute for Statistics		2-18
Innovation Input	Human capital & research	Tertiary education	2.2.3	Tertiary graduates in engineering	The share of all tertiary graduates in manufacturing, engineering, and construction over all tertiary graduates.	UIS online database (2000-09)	UNESCO Institute for Statistics		2-20
Innovation Input	Human capital & research	Tertiary education	2.2.4	Tertiary inbound mobility	The number of students from abroad studying in a given country, as a percentage of the total tertiary enrolment in that country.	UIS online database (2000-10)	UNESCO Institute for Statistics		2-21
Innovation Input	Human capital & research	Tertiary education	2.2.5	Tertiary outbound mobility ratio (%)	The number of students from a given country studying abroad as a percentage of the total tertiary enrolment in that country.	United Nations database UNdata) (2000-09)	UNESCO Institute for Statistics		2-23
Innovation Input	Human capital & research	Tertiary education	2.2.6	Gross tertiary outbound enrolment	Mobile students coming from a country/region as a percentage of the population of tertiary student age in their home country.	United Nations database UNdata) (2001-09)	UNESCO Institute for Statistics		2-22
Innovation Input	Human capital & research	Research & development (R&D)	2.3.1	Researchers	Researchers per million people, headcounts. Researchers in R&D are professionals engaged in the conception or creation of new knowledge, products, processes, methods, or systems and in the management of the projects concerned. Postgraduate PhD students (ISCED97 level 6) engaged in R&D are included. UNESCO series supplemented by World Bank data (same source).	UIS online database (2000-09)	UNESCO Institute for Statistics		2-24
Innovation Input	Human capital & research	Research & development (R&D)	2.3.2	Gross expenditure on R&D (GERD)	Total domestic intramural expenditure on R&D during a given period as a percentage of GDP. Intramural R&D expenditure is all expenditure for R&D performed within a statistical unit or sector of the economy during a specific period, whatever the source of funds. UNESCO data supplemented with World Bank data (same source).	UIS online database (2002-08)	UNESCO Institute for Statistics		2-25
Innovation Input	Human capital & research	Research & development (R&D)	2.3.3	Quality of research institutions	-	Executive Opinion Survey 2010	World Economic Forum	†	2-28
Innovation Input	Infrastructure	Info & comm. technologies (ICT)	3.1.1	ICT access	A composite index that weights five ICT indicators (20% each): (1) fixed telephone lines per 100 inhabitants; (2) mobile cellular telephone subscriptions per 100 inhabitants; (3) international Internet bandwidth (bits) per Internet user; (4) proportion of households with a computer; and (5) proportion of households with Internet access at home. It is the first subindex in ITU's ICT Development Index (IDI).	ICT Development Index Report 2010 (with data from 2008)	International Telecommunication Union (ITU)	*	3-8
Innovation Input	Infrastructure	Info & comm. technologies (ICT)	3.1.2	ICT use	A composite index that weights three ICT indicators (33% each): (1) Internet users per 100 inhabitants; (2) fixed broadband Internet subscribers per 100 inhabitants; (3) mobile broadband subscriptions per 100 inhabitants. It is the second subindex in ITU's ICT Development Index (IDI).	ICT Development Index Report 2010 (with data from 2008)	International Telecommunication Union (ITU)	*	3-10
Innovation Input	Infrastructure	Info & comm. technologies (ICT)	3.1.3	Government's Online Service	Research teams assessed each country's national website and the websites of the ministries of education, labour, social services, health and finance, along with associated portals and subsidiary websites. Websites were tested for a minimal level of content accessibility. The survey covers four stages of government's online service development with points assigned for (1) emerging information services; (2) enhanced information services; (3) transaction services; and (4) a connected approach. A citizen-centric approach was followed. It is the first of three components of the E-Government Development Index (EGDI) of the United Nations Public Administration Network (UNPAN), together with components on telecommunications infrastructure and human capital.	e-Government Development Database (UNeGovDD)	United Nations Public Administration Network	*	3-11

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GII2011									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	†: soft data *: index data others: hard data	本文表の番号	
Innovation Input	Infrastructure	Info & comm. technologies (ICT)	3.1.4	Online participation	The United Nations E-Participation Index is based on the survey used for the UN Online Service Index. The survey was expanded with questions emphasizing quality in the connected presence stage of e-government. These questions focus on the use of the Internet to facilitate provision of information by governments to citizens ('e-information sharing'), interaction with stakeholders ('e-consultation'), and engagement in decision-making processes ('e-decision making'). A country's E-Participation Index value reflects how useful these features are and the extent to which they have been deployed by the government compared with all other countries. The purpose of this measure is to offer insight into how different countries are using online tools to promote interaction between citizen and government, as well as among citizens, for the benefit of all. The index ranges from 0 to 1, with 1 showing greater e-participation.	e-Government Development Database (UNeGovDD)	United Nations Public Administration Network	*	3-13
Innovation Input	Infrastructure	Energy	3.2.1	Electricity output (kWh per capita)	Electricity production, measured at the terminals of all alternator sets in a station. In addition to hydropower, coal, oil, gas, and nuclear power generation, it covers generation by geothermal, solar, wind, and tide and wave energy, as well as that from combustible renewables and waste. Production includes the output of electricity plants that are designed to produce electricity only as well as that of combined heat and power plants. Electricity output in kWh is scaled by population.	World Energy Balances online data service (2008–09)	International Energy Agency		3-15
Innovation Input	Infrastructure	Energy	3.2.2	Electricity consumption (kWh per capita)	Electric power consumption, measured by the production of power plants and combined heat and power plants less transmission, distribution, and transformation losses and own use by heat and power plants. The total value in kWh is scaled by population.	World Energy Balances online data service (2008–09)	International Energy Agency		3-16
Innovation Input	Infrastructure	Energy	3.2.3	GDP per unit of energy use (2000 PPP\$ per kg of oil equivalent)	PPP GDP per kilogram of oil equivalent of energy use. Energy use or total primary energy supply (TPES) is calculated as production of fuels + inputs from other sources + imports – exports – international marine bunkers +/- stock changes. It includes coal, crude oil, natural gas liquids, refinery feedstocks, additives, petroleum products, gases, combustible renewables and waste, electricity and heat. Domestic supply (also called 'energy apparent consumption') differs from final consumption in that it does not take account of distribution losses. The supply (or use) of energy commodities is converted to kilograms or tons of oil equivalent (koe, toe) using standard coefficients for each energy source.	World Energy Balances online data service (2008–09)	International Energy Agency		3-22
Innovation Input	Infrastructure	Energy	3.2.4	Share of renewables in energy use (% of total energy use)	Share of energy from renewable sources over energy use or TPES (definition provided under indicator 3.2.3). Renewable sources include: hydro, geothermal, solar, wind, tide, renewable combustibles, and waste.	World Energy Balances online data service (2008–09)	International Energy Agency		3-19
Innovation Input	Infrastructure	General infrastructure	3.3.1	Trade & transport-related infrastructure	Logistics Performance Index surveys conducted by the World Bank in partnership with academic and international institutions and private companies and individuals engaged in international logistics. The 2009 round of surveys covered more than 5,000 country assessments by nearly 1,000 international freight forwarders. Respondents evaluate eight markets on six core dimensions on a scale from 1 (worst) to 5 (best). The markets are chosen based on the most important export and import markets of the respondent's country, random selection, and, for landlocked countries, neighboring countries that connect them with international markets. Details of the survey methodology are in <i>Arvis et al.'s Connecting to Compete 2010: Trade Logistics in the Global Economy (2010)</i> . Respondents evaluated the quality of trade and transport related infrastructure (e.g., ports, railroads, roads, information technology), on a rating ranging from 1 (very low) to 5 (very high). Scores are averaged across all respondents.	① Logistic Performance Index Surveys 2009 ② World Development Indicators database (2006–09)	① World Bank and Turku School of Economics ② World Bank	*	3-18
Innovation Input	Infrastructure	General infrastructure	3.3.2	Gross capital formation	Gross capital formation (formerly 'gross domestic investment') consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and 'works in progress'. Net acquisitions of valuables are also considered capital formation.	World Bank World Development Indicators database (2000–09)	① World Bank ② OECD		3-20

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GII2011									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		T: soft data *: index data others: hard data	本文表の番号
Innovation Input	Infrastructure	General infrastructure	3.3.3	Ecological footprint and biocapacity	The Global Footprint Network provides estimates of the ecological biocapacity (EB) and of the ecological footprint of consumption (EF) of countries, in global hectares per capita. The difference between the two (EB – EF) corresponds to the ecological deficit (negative values) or reserve (positive values) of each country. EB includes five sub-categories: cropland, grazing, forest, fishing, and built land. EC includes the same five, with the addition of carbon footprint.	Global Footprint Network (2001–07)	Global Footprint Network		3-27
Innovation Input	Market sophistication	Credit	4.1.1	Legal rights strength to get credit	Index that measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders, and thus facilitate lending. It ranges from 0 to 10, with higher scores indicating that collateral and bankruptcy laws are better designed to expand access to credit.	Ease of Doing Business Index 2011, Doing Business 2011	World Bank	*	4-7
Innovation Input	Market sophistication	Credit	4.1.2	Depth of credit information	Index that measures rules and practices affecting the coverage, scope, and accessibility of credit information available through either a public credit registry or a private credit bureau. It ranges from 0 to 6, with higher values indicating the availability of more credit information.	Ease of Doing Business Index 2011, Doing Business 2011	World Bank	*	4-9
Innovation Input	Market sophistication	Credit	4.1.3	Domestic credit to private sector	Financial resources provided to the private sector, such as through loans, purchases of non-equity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries these claims include credit to public enterprises.	①World Development Indicators database(2000–09) ②OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates		4-10
Innovation Input	Market sophistication	Credit	4.1.4	Microfinance institutions' gross loan portfolio	Combined gross loan balances per microfinance institution (current US\$), divided by GDP (current US\$) and multiplied by 100.	①Mix Market database ②World Development Indicators database (2001–09) ③OECD GDP estimates	①Microfinance Information Exchange (MIX) ②World Bank ③OECD GDP estimates		4-11
Innovation Input	Market sophistication	Investment	4.2.1	Strength of investor protection	Index that is the average of the extent of disclosure index, the extent of director liability index, and the ease of shareholder suits index. It ranges from 0 to 10, with higher values indicating more investor protection.	Ease of Doing Business Index 2011, Doing Business 2011	World Bank	*	4-14
Innovation Input	Market sophistication	Investment	4.2.2	Market capitalization	Market capitalization (also known as 'market value') is the share price times the number of shares outstanding. Listed domestic companies are the domestically incorporated companies listed on the country's stock exchanges at the end of the year. Listed companies do not include investment companies, mutual funds, or other collective investment vehicles.	①World Development Indicators database(2005–09) ②OECD GDP estimates	①Standard and Poor's ②World Bank ③OECD GDP estimates		4-16
Innovation Input	Market sophistication	Investment	4.2.3	Total value of stocks trade	Total value of shares traded during the period. This indicator complements the market capitalization ratio by showing whether market size is matched by trading.	①World Development Indicators database(2005–09) ②OECD GDP estimates	①Standard and Poor's ②World Bank ③OECD GDP estimates		4-17
Innovation Input	Market sophistication	Investment	4.2.4	Venture capital deals	Thomson Reuters data on private equity deals, per deal, with details on, among others, the location of investment, investment company, and investor firms and funds. The series corresponds to a query on venture capital deals from 1 January 2010 to 31 December 2010, with the data collected by investment location, for a total of 7,937 deals in 81 countries in 2010.	①Thomson One Banker Private Equity database ②World Development Indicators database ③OECD GDP estimates	①Thomson Reuters ②World Bank ③OECD GDP estimates		4-19
Innovation Input	Market sophistication	Trade & competition	4.3.1	Applied tariff rate	The average of effectively applied rates weighted by the product import shares corresponding to each partner country. Data are classified using the Harmonized System of trade at the six- or eight-digit level. Tariff line data were matched to Standard International Trade Classification (SITC) revision 3 codes to define commodity groups and import weights. To the extent possible, specific rates have been converted to their ad valorem equivalent rates and have been included in the calculation of weighted mean tariffs. Effectively applied tariff rates at the six- and eight-digit product level are averaged for products in each commodity group. When the effectively applied rate is unavailable, the most favoured nation rate is used instead. World Bank estimates using the World Integrated Trade Solution (WITS) system, based on tariff data from the UNCTAD Trade Analysis and Information System (TRANS) database and import weights calculated using the UN Comtrade database.	World Development Indicators database(2002–08)	①World Bank ②UNCTAD TRAINS ③UN COMTRADE		4-21

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GII2011									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	† : soft data * : index data others : hard data	本文表の番号	
Innovation Input	Market sophistication	Trade & competition	4.3.2	Market access trade restrictiveness	The Market Access Overall Trade Restrictiveness Index (MA_OTRI) is a measure of applied tariffs and ad-valorem equivalent non-tariff measures faced by exports, taking into account tariff preferences. It captures the trade distortions that the rest of the world trade policies impose on the export bundle of each country. The MA_OTRI answers the question: What is the uniform tariff that if imposed by all trading partners on exports of country <i>c</i> instead of their current structure of protection would leave exports of country <i>c</i> at their current level? Based on H. L. Kee, A. Nicita, and M. Olarreaga (2008), 'Import Demand Elasticities and Trade Distortions', <i>Review of Economics and Statistics</i> 90 (4): 666-82; and H. L. Kee, A. Nicita, and M. Olarreaga (2009), 'Estimating Trade Restrictiveness Indices', <i>Economic Journal</i> 119: 172-99.	①Overall Trade Restrictiveness Indices ②Global Monitoring Report 2010	①World Bank and International Monetary Fund (IMF)	4-22	
Innovation Input	Market sophistication	Trade & competition	4.3.3	Imports of goods and services	The value of all goods and other market services imported from the rest of the world. Imports includes the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude compensation of employees and investment income (formerly called 'factor services') and transfer payments.	World Development Indicators database (2001-09)	①World Bank ②OECD	4-24	
Innovation Input	Market sophistication	Trade & competition	4.3.4	Exports of goods and services	The value of all goods and other market services provided to the rest of the world. Exports include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude compensation of employees and investment income (formerly called 'factor services') and transfer payments.	World Development Indicators database (2001-09)	①World Bank ②OECD	4-25	
Innovation Input	Market sophistication	Trade & competition	4.3.5	Intensity of local competition	-	Executive Opinion Survey 2010	World Economic Forum	†	4-26
Innovation Input	Business sophistication	Knowledge workers	5.1.1	Employment in knowledge-intensive services	Sum of people in categories 0 to 3 as a percentage of total people employed, according to ISCO-1968, ISCO-88, and NSCO (excluding 0 Armed forces in ISCO-88). Categories included: ISCO-1968: (0/1) Professional, technical and related workers; (2) Administrative and managerial workers; and (3) Clerical and related workers. ISCO-88: (1) Legislators, senior officials and managers; (2) Professionals, and (3) Technicians and associate professionals.	LABORSTA Database of Labour Statistics (2000-08)	International Labour Organization (ILO)		5-13
Innovation Input	Business sophistication	Knowledge workers	5.1.2	Firms offering formal training	The percentage of firms offering formal training programmes for their permanent, full-time employees.	①Enterprise Surveys ②World Development Indicators database (2003-09)	World Bank		5-15
Innovation Input	Business sophistication	Knowledge workers	5.1.3	GERD performed by business enterprise	Percentage of gross expenditure on R&D performed by business enterprise.	UIS online database (2002-09)	UNESCO Institute for Statistics		5-17
Innovation Input	Business sophistication	Knowledge workers	5.1.4	GERD financed by business enterprise	Percentage of gross expenditure on R&D financed by business enterprise.	UIS online database (2001-09)	UNESCO Institute for Statistics		5-18
Innovation Input	Business sophistication	Innovation linkages	5.2.1	University/industry collaboration on R&D	-	Executive Opinion Survey 2010	World Economic Forum	†	5-21
Innovation Input	Business sophistication	Innovation linkages	5.2.2	State of cluster development	Clusters are defined as geographic concentrations of firms, suppliers, producers of related products and services, and specialized institutions in a particular field (e.g., financial services in New York, leather and footwear in Italy, consumer electronics in Japan).	Executive Opinion Survey 2010	World Economic Forum	†	5-22
Innovation Input	Business sophistication	Innovation linkages	5.2.3	GERD financed by abroad	Percentage of gross expenditure on R&D financed by abroad, i.e., with foreign financing.	UIS online database (2001-09)	UNESCO Institute for Statistics		5-23
Innovation Input	Business sophistication	Innovation linkages	5.2.4	Joint ventures / strategic alliances deals	Thomson Reuters data on joint ventures / strategic alliances deals, per deal, with details on, among others, the country of origin of partner firms. The series corresponds to a query on joint ventures / strategic alliances deals from 1 January 2010 to 31 December 2010, for a total of 1,247 deals announced, of which 920 were joint ventures and 327 strategic alliances. Of these, an assessment of value was available for only 184 deals, which is why a count variable was created. Each participating nation (out of a total of 94) of each company in a deal (<i>n</i> countries per deal, <i>n</i> ranging from 1 to 7) gets, per deal, a score equivalent to $1/n$ (with the effect that all country scores add up to 1,247).	①Thomson One Banker Private Equity, SDC Platinum database ②Bank World Development Indicators database ③OECD GDP estimates	①Thomson Reuters ②World Bank ③OECD GDP estimates		5-25

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Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	T: soft data *: index data others: hard data	本文表の番号
Innovation Input	Business sophistication	Innovation linkages	5.2.5	PCT published patents with at least one foreign inventor	Percentage of PCT applications having at least one foreign inventor (i.e., one inventor's country of residence is different from the first-named applicant's country of residence). The statistic is given for PCT Contracting Parties only. Where there were no published PCT applications, a zero is assigned. Counts are based on the year of publication. A patent confers a set of exclusive rights to applicants by law for inventions that meet standards of novelty, non-obviousness, and industrial applicability. It is valid for a limited period of time (generally 20 years), during which patent holders can commercially exploit their inventions on an exclusive basis. In return, applicants are obliged to disclose their inventions to the public so that others, skilled in the art, may replicate the invention. The patent system is designed to encourage innovation by providing innovators with time-limited exclusive legal rights, thus enabling innovators to appropriate the returns of their innovative activities.	WIPO Statistics Database	World Intellectual Property Organization (WIPO)	5-27
Innovation Input	Business sophistication	Knowledge absorption	5.3.1	Royalty and license fees' payments	Payments between residents and nonresidents for the authorized use of intangible, nonproduced, nonfinancial assets and proprietary rights (such as patents, copyrights, trademarks, industrial processes, and franchises) and for the use, through licensing agreements, of produced originals of prototypes (such as films and manuscripts). The data in current US\$ were divided by GDP in current US\$. Zeros in the original World Bank series were replaced by the last record available.	①World Development Indicators database (2000–09) ②OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates	5-28
Innovation Input	Business sophistication	Knowledge absorption	5.3.2	High-tech imports	High-technology imports minus re-imports over total imports minus re-imports. The list of commodities contains technical products with a high intensity of R&D, based on the Eurostat classification, itself based on SITC Rev.4 and the OECD definition. Commodities belong to the following sectors: aerospace; computers & office machines; electronics, telecommunications; pharmacy; scientific instruments; electrical machinery; chemistry, non-electrical machinery; and armament (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/Annexes/htec_esms_an5.pdf).	UN COMTRADE database (2007–10)	United Nations COMTRADE	5-30
Innovation Input	Business sophistication	Knowledge absorption	5.3.3	Computer and communications service imports	Computer, communications, and other services imports (% of commercial service imports) include such activities as international telecommunications, and postal and courier services; computer data; news-related service transactions between residents and nonresidents; construction services; royalties and license fees; miscellaneous business, professional, and technical services; and personal, cultural, and recreational services.	①World Development Indicators database (2000–09) ②OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates	5-31
Innovation Input	Business sophistication	Knowledge absorption	5.3.4	Foreign direct investment net inflows	Net inflows of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by GDP.	①World Development Indicators database (2000–09) ②OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates	5-32
Innovation Output	Scientific outputs	Knowledge creation	6.1.1	Patent applications filed at the national office	Number of patent applications filed by residents at the national patent office. 'Patent' is defined in the description of indicator 5.2.5.	①WIPO Statistics Database ②World Development Indicators database(2000–10) ③OECD GDP estimates	①World Intellectual Property Organization (WIPO) ②World Bank ③OECD GDP estimates	6-8
Innovation Output	Scientific outputs	Knowledge creation	6.1.2	Patent applications filed through the PCT	Number of patent applications filed by residents under the WIPO-administered Patent Cooperation Treaty (PCT). The statistic is given for PCT Contracting Parties only. PCT applications are assigned to a particular country of origin according to the country of residence of the first-named applicant. The PCT system simplifies the process of multiple national patent filings by reducing the requirement to file a separate application in each jurisdiction. 'Patent' is defined in the description of indicator 5.2.5.	①WIPO Statistics Database ②World Development Indicators database ③OECD GDP estimates	①World Intellectual Property Organization (WIPO) ②World Bank ③OECD GDP estimates	6-9
Innovation Output	Scientific outputs	Knowledge creation	6.1.3	Utility model applications filed at the national office	Number of utility model applications filed by residents at their national patent office. Like a patent, a utility model (UM) confers a set of rights for an invention for a limited period of time, during which UM holders can commercially exploit their inventions on an exclusive basis. The terms and conditions for granting UMs are different from those for 'traditional' patents. For example, UMs are issued for a shorter duration (7 to 10 years) and, at most offices, UM applications are granted without substantive examination.	①WIPO Statistics Database ②World Development Indicators database(2000–09) ③OECD GDP estimates	①World Intellectual Property Organization (WIPO) ②World Bank ③OECD GDP estimates	6-10

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Innovation Output	Scientific outputs	Knowledge creation	6.1.4	Scientific and technical journal articles	The number of scientific and engineering articles published in the following fields: physics, biology, chemistry, mathematics, clinical medicine, biomedical research, engineering and technology, and earth and space sciences.	①World Development Indicators database ②OECD GDP estimates	①National Science Foundation ②World Bank ③OECD GDP estimates	6-12
Innovation Output	Scientific outputs	Knowledge impact	6.2.1	Growth rate of GDP per person engaged	Growth of GDP per person engaged provides a measure of labour productivity (defined as output per unit of labour input). GDP per person employed is gross domestic product (GDP) divided by total employment in the economy. Purchasing power parity (PPP) GDP is GDP converted to 1990 constant international dollars using PPP rates. An international dollar has the same purchasing power over GDP that a US dollar has in the United States of America.	LABORSTA Database of Labor Statistics	International Labour Organization (ILO)	6-15
Innovation Output	Scientific outputs	Knowledge impact	6.2.2	New business density	Number of new firms, defined as firms registered in the current year of reporting, per 1,000 working-age people (those aged 15–64).	World Development Indicators database (2007–09)	International Finance Corporation and World Bank	6-17
Innovation Output	Scientific outputs	Knowledge impact	6.2.3	Computer software spending	Total computer software spending (US\$) divided by GDP (current US\$).	①World Development Indicators database ②OECD GDP estimates	①World Information Technology and Services Alliance (WITSA) ②World Bank ③OECD GDP estimates	6-19
Innovation Output	Scientific outputs	Knowledge diffusion	6.3.1	Royalty and license fees' receipts	Receipts between residents and nonresidents for the authorized use of intangible, nonproduced, nonfinancial assets and proprietary rights (such as patents, copyrights, trademarks, industrial processes, and franchises) and for the use, through licensing agreements, of produced originals of prototypes (such as films and manuscripts). Zeros in the original World Bank series were replaced by the last record available.	①World Development Indicators database (2000–09) ②OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates	6-25
Innovation Output	Scientific outputs	Knowledge diffusion	6.3.2	High-tech exports	High-technology exports minus re-exports over total exports minus re-exports. The list of commodities contains technical products with a high intensity of R&D, based on the Eurostat classification, itself based on SITC Rev4 and the OECD definition. Commodities belong to the following sectors: aerospace; computers and office machines; electronics, telecommunications; pharmacy; scientific instruments; electrical machinery; chemistry, non-electrical machinery, and armament (http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/Annexes/htec_esms_an5.pdf).	COMTRADE database(2007–10)	United Nations COMTRADE	6-26
Innovation Output	Scientific outputs	Knowledge diffusion	6.3.3	Computer and communications service exports	Computer, communications, and other services exports (% of commercial service exports) include such activities as international telecommunications, and postal and courier services; computer data; news-related service transactions between residents and nonresidents; construction services; royalties and license fees; miscellaneous business, professional, and technical services; and personal, cultural, and recreational services.	①World Development Indicators database (2000–09) ②OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates	6-28
Innovation Output	Scientific outputs	Knowledge diffusion	6.3.4	Foreign direct investment net outflows	Net outflows of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net outflows of investment from the reporting economy to the rest of the world and is divided by GDP.	①World Development Indicators database (2000–09) ②OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates	6-30
Innovation Output	Creative outputs	Creative intangibles	7.1.1	Trademark registrations filed at the national office	A trademark is a distinctive sign, which distinguishes certain goods or services of one undertaking from those produced or provided by other undertakings. The holder of a registered trademark has the legal right to the exclusive use of the mark in relation to the products or services for which it is registered. Trademark registrations can potentially be maintained indefinitely as long as the trademark holder pays the renewal fees and actually uses the trademark.	①WIPO Statistics Database ②World Development Indicators database (2000–09) ③OECD GDP estimates	①World Intellectual Property Organization (WIPO) ②World Bank ③OECD GDP estimates	7-9

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資料:INSEAD,「GI2011」

GII2011									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		†: soft data *: index data others: hard data	本文表の番号
Innovation Output	Creative outputs	Creative intangibles	7.1.2	Trademark registrations filed through the Madrid System	Number of international trademark registrations filed by residents under the WIPO-administered Madrid System. The statistic is given for Contracting Parties to the Madrid System only. The Madrid System makes it possible for an applicant to apply for a trademark registration in a large number of contracting parties by filing a single application at a national or regional intellectual property (IP) office party to the System. The Madrid System simplifies the process of multinational trademark registration by reducing the requirement to file a separate application with each IP office. An international registration under the Madrid System produces the same effect as an application for registration of the mark in each of the contracting parties designated by the applicant. If protection is not refused by the office of a designated contracting party, the status of the mark is the same as if it had been registered by that office. Definition of trademark under 7.1.1.	①WIPO Statistics Database ②World Development Indicators database (2003–09) ③OECD GDP estimates	①World Intellectual Property Organization (WIPO) ②World Bank ③OECD GDP estimates		7-12
Innovation Output	Creative outputs	Creative intangibles	7.1.3	ICT and business model creation	-	Executive Opinion Survey 2010	World Economic Forum	†	7-13
Innovation Output	Creative outputs	Creative intangibles	7.1.4	ICT and organizational model creation	-	Executive Opinion Survey 2010	World Economic Forum	†	7-15
Innovation Output	Creative outputs	Creative goods & services	7.2.1	Recreation and culture	Expenditure on category (9) recreation and culture as a percentage of individual consumption expenditure of households, non-profit institutions serving households, and general government (current prices, national currency). Individual consumption categories are defined according to the System of National Accounts' classifications of 1993 (SNA 93) and 1968 (SNA 68). Categories under SNA 93 are: (1) Food and non-alcoholic beverages, (2) Alcoholic beverages, tobacco and narcotics, (3) Clothing and footwear, (4) Housing, water, electricity, gas and other fuels, (5) Furnishings, household equipment and routine maintenance of the house, (6) Health, (7) Transport, (8) Communication, (9) Recreation and culture, (10) Education, (11) Restaurants and hotels, and (12) Miscellaneous goods and services.	National Accounts Official Country Data, United Nations database UNdata) (2003–09)	United Nations Statistics Division		7-17
Innovation Output	Creative outputs	Creative goods & services	7.2.2	National feature films produced	Films produced for commercial exhibition in cinemas (films produced solely for television broadcasting are as a general rule excluded). The minimum length of films classified as long (or feature) films ranges from less than 1,000 metres to more than 3,000 metres depending on the country, with a mode of around 1,600 metres.	①UIS online database ②World Bank population estimates, World Development Indicators database (2005–08)	①UNESCO Institute for Statistics ②World Bank population estimates		7-20
Innovation Output	Creative outputs	Creative goods & services	7.2.3	Daily newspapers circulation	Daily newspapers are periodic publications mainly reporting events that have occurred in the 24-hour period before going to press (issued at least 4 times a week). Periodic publications are intended for the general public and mainly designed to be a primary source of written information on current events connected with public affairs, international questions, politics, etc. They may also include articles on literary or other subjects as well as illustrations and advertising. The average daily circulation includes the number of copies distributed both inside the country and abroad and either: (a) sold directly; (b) sold by subscription; or (c) mainly distributed free of charge.	UIS online database (2001–05)	UNESCO Institute for Statistics		7-21
Innovation Output	Creative outputs	Creative goods & services	7.2.4	Creative goods exports	Total export values of creative goods (current US\$) over total goods exports (current US\$).	UNCTAD Creative Economy Report, UNCTADStat (2003–08)	United Nations Conference on Trade and Development (UNCTAD)		7-22
Innovation Output	Creative outputs	Creative goods & services	7.2.5	Creative services exports	Total exports of creative services (current US\$) over total services exports (current US\$). UNCTAD reports that 'the value of total exports... of creative services is inevitably underestimated, as all the statistical detail necessary is rarely systematically reported'. Creative services includes the following categories of services: (1) advertising, market research and public opinion polling services; (2) architectural, engineering and other technical; (3) research and development services; (4) personal, cultural and recreational services, (including 4.a. audiovisual and related services); and (5) other personal, cultural and recreational services. UNCTAD does not report totals for services, the series 1 to 5 were added up to get the total.	UNCTAD Creative Economy Report, UNCTADStat (2001–08)	United Nations Conference on Trade and Development (UNCTAD)		7-24

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資料: INSEAD, 「GII2011」

2.4 GII2012

GII2012									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		1: soft data *: index data others: hard data	本文表の番号
Innovation Input	Institutions	Political environment	1.1.1	Political stability and absence of violence/terrorism	Index that captures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism. Scores are standardized.	World Governance Indicators 2010	World Bank	*	1-1
Innovation Input	Institutions	Political environment	1.1.2	Government effectiveness	Index that captures perceptions of the quality of public and civil services and the degree of their independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Scores are standardized.	World Governance Indicators 2010	World Bank	*	1-10
Innovation Input	Institutions	Political environment	1.1.3	Press freedom	Index that captures perceptions on violations of press freedom in the world. It reflects the degree of freedom that journalists and news organisations enjoy in each country, and the efforts made by the authorities to respect and ensure respect for this freedom. It is based on events between 1 December 2010 and 30 November 2011.	Press Freedom Index 2011-2012	Reporters Without Borders	*	1-11
Innovation Input	Institutions	Regulatory environment	1.2.1	Regulatory quality	Index that captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private-sector development. Scores are standardized.	World Governance Indicators 2010	World Bank	*	1-13
Innovation Input	Institutions	Regulatory environment	1.2.2	Rule of law	Index that captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Scores are standardized.	World Governance Indicators 2010	World Bank	*	1-15
Innovation Input	Institutions	Regulatory environment	1.2.3	Cost of redundancy dismissal	<i>Doing Business</i> , in its indicators on employing workers, measures flexibility in the regulation on redundancy in a manner consistent with relevant ILO conventions to strike a better balance between labour market flexibility and social protection (including unemployment protection). The redundancy cost indicator is the sum of the cost of advance notice requirements added to severance payments due when terminating a redundant worker, expressed in weeks of salary. The average value of notice requirements and severance payments applicable to a worker with 1 year of tenure, a worker with 5 years of tenure, and a worker with 10 years of tenure is used to assign the score. If the redundancy cost adds up to 8 or fewer weeks of salary, a value of 8 is assigned but the actual number of weeks is published. If the cost adds up to more than 8 weeks of salary, the score is the number of weeks. One month is recorded as 4 and 1/3 weeks. Assumptions about the worker: the worker is a full-time, male, nonexecutive employee; he earns a salary plus benefits equal to the economy's average wage during the entire period of his employment; he has a pay period that is the most common for workers in the economy; he is a lawful citizen who belongs to the same race and religion as the majority of the economy's population; he resides in the economy's largest business city; he is not a member of a labour union, unless membership is mandatory. Assumptions about the business: the business is a limited liability company; it operates in the economy's largest business city; it is 100% domestically owned; it operates in the manufacturing sector; it has 60 employees; it is subject to collective bargaining agreements in economies where such agreements cover more than half the manufacturing sector and apply even to firms not party to them; and it abides by every law and regulation but does not grant workers more benefits than mandated by law, regulation, or (if applicable) collective bargaining agreement.	Doing Business 2012, Employing Workers.	World Bank		1-18
Innovation Input	Institutions	Business environment	1.3.1	Ease of starting a business	The ranking is the simple average of the percentile rankings on the component indicators for starting a business: procedures (number); time (days); and cost (% of income per capita). <i>Doing Business</i> records all procedures that are officially required for an entrepreneur to start up and formally operate an industrial or commercial business. These include obtaining all necessary licenses and permits and completing any required notifications, verifications, or inscriptions for the company and employees with relevant authorities. To make the data comparable across economies, several assumptions about the business and the procedures are used.	Ease of Doing Business Index 2012, Doing Business 2012	World Bank	*	1-19

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資料: INSEAD, 「GII2012」

GI12012									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	1: soft data *: index data others: hard data	本文表の番号	
Innovation Input	Institutions	Business environment	1.3.2	Ease of resolving insolvency	The ranking on the ease of resolving insolvency is based on the recovery rate (cents on the dollar). To make the data comparable across economies, several assumptions about the business and the case are used: the recovery rate is recorded as cents on the dollar recouped by creditors through reorganization, liquidation, or debt enforcement (foreclosure) proceedings. The calculation takes into account the outcome: whether the business emerges from the proceedings as a going concern or the assets are sold piecemeal. Then the costs of the proceedings are deducted (1 cent for each percentage point of the value of the debtor's estate). Finally, the value lost as a result of the time the money remains tied up in insolvency proceedings is taken into account, including the loss of value due to depreciation of the hotel furniture. Consistent with international accounting practice, the annual depreciation rate for furniture is taken to be 20%. The furniture is assumed to account for a quarter of the total value of assets. The recovery rate is the present value of the remaining proceeds, based on end-2010 lending rates from the International Monetary Fund's <i>International Financial Statistics</i> , supplemented with data from central banks and the Economist Intelligence Unit. Indicators resolving insolvency—time (in years) and cost (% of estate), while also computed by <i>Doing Business</i> , are not taken into account for the ranking on the ease of resolving insolvency.	Ease of Doing Business Index 2012, Doing Business 2012	World Bank	*	1-21
Innovation Input	Institutions	Business environment	1.3.3	Ease of paying taxes	The ranking on the ease of paying taxes is the simple average of the percentile rankings on the component indicators for paying taxes: payments (number per year); time (hours per year); profit tax (%); labour tax and contributions (%); other taxes (%); and total tax rate (% profit). As of the 2012 edition of <i>Doing Business</i> , a threshold—equivalent to the highest total tax rate among the top 30% of economies in the ranking on the total tax rate—is applied to the total tax rate. It will be calculated and adjusted on a yearly basis. The threshold in 2011 is 32.5%. For all economies with a total tax rate below this threshold, the total tax rate is set at 32.5% this year. The threshold is not based on any underlying theory, but is intended to mitigate the effect of very low tax rates on the ranking of the ease of paying taxes. To make the data comparable across economies, several assumptions about the business and the taxes and contributions are used. The methodology benefited from discussion with members of the International Tax Dialogue and other stakeholders, which led to a refinement of the survey questions on the time to pay taxes, the collection of additional data on the labour tax wedge for further research, and the introduction of a threshold applied to the total tax rate for the purpose of calculating the rankings on the ease of paying taxes.	Ease of Doing Business Index 2012, Doing Business 2012	World Bank	*	1-24
Innovation Input	Human capital & research	Education	2.1.1	Expenditure on education	Current operating expenditures in education, including wages and salaries and excluding capital investments in buildings and equipment, as a percentage of gross national income (GNI). UNESCO series supplemented by World Bank estimates based on UN and UNESCO data (same year).	①UIS online database ②United Nations database UNdata ③World Development Indicators database (2008–11)	①UNESCO Institute for Statistics ②United Nations ③World Bank		2-1
Innovation Input	Human capital & research	Education	2.1.2	Public expenditure on education per pupil	Public current spending on education divided by the total number of students by level, as a percentage of GDP per capita. Public expenditure (current and capital) includes government spending on educational institutions (both public and private), education administration, and subsidies for private entities (students/households and other private entities).	UIS online database (2001–10)	UNESCO Institute for Statistics		2-10
Innovation Input	Human capital & research	Education	2.1.3	School life expectancy	Total number of years of schooling that a child of a certain age can expect to receive in the future, assuming that the probability of his or her being enrolled in school at any particular age is equal to the current enrolment ratio for that age.	UIS online database (2002–11)	UNESCO Institute for Statistics		2-12
Innovation Input	Human capital & research	Education	2.1.4	Assessment in reading, mathematics, and science	The OECD Programme for International Student Assessment (PISA) develops three-yearly surveys that examine 15-year-old students' performance in reading, mathematics, and science. The scores are calculated in each year so that the mean is 500 and the standard deviation 100. The scores for China come from Shanghai; those for India from Himachal Pradesh and Tamil Nadu (average); those for the United Arab Emirates from Dubai; and those for Venezuela from Miranda.	OECD Programme for International Student Assessment (PISA) 2009 and 2010 (2009–10).	OECD		2-13

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資料:INSEAD,「GI12012」

GII2012									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	1: soft data *: index data others: hard data	本文 表の 番号	
Innovation Input	Human capital & research	Education	2.1.5	Pupil-teacher ratio, secondary	The number of pupils enrolled in secondary school divided by the number of secondary school teachers (regardless of their teaching assignment). Where the data are missing for some countries, the ratios for upper-secondary are reported; if these are also missing, the ratios for lower-secondary are reported instead. UNESCO data supplemented by World Bank data.	①UIS online database ②World Development Indicators database (2001–11)	①UNESCO Institute for Statistics ②World Bank		2-14
Innovation Input	Human capital & research	Tertiary education	2.2.1	Tertiary enrolment	The ratio of total tertiary enrolment, regardless of age, to the population of the age group that officially corresponds to the tertiary level of education. Tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level. UNESCO data supplemented by World Bank data.	①UIS online database ②World Development Indicators database (2003–11)	①UNESCO Institute for Statistics ②World Bank		2-17
Innovation Input	Human capital & research	Tertiary education	2.2.2	Graduates in science and engineering	The share of all tertiary graduates in manufacturing, engineering, and construction over all tertiary graduates.	UIS online database (2001–11)	UNESCO Institute for Statistics		2-19
Innovation Input	Human capital & research	Tertiary education	2.2.3	Tertiary inbound mobility	The number of students from abroad studying in a given country, as a percentage of the total tertiary enrolment in that country.	UIS online database (2001–11)	UNESCO Institute for Statistics		2-21
Innovation Input	Human capital & research	Tertiary education	2.2.4	Gross tertiary outbound enrolment	Mobile students coming from a country/ region as a percentage of the population of tertiary student age in their home country. UNESCO data supplemented by United Nations data.	①UIS online database ②United Nations database UNdata (2008–10)	①UNESCO Institute for Statistics ②United Nations		2-22
Innovation Input	Human capital & research	Research & development (R&D)	2.3.1	Researchers	Researchers per million population, head counts. Researchers in R&D are professionals engaged in the conception or creation of new knowledge, products, processes, methods, or systems and in the management of the projects concerned. Postgraduate PhD students (ISCED97 level 6) engaged in R&D are included. The series with full-time equivalents (FTE) also exists, but has a lower country coverage. UNESCO series supplemented by World Bank data.	①UIS online database ②World Development Indicators database (2002–10)	①UNESCO Institute for Statistics ②World Bank		2-24
Innovation Input	Human capital & research	Research & development (R&D)	2.3.2	Gross expenditure on R&D (GERD)	Total domestic intramural expenditure on R&D during a given period as a percentage of GDP. Intramural R&D expenditure is all expenditure for R&D performed within a statistical unit or sector of the economy during a specific period, whatever the source of funds. UNESCO data supplemented with World Bank data.	①UIS online database ②World Development Indicators database (2002–10)	①UNESCO Institute for Statistics ②World Bank		2-25
Innovation Input	Human capital & research	Research & development (R&D)	2.3.3	Quality of scientific research institutions	-	Executive Opinion Survey 2010–2011	World Economic Forum	†	2-27
Innovation Input	Infrastructure	Information and communication technologies (ICT)	3.1.1	ICT access	The ICT access index is a composite index that weights five ICT indicators (20% each): (1) Fixed telephone lines per 100 inhabitants; (2) Mobile cellular telephone subscriptions per 100 inhabitants; (3) International Internet bandwidth (bit/s) per Internet user; (4) Proportion of households with a computer; and (5) Proportion of households with Internet access at home. It is the first subindex in ITU's ICT Development Index (IDI).	①Measuring the Information Society 2011 ②ICT Development Index 2011 (2008–10)	International Telecommunication Union (ITU)	*	3-8
Innovation Input	Infrastructure	Information and communication technologies (ICT)	3.1.2	ICT use	The ICT use index is a composite index that weights three ICT indicators (33% each): (1) Internet users per 100 inhabitants; (2) Fixed broadband Internet subscribers per 100 inhabitants; (3) Mobile broadband subscriptions per 100 inhabitants. It is the second subindex in ITU's ICT Development Index (IDI).	①Measuring the Information Society 2011 ②ICT Development Index 2011 (2008–10)	International Telecommunication Union (ITU)	*	3-10
Innovation Input	Infrastructure	Information and communication technologies (ICT)	3.1.3	Government's online service	Research teams assessed each country's national website as well as the websites of the ministries of education, labour, social services, health, and finance, as well as associated portals and subsidiary websites. Websites were tested for a minimal level of content accessibility. The survey covers four stages of government's online service development with points assigned for (1) emerging information services; (2) enhanced information services; (3) transaction services; and (4) a connected approach. A citizen-centric approach was followed. It is the first of three components of the E-Government Development Index (EGDI) of the United Nations Public Administration Network (UNPAN), together with components on telecommunications infrastructure and human capital.	e-Government Survey 2012 (2010–11)	United Nations Public Administration Network	*	3-11

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資料: INSEAD, 「GII2012」

GI2012									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	1: soft data *: index data others: hard data	本文表の番号	
Innovation Input	Infrastructure	Information and communication technologies (ICT)	3.1.4	Online e-participation	The United Nations E-Participation Index is based on the survey used for the UN Online Service Index. The survey was expanded with questions emphasizing quality in the connected presence stage of e-government. These questions focus on the use of the Internet to facilitate the provision of information by governments to citizens ('e-information sharing'), interaction with stakeholders ('e-consultation'), and engagement in decision-making processes ('e-decision making'). A country's E-Participation Index value reflects how useful these features are and the extent to which they have been deployed by the government compared with all other countries. The purpose of this measure is to offer insight into how different countries are using online tools to promote interaction between citizen and government, as well as among citizens, for the benefit of all. The index ranges from 0 to 1, with 1 showing greater e-participation.	e-Government Survey 2012	United Nations Public Administration Network	*	3-13
Innovation Input	Infrastructure	General infrastructure	3.2.1	Electricity output	Electricity production, measured at the terminals of all alternator sets in a station. In addition to hydropower, coal, oil, gas, and nuclear power generation, this indicator covers generation by geothermal, solar, wind, and tide and wave energy, as well as that from combustible renewables and waste. Production includes the output of electricity plants that are designed to produce electricity only as well as that of combined heat and power plants. Electricity output in KWh is scaled by population.	World Energy Balances online data service (2009–10).	International Energy Agency		3-15
Innovation Input	Infrastructure	General infrastructure	3.2.2	Electricity consumption	Electric power consumption, measured by the production of power plants and combined heat and power plants less transmission, distribution, and transformation losses and own use by heat and power plants. The total value in kWh is scaled by population.	World Energy Balances online data service (2009–10).	International Energy Agency		3-16
Innovation Input	Infrastructure	General infrastructure	3.2.3	Trade and transport-related infrastructure	Logistics Performance Index surveys conducted by the World Bank in partnership with academic and international institutions and private companies and individuals engaged in international logistics. The 2009 round of surveys covered more than 5,000 country assessments by nearly 1,000 international freight forwarders. Respondents evaluate eight markets on six core dimensions on a scale from 1 (worst) to 5 (best). The markets are chosen based on the most important export and import markets of the respondent's country, random selection, and, for landlocked countries, neighbouring countries that connect them with international markets. Details of the survey methodology are in Arvis et al.'s <i>Connecting to Compete 2010: Trade Logistics in the Global Economy</i> (2010). Respondents evaluated the quality of trade and transport related infrastructure (e.g., ports, railroads, roads, information technology), on a rating ranging from 1 (very low) to 5 (very high). Scores are averaged across all respondents.	Logistics Performance Index 2010 (2006–09)	World Bank and Turku School of Economics	*	3-18
Innovation Input	Infrastructure	General infrastructure	3.2.4	Gross capital formation	Gross capital formation (formerly 'gross domestic investment') consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and 'work in progress'. Net acquisitions of valuables are also considered capital formation.	World Development Indicators database (2003–10)	①World Bank ②OECD		3-20
Innovation Input	Infrastructure	Ecological sustainability	3.3.1	GDP per unit of energy use	Purchasing power parity gross domestic product (PPP\$ GDP) per kilogram of oil equivalent of energy use. Energy use or total primary energy supply (TPES) is calculated as production of fuels + inputs from other sources + imports – exports – international marine bunkers +/- stock changes. It includes coal, crude oil, natural gas liquids, refinery feedstocks, additives, petroleum products, gases, combustible renewables and waste, electricity, and heat. Domestic supply (also called 'energy apparent consumption') differs from final consumption in that it does not take account of distribution losses. The supply (or use) of energy commodities is converted to kilograms or tons of oil equivalent (koe, toe) using standard coefficients for each energy source.	World Energy Balances online data service (2009–10)	International Energy Agency		3-22
Innovation Input	Infrastructure	Ecological sustainability	3.3.2	Environmental performance	This index ranks countries on 22 performance indicators tracked across policy categories that cover both environmental public health and ecosystem vitality. These indicators gauge how close countries are to established environmental policy goals. The index ranges from 0 to 100, 100 indicating best performance.	Yale University and Columbia University Environmental Performance Index 2012	Yale University and Columbia University	*	3-24

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GII2012									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	1: soft data *: index data others: hard data	本文表の番号	
Innovation Input	Infrastructure	Ecological sustainability	3.3.3	ISO 14001 environmental certificates	Number of certificates of conformity to 'ISO 14001:2004 Environmental management systems: Requirements with guidance for use' issued, based on the ISO survey. Single-site and multiple-site certificates are not distinguished. The ISO survey is published on an annual basis by the International Organization for Standardization (ISO). The 2010 edition of the ISO survey was carried out by the market research firm the Nielsen Company. Only certification bodies accredited by national members of the International Accreditation Forum (www.iaf.nu) were used as sources (except for certificates in the Russian Federation, which were accredited locally). Certification of conformity with standards is not a requirement and the standards can be implemented without certification, but certification is perceived as adding value and trust. ISO is a network of the national standards institutes of 163 countries, and it is the world's largest developer of voluntary International Standards for business, government, and society, with a portfolio of more than 18,800 standards in almost every sector of economic activity and technology. ISO itself does not perform certification to its standards, does not issue certificates, and does not control certification performed independently of ISO by other organizations. The data are reported per billion PPP\$ GDP.	The ISO Survey of Certifications 2010 CD-Rom (2008-10).	International Organization for Standardization (ISO)		3-26
Innovation Input	Market sophistication	Credit	4.1.1	Ease of getting credit	The ranking is based on the percentile rankings on the component indicators for the getting credit index: strength of legal rights index (range 0-10, weighted at 62.5%); and depth of credit information index (range 0-6, weighted at 37.5%). <i>Doing Business</i> measures the legal rights of borrowers and lenders with respect to secured transactions through one set of indicators and the sharing of credit information through another. The first set of indicators describes how well collateral and bankruptcy laws facilitate lending. The second set measures the coverage, scope and accessibility of credit information available through public credit registries and private credit bureaus. Although <i>Doing Business</i> compiles data on getting credit for public registry coverage (% of adults) and for private bureau coverage (% of adults), these indicators are not included in the ranking.	①Ease of Doing Business Index 2012 ②Doing Business 2012	World Bank	*	4-8
Innovation Input	Market sophistication	Credit	4.1.2	Domestic credit to private sector	Financial resources provided to the private sector, such as through loans, purchases of non-equity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries, these claims include credit to public enterprises.	① World Development Indicators database (2005-10) ② OECD GDP estimates	① International Monetary Fund (IMF) ② World Bank ③ OECD GDP estimates		4-10
Innovation Input	Market sophistication	Credit	4.1.3	Microfinance institutions' gross loan portfolio	Combined gross loan balances per microfinance institution (current US\$), divided by GDP (current US\$) and multiplied by 100.	① Mix Market database ② World Development Indicators database (2001-11) ③ OECD GDP estimates	① Microfinance Information Exchange (MIX) ② World Bank ③ OECD GDP estimates		4-11
Innovation Input	Market sophistication	Investment	4.2.1	Ease of protecting investors	The ranking is the simple average of the percentile rankings on the component indicators for protecting investors: the extent of disclosure index (0-10); the extent of director liability index (0-10); the ease of shareholder suits index (0-10); and the strength of investor protection index (0-10). <i>Doing Business</i> measures the strength of minority shareholder protections against directors' misuse of corporate assets for personal gain. The indicators distinguish three dimensions of investor protections: transparency of related-party transactions (extent of disclosure index), liability for self-dealing (extent of director liability index), and shareholders' ability to sue officers and directors for misconduct (ease of shareholder suits index). The data come from a survey of corporate and securities lawyers and are based on securities regulations, company laws, civil procedure codes, and court rules of evidence.	Ease of Doing Business Index 2012, <i>Doing Business</i> 2012.	World Bank	*	4-14
Innovation Input	Market sophistication	Investment	4.2.2	Market capitalization	Market capitalization (also known as 'market value') is the share price times the number of shares outstanding. Listed domestic companies are the domestically incorporated companies listed on the country's stock exchanges at the end of the year. Listed companies do not include investment companies, mutual funds, or other collective investment vehicles	① World Development Indicators database (2006-10) ② OECD GDP estimates	① Standard and Poor's ② World Bank ③ OECD GDP estimates		4-16
Innovation Input	Market sophistication	Investment	4.2.3	Total value of stocks traded	Total value of shares traded during the period. This indicator complements the market capitalization ratio by showing whether market size is matched by trading.	① World Development Indicators database (2006-10) ② OECD GDP estimates	① Standard and Poor's ② World Bank ③ OECD GDP estimates		4-17

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資料: INSEAD, 「GII2012」

GII2012								
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	1: soft data *: index data others: hard data	本文表の番号
Innovation Input	Market sophistication	Investment	4.2.4	Venture capital deals	Thomson Reuters data on private equity deals, per deal, with details on, among others, the location of investment, investment company, investor firms, and funds. The series corresponds to a query on venture capital deals from 1 January 2011 to 31 December 2011, with the data collected by investment location, for a total of 6,306 deals in 71 countries in 2011. The data are reported per trillion PPP\$ GDP.	①Thomson One Banker Private Equity database ②World Development Indicators database ③OECD GDP estimates	①Thomson Reuters ②World Bank ③OECD GDP estimates	4-19
Innovation Input	Market sophistication	Trade & competition	4.3.1	Applied tariff rate, weighted mean	The average of effectively applied rates weighted by the product import shares corresponding to each partner country. Data are classified using the Harmonized System of trade at the six- or eight-digit level. Tariff line data were matched to Standard International Trade Classification (SITC) revision 3 codes to define commodity groups and import weights. To the extent possible, specific rates have been converted to their ad valorem equivalent rates and have been included in the calculation of weighted mean tariffs. Effectively applied tariff rates at the six- and eight-digit product level are averaged for products in each commodity group. When the effectively applied rate is unavailable, the most favoured nation rate is used instead. World Bank estimates using the World Integrated Trade Solution (WITS) system, based on tariff data from the UNCTAD Trade Analysis and Information System (TRAINS) database and import weights calculated using the UN Comtrade database.	World Development Indicators database (2003–10)	World Bank, based on WITS, UNCTAD TRAINS, and UN COMTRADE	4-21
Innovation Input	Market sophistication	Trade & competition	4.3.2	Market access for non-agricultural exports	Part B of Section II Country Tables of the World Tariff Profiles (WTP) covers, among others, the market access conditions in the five major export markets for each country, broken down into agricultural (AG) and non-agricultural products (NAMA), following the classification included in Annex 1 of the WTO Agreement on Agriculture (by Harmonized System codes). The weighted actual applied tariff in each export market (c) is calculated as the difference between (a) the trade-weighted average most-favoured nation (MFN) duty and (b) the preference margin, defined as the trade-weighted average difference between the MFN duty and the lowest preferential duty. Statistics (a) and (b) for AG and NAMA are published in the World Tariff Profiles and are used to calculate (c). To get a single value by country, the actual applied tariffs for each of the five export markets were weighted by total imports for non-agricultural exports. For EU countries, the extra-EU data are included for the entire bloc. These statistics are calculated from the imports data reported by the importing country (mirror exports data) and the tariff applied when these imports come into the country, that is, MFN, preferential or general (for non-WTO members). In each WTP issue, the list of major markets depends on the availability of imports data; to increase data coverage, the latest available data for two reference years are used. The reference years for each partner can be consulted in the WTP (if the same year is used in different WTP editions, data will differ if revisions were made). Applied tariffs and imports are sourced from submissions made to the WTO Integrated Data Base (IDB). Preferences are sourced from the IDB and supplemented by ITC data. The ITC also calculates all non-available ad-valorem equivalents (AVEs) for MFN and non-MFN non-ad valorem duties (base years for imports change every issue). When information on preferential tariff regimes is missing, MFN treatment is assumed (it is also assumed that a country avails itself of preferential tariffs, even if the exporter chooses not to for whatever reason—such as the more onerous prerequisites attached to the preferential tariff).	World Tariff Profiles 2011 and 2008 (2008–09)	①World Trade Organization (WTO) ②International Trade Centre (ITC) ③United Nations Conference on Trade and Development (UNCTAD)	4-23
Innovation Input	Market sophistication	Trade & competition	4.3.3	Imports of goods and services	The value of all goods and other market services imported from the rest of the world. Imports includes the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. It excludes compensation of employees and investment income (formerly called 'factor services') and transfer payments.	World Development Indicators database (2003–10)	①World Bank ②OECD	4-24
Innovation Input	Market sophistication	Trade & competition	4.3.4	Exports of goods and services	The value of all goods and other market services provided to the rest of the world. Exports include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude compensation of employees and investment income (formerly called 'factor services') and transfer payments.	World Development Indicators database (2003–10)	①World Bank ②OECD	4-25

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資料:INSEAD,「GII2012」

GII2012									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		†: soft data *: index data others: hard data	本文表の番号
Innovation Input	Market sophistication	Trade & competition	4.3.5	Intensity of local competition	-	Executive Opinion Survey 2010-2011	World Economic Forum	†	4-26
Innovation Input	Business sophistication	Knowledge workers	5.1.1	Employment in knowledge-intensive services	Sum of people in categories 0 to 3 as a percentage of total people employed, according to ISCO-1968, ISCO-88, and NSCO (excluding 0 Armed forces in ISCO-88). Categories included: ISCO-1968: 0/1 Professional, technical and related workers, 2 Administrative and managerial workers, 3 Clerical and related workers. ISCO-88: 1 Legislators, senior officials and managers, 2 Professionals, 3 Technicians and associate professionals.	LABORSTA Database of Labour Statistics (2001-08)	International Labour Organization (ILO)		5-13
Innovation Input	Business sophistication	Knowledge workers	5.1.2	Firms offering formal training	The percentage of firms offering formal training programmes for their permanent, full-time employees.	①Enterprise Surveys ②World Development Indicators database (2002-10)	①International Finance Corporation and World Bank ②World Bank		5-15
Innovation Input	Business sophistication	Knowledge workers	5.1.3	GERD performed by business enterprise	Percentage of gross expenditure on R&D performed by business enterprise.	UIS online database (2002-10)	UNESCO Institute for Statistics		5-17
Innovation Input	Business sophistication	Knowledge workers	5.1.4	GERD financed by business enterprise	Percentage of gross expenditure on R&D financed by business enterprise.	UIS online database (2001-10)	UNESCO Institute for Statistics		5-18
Innovation Input	Business sophistication	Knowledge workers	5.1.5	GMAT mean score	Mean scores at the Graduate Management Admission Test (GMAT) by residency and by citizenship, weighted by total number of residents and citizens taking the test, respectively. The GMAT is a standardized test aimed at measuring aptitude to succeed academically in graduate business studies. It is an important part of the admissions process for nearly 5,300 graduate management programs in approximately 2,000 business schools worldwide. The GMAT exam consists of three sections: Verbal, Quantitative, and Analytical Writing. GMAT total scores are calculated based on performance in the Verbal and Quantitative sections of the exam only. Scores are reported in increments of 10, on a scale ranging from 200 to 800. Mean score data for groups with fewer than 5 GMAT exams taken are not released and therefore not considered.	GMAC Exam	Graduate Management Admission Council (GMAC)		5-19
Innovation Input	Business sophistication	Knowledge workers	5.1.6	GMAT test takers	Total number of test takers of the Graduate Management Admission Test (GMAT) by citizenship, scaled by population 20-34 years old (if for a given country/economy the data for citizens do not exist, the data for residents are given instead). Refer to indicator 5.1.5 for details.	GMAC Exam	Graduate Management Admission Council (GMAC)		5-20
Innovation Input	Business sophistication	Innovation linkages	5.2.1	University/industry research collaboration	-	Executive Opinion Survey 2010-2011	World Economic Forum	†	5-21
Innovation Input	Business sophistication	Innovation linkages	5.2.2	State of cluster development	-	Executive Opinion Survey 2010-2011	World Economic Forum	†	5-22
Innovation Input	Business sophistication	Innovation linkages	5.2.3	GERD financed by abroad	Percentage of gross expenditure on R&D financed by abroad, i.e., with foreign financing.	UIS online database (2002-10)	UNESCO Institute for Statistics		5-23
Innovation Input	Business sophistication	Innovation linkages	5.2.4	Joint venture / strategic alliance deals	Thomson Reuters data on joint ventures / strategic alliances deals, per deal, with details on, among others, the country of origin of partner firms. The series corresponds to a query on joint ventures / strategic alliances deals from 1 January 2011 to 31 December 2011, for a total of 3,007 deals announced. Each participating nation of each company in a deal (n countries per deal) gets, per deal, a score equivalent to 1/n (with the effect that all country scores add up to 3,007). The data are reported per trillion PPP\$ GDP.	①Thomson One Banker Private Equity, SDC Platinum database ②Bank World Development Indicators database ③OECD GDP estimates	①Thomson Reuters ②World Bank ③OECD GDP estimates		5-25
Innovation Input	Business sophistication	Innovation linkages	5.2.5	Share of patents with foreign inventor	Percentage of PCT applications having at least one foreign inventor (i.e., one inventor's country of residence is different from the first-named applicant's country of residence). The statistic is given for PCT Contracting Parties only. Where there were no published PCT applications, a zero is assigned. Counts are based on the year of publication. A patent confers a set of exclusive rights to applicants by law for inventions that meet standards of novelty, non-obviousness, and industrial applicability. It is valid for a limited period of time (generally 20 years), during which patent holders can commercially exploit their inventions on an exclusive basis. In return, applicants are obliged to disclose their inventions to the public so that others, skilled in the art, may replicate the invention. The patent system is designed to encourage innovation by providing innovators with time-limited exclusive legal rights, thus enabling innovators to appropriate the returns of their innovative activities.	WIPO Statistics Database (2001-11)	World Intellectual Property Organization (WIPO)		5-27

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資料: INSEAD, 「GII2012」

GII2012								
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	1: soft data *: index data others: hard data	本文表の番号
Innovation Input	Business sophistication	Knowledge absorption	5.3.1	Royalty and license fees payments	Payments between residents and nonresidents for the authorized use of intangible, nonproduced, nonfinancial assets and proprietary rights (such as patents, copyrights, trademarks, industrial processes, and franchises) and for the use, through licensing agreements, of produced originals of prototypes (such as films and manuscripts). The data in current US\$ were divided by GDP in current US\$.	①World Development Indicators database (2005–10) ②OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates	5-28
Innovation Input	Business sophistication	Knowledge absorption	5.3.2	High-tech imports	High-technology imports minus reimports over total imports minus reimports. The list of commodities contains technical products with a high intensity of R&D, based on the Eurostat classification, itself based on SITC Rev4 and the OECD definition. Commodities belong to the following sectors: aerospace; computers & office machines; electronics; telecommunications; pharmacy; scientific instruments; electrical machinery; chemistry; non-electrical machinery; and armament.	①UN COMTRADE database ②Eurostat 'High-technology' aggregations based on SITC Rev. 4, April 2009 (2007–11).	①United Nations COMTRADE ②Eurostat	5-30
Innovation Input	Business sophistication	Knowledge absorption	5.3.3	Computer and communications service imports	Computer, communications, and other services (% of commercial service imports) include such activities as international telecommunications, and postal and courier services; computer data; news-related service transactions between residents and nonresidents; construction services; royalties and license fees; miscellaneous business, professional, and technical services; and personal, cultural, and recreational services.	①International Financial Statistics and data files ②World Development Indicators database (2004–10) ③OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates	5-31
Innovation Input	Business sophistication	Knowledge absorption	5.3.4	Foreign direct investment net inflows	Net inflows of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by GDP.	①World Development Indicators database(2009–10) ②OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates	5-32
Innovation Output	Knowledge & technology outputs	Knowledge creation	6.1.1	National office patent applications	Number of patent applications filed by residents at the national patent office. <i>Patent</i> is defined in the description of indicator 5.2.5. Patent applications by resident data are based on 'equivalent count', by which applications at regional offices are multiplied by the corresponding number of member states. This concerns the Eurasian Patent Organization (EAPO) and the African Intellectual Property Organization (AIP). For the European Patent Office (EPO) and the African Regional Intellectual Property Organization (ARIPO), each application is counted as one application abroad if the applicant does not reside in a member state; or as one resident and one application abroad if the applicant resides in a member state. Data reported per billion PPP\$ GDP.	①WIPO Statistics Database ②World Development Indicators database(2001–10) ③OECD GDP estimates	①World Intellectual Property Organization (WIPO) ②World Bank ③OECD GDP estimates	6-8
Innovation Output	Knowledge & technology outputs	Knowledge creation	6.1.2	Patent Cooperation Treaty applications	Number of patent applications filed by residents under the WIPO-administered Patent Cooperation Treaty (PCT). The statistic is given for PCT Contracting Parties only. PCT applications are assigned to a particular country of origin according to the country of residence of the first named applicant. The PCT system simplifies the process of multiple national patent filings by reducing the requirement to file a separate application in each jurisdiction. <i>Patent</i> is defined in the description of indicator 5.2.5. Data reported per billion PPP\$ GDP.	①WIPO Statistics Database ②World Development Indicators database(2003–11) ③OECD GDP estimates	①World Intellectual Property Organization (WIPO) ②World Bank ③OECD GDP estimates	6-9
Innovation Output	Knowledge & technology outputs	Knowledge creation	6.1.3	National office utility model applications	Number of utility model applications filed by residents at their national patent office. Like a patent, a utility model (UM) confers a set of rights for an invention for a limited period of time, during which UM holders can commercially exploit their inventions on an exclusive basis. The terms and conditions for granting UMs are different from those for 'traditional' patents. For example, UMs are issued for a shorter duration (7 to 10 years) and, at most offices, UM applications are granted without substantive examination. Data reported per billion PPP\$ GDP.	①WIPO Statistics Database ②World Development Indicators database(2003–10) ③OECD GDP estimates	①World Intellectual Property Organization (WIPO) ②World Bank ③OECD GDP estimates	6-10
Innovation Output	Knowledge & technology outputs	Knowledge creation	6.1.4	Scientific and technical journal articles	The number of scientific and engineering articles published in the following fields: physics, biology, chemistry, mathematics, clinical medicine, biomedical research, engineering and technology, and earth and space sciences. The NSF considers article counts from a set of journals covered by Science Citation Index (SCI) and Social Sciences Citation Index (SSCI). Articles are classified by year of publication and assigned to region/country/economy on basis of institutional address (es) listed on the article. Articles are counted on a fractional-count basis—that is, for articles with collaborating institutions from multiple countries/economies, each country/economy receives fractional credit on basis of proportion of its participating institutions. Details may not add to total because of rounding. The data are reported per billion PPP\$ GDP.	①National Center for Science and Engineering Statistics ②The Patent BoardTM, special tabulations (2011) from Thomson Reuters, SCI and SSCI ③World Development Indicators database ④OECD GDP estimates	①National Science Foundation ②World Bank ③OECD GDP estimates	6-12

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資料: INSEAD, 「GII2012」

GI2012									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		1: soft data *: index data others: hard data	本文表の番号
Innovation Output	Knowledge & technology outputs	Knowledge impact	6.2.1	Growth rate of GDP per person engaged	Growth of GDP per person engaged provides a measure of labour productivity (defined as output per unit of labour input). GDP per person employed is gross domestic product (GDP) divided by total employment in the economy. PPP\$ GDP is converted to 1990 constant international dollars using PPP rates. An international dollar has the same purchasing power over GDP that a US dollar has in the United States of America.	LABORSTA Database of Labour Statistics.	International Labour Organization (ILO)		6-15
Innovation Output	Knowledge & technology outputs	Knowledge impact	6.2.2	New business density	Number of new firms, defined as firms registered in the current year of reporting, per thousand population aged 15–64 years old.	World Development Indicators database (2007–09)	International Finance Corporation and World Bank		6-17
Innovation Output	Knowledge & technology outputs	Knowledge impact	6.2.3	Total computer software spending	Computer software spending includes the total value of purchased or leased packaged software such as operating systems, database systems, programming tools, utilities, and applications. It excludes expenditures for internal software development and outsourced custom software development. WITSA figures for 2011 are estimates calculated in 2010 (http://www.witsa.org/v2/media_center/pdf/DP2010_ExecSumm_Final_LoRes.pdf). Data reported as a percentage of GDP.	① World Development Indicators database ② OECD GDP estimates	① World Information Technology and Services Alliance (WITSA) ② World Bank ③ OECD GDP estimates		6-19
Innovation Output	Knowledge & technology outputs	Knowledge impact	6.2.4	ISO 9001 quality certificates	Number of certificates of conformity with standard 'ISO 9001:2008 Quality management systems – Requirements' issued, based on the ISO Survey. Single-site and multiple-site certificates are not distinguished. The data are reported per billion PPP\$ GDP. Refer to indicator 3.3.5 for details.	The ISO Survey of Certifications 2010 CD-Rom (2002–10)	International Organization for Standardization (ISO)		6-21
Innovation Output	Knowledge & technology outputs	Knowledge diffusion	6.3.1	Royalty and license fees receipts	Receipts between residents and nonresidents for the authorized use of intangible, nonproduced, nonfinancial assets and proprietary rights (such as patents, copyrights, trademarks, industrial processes, and franchises) and for the use, through licensing agreements, of produced originals of prototypes (such as films and manuscripts).	① World Development Indicators database (2003–10) ② OECD GDP estimates	① International Monetary Fund (IMF) ② World Bank ③ OECD GDP estimates		6-25
Innovation Output	Knowledge & technology outputs	Knowledge diffusion	6.3.2	High-tech exports	High-technology exports minus re-exports over total exports minus re-exports. See indicator 5.3.2 for details.	① UN COMTRADE database ② Eurostat 'High-technology aggregations based on SITC Rev. 4, April 2009 (2007–11).	① United Nations COMTRADE ② Eurostat		6-26
Innovation Output	Knowledge & technology outputs	Knowledge diffusion	6.3.3	Computer and communications service exports	Computer, communications, and other services (% of commercial service exports) include such activities as international telecommunications, and postal and courier services; computer data; news-related service transactions between residents and nonresidents; construction services; royalties and license fees; miscellaneous business, professional, and technical services; and personal, cultural, and recreational services.	① World Development Indicators database (2004–10) ② OECD GDP estimates	① International Monetary Fund (IMF) ② World Bank ③ OECD GDP estimates		6-28
Innovation Output	Knowledge & technology outputs	Knowledge diffusion	6.3.4	Foreign direct investment net outflows	Net outflows of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net outflows of investment from the reporting economy to the rest of the world and is divided by GDP.	① World Development Indicators database (2005–10) ② OECD GDP estimates	① International Monetary Fund (IMF) ② World Bank ③ OECD GDP estimates		6-30
Innovation Output	Creative outputs	Creative intangibles	7.1.1	National office trademark registrations	A trademark is a distinctive sign that distinguishes certain goods or services of one undertaking from those produced or provided by other undertakings. The holder of a registered trademark has the legal right to the exclusive use of the mark in relation to the products or services for which it is registered. Trademark registration can potentially be maintained indefinitely as long as the trademark holder pays the renewal fees and actually uses the trademark. Trademark registrations by resident data are based on 'equivalent class counts'. For each trademark application, one or more classes may be specified, depending on whether the national office has a single or multi-class filing system. For example, the offices of Japan, the Republic of Korea, and the United States, as well as many European offices, have multi-class filing systems. The offices of Brazil, China, and Mexico follow a single-class filing system, requiring a separate application for each class in which applicants seek trademark protection. This can result in much higher numbers of applications at the latter. To improve international comparability between offices, WIPO has analysed the number of classes specified in trademark applications and registrations with time series going back to 2004, while taking into account whether an office has a single or multi-class filing system. Statistics concerning "Class" refer to the 45 classes of the International Classification of Goods and Services for the Purposes of the Registration of Marks, under the Nice Agreement (www.wipo.int/classifications/en/). The first 34 of the 45 classes indicate goods and the remaining 11 refer to services. Data reported per billion PPP\$ GDP.	① WIPO Statistics Database ② World Development Indicators database (2004–10) ③ OECD GDP estimates	① World Intellectual Property Organization (WIPO) ② World Bank ③ OECD GDP estimates		7-9

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資料: INSEAD, 「GI2012」

GI12012									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	T: soft data *: index data others: hard data	本文 表の 番号	
Innovation Output	Creative outputs	Creative intangibles	7.1.2	Madrid Agreement trademark registrations	The statistics are for Contracting Parties to the Madrid system only. The Madrid system makes it possible for an applicant to apply for a trademark registration in a large number of contracting parties by filing a single application at a national or regional intellectual property (IP) office party to the system. The Madrid system simplifies the process of multinational trademark registration by reducing the requirement to file a separate application with each IP office. An international registration under the Madrid system produces the same effect as an application for registration of the mark in each of the contracting parties designated by the applicant. If protection is not refused by the office of a designated contracting party, the status of the mark is the same as if it had been registered by that office. The definition of <i>trademark</i> is under the description for indicator 7.1.1. Data reported per billion PPP\$ GDP.	①WIPO Statistics Database ②World Development Indicators database (2003–10) ③OECD GDP estimates	①World Intellectual Property Organization (WIPO) ②World Bank ③OECD GDP estimates	7-12	
Innovation Output	Creative outputs	Creative intangibles	7.1.3	ICT and business model creation	-	Executive Opinion Survey 2010–2011	World Economic Forum	↑	7-13
Innovation Output	Creative outputs	Creative intangibles	7.1.4	ICT and organisational models creation	-	Executive Opinion Survey 2010–2011	World Economic Forum	↑	7-15
Innovation Output	Creative outputs	Creative goods & services	7.2.1	Recreation and culture consumption	Expenditure on category (9) recreation and culture as a percentage of individual consumption expenditure of households, nonprofit institutions serving households, and general government (current prices, national currency). Individual consumption categories are defined according to the System of National Accounts' classifications of 1993 (SNA 93) and 1968 (SNA 68). Categories under SNA 93 are: (1) Food and non-alcoholic beverages; (2) Alcoholic beverages, tobacco and narcotics; (3) Clothing and footwear; (4) Housing, water, electricity, gas and other fuels; (5) Furnishings, household equipment and routine maintenance of the house; (6) Health; (7) Transport; (8) Communication; (9) Recreation and culture; (10) Education; (11) Restaurants and hotels; and (12) Miscellaneous goods and services. UN data are complemented by Euromonitor (expenditure on leisure and recreation).	①National Accounts Official Country Data, United Nations database UNdata ②Euromonitor Passport GMD (Global Market Information Database) (2005–11)	①United Nations Statistics Division ②Euromonitor International		7-17
Innovation Output	Creative outputs	Creative goods & services	7.2.2	National feature films produced	Films produced for commercial exhibition in cinemas (films produced solely for television broadcasting are as a general rule excluded). The minimum length of films classified as long (or feature) films ranges from less than 1,000 metres to more than 3,000 metres depending on the country, with a mode of around 1,600 metres. UNESCO data are supplemented by Euromonitor. Data reported per million population 15–69 years old.	①UIS online database ②complemented by United Nations database UNdata ③Euromonitor Passport GMD (Global Market Information Database) ④World Development Indicators database (2005–11) ⑤OECD GDP estimates	①UNESCO Institute for Statistics ②United Nations ③Euromonitor International ④World Bank ⑤OECD GDP estimates		7-20
Innovation Output	Creative outputs	Creative goods & services	7.2.3	Daily newspapers circulation	Paid-for dailies total average circulation. Daily newspapers are periodic publications mainly reporting events that have occurred in the 24-hour period before going to press (issued at least four times a week). Periodic publications are intended for the general public and mainly designed to be a primary source of written information on current events connected with public affairs, international questions, politics, etc. They may also include articles on literary or other subjects as well as illustrations and advertising. The average daily circulation includes the number of copies distributed both inside the country and abroad and either: (a) sold directly; (b) sold by subscription; or (c) mainly distributed free of charge'. Data reported per thousand population 15–69 years old.	World Press Trends 2010.	World Association of Newspapers and News Publishers		7-21
Innovation Output	Creative outputs	Creative goods & services	7.2.4	Creative goods exports	Total export values of creative goods (current US\$) over total goods exports (current US\$).	Creative Economy Report, UNCTADStat (2004–10).	UNCTAD		7-22
Innovation Output	Creative outputs	Creative goods & services	7.2.5	Creative services exports	Total exports of creative services (current US\$) over total services exports (current US\$). UNCTAD reports that 'the value of total exports ... of creative services is inevitably underestimated, as all the statistical detail necessary is rarely systematically reported'. Creative services includes the following categories of services: (1) advertising, market research, and public opinion polling services; (2) architectural, engineering, and other technical; (3) research and development services; (4) personal, cultural, and recreational services (including 4.a. audiovisual and related services); and (5) other personal, cultural, and recreational services. UNCTAD does not report totals for services; the series 1 to 5 were added up to get the total.	Creative Economy Report, UNCTADStat (2005–10)	UNCTAD		7-24

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資料: INSEAD, 「GI12012」

GII2012									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	1: soft data *: index data others: hard data	本文の番号	
Innovation Output	Creative outputs	Online creativity	7.3.1	Generic top-level domains (gTLDs)	A generic top-level domain (gTLD) is one of the categories of top-level domains (TLDs) maintained by the Internet Assigned Numbers Authority (IANA) for use in the Internet. Generic TLDs can be unrestricted (.com, .info, .net, and .org) or restricted—that is, used on the basis of fulfilling eligibility criteria (biz, name, and .pro). Of these, the statistic covers the five generic domains biz, info, org, net, and com. Generic domains .name and .pro, and sponsored domains (.arpa, .aero, .asia, .cat, .coop, .edu, .gov, .int, .jobs, .mil, .museum, .tel, .travel, and .xxx) are not included. Neither are country-code top-level domains (refer to indicator 7.3.2). The statistic represents the total number of registered domains (i.e., net totals by December 2011, existing domains + new registrations – expired domains). Data are collected on the basis of a 4% random sample of the total population of domains drawn from the root zone files (a complete listing of active domains) for each TLD. The geographic location of a domain is determined by the registration address for the domain name registrant that is returned from a whois query. These registration data are parsed by country and postal code and then aggregated to any number of geographic levels such as county, city, MSA, or country/economy. The original hard data were scaled by thousand population 15–69 years old. For confidentiality reasons, only normalized values are reported; while relative positions are preserved, magnitudes are not.	ZookNIC	ZookNIC Inc		7-25
Innovation Output	Creative outputs	Online creativity	7.3.2	Country-code top-level domains (ccTLDs)	A country-code top-level domain (ccTLD) is one of the categories of top-level domains (TLDs) maintained by the Internet Assigned Numbers Authority (IANA) for use in the Internet. Country code TLDs are two-letter domains especially designated for a particular economy, country, or autonomous territory (there are 324 ccTLDs, in various alphabets/characters). The statistic represents the total number of registered domains (i.e., net totals by December 2011, existing domains + new registrations – expired domains). Data are collected from the registry responsible for each ccTLD and represent the total number of domain registrations in the ccTLD. Each ccTLD is assigned to the country with which it is associated rather than based on the registration address of the registrant. ZookNIC reports that for the ccTLDs it covers, 85–100% of domains are registered in the same country; the only exceptions are the ccTLDs that have been licensed for commercial worldwide use. Of this year's GII sample of countries, this is the case for the ccTLDs of the following economies: Armenia am, Austria at, Belgium be, Belarus by, Canada ca, Switzerland ch, Colombia co, Denmark dk, Spain es, Finland fi, India in, Iran, Islamic Rep. ir, Iceland is, Italy it, Lao PDR la, Latvia lv, Moldova md, Montenegro me, Mongolia mn, Mauritius mu, Nicaragua ni, Serbia rs, Slovenia si (list based on from www.wikipedia.org). Data reported by thousand population 15–69 years old. For confidentiality reasons, only normalized values are reported; while relative positions are preserved, magnitudes are not.	ZookNIC (2003–11)	ZookNIC Inc		7-26
Innovation Output	Creative outputs	Online creativity	7.3.3	Wikipedia monthly edits	Data extracted from Wikimedia Traffic Analysis Report, Wikipedia Page Edits per Country, Overview on the portal www.wikipedia.org. The count of monthly page edits data is based on a 1:1,000 sampled server log (squids), for the period January to December 2011. Wikimedia Foundation (WMF) traffic logging service suffered from server capacity problems in Aug/Sep/Oct 2011. Data loss occurred only during peak hours. It therefore may have had a somewhat different impact for traffic from different parts of the world. Countries are included only if the number of page edits in the period exceeds 100,000 (100 matching records in 1:1,000 sampled log). Page edits by bots are not included. Also all IP addresses that occur more than once on a given day are discarded for that day. A few false negatives are taken for granted. Generated on Friday, 20 January 2012 at 16:25. Data reported per million population 15–69 years old.	Wikimedia Foundation	Wikimedia Foundation		7-27
Innovation Output	Creative outputs	Online creativity	7.3.4	Video uploads on YouTube	Total number of video uploads on YouTube, per country, scaled by population 15–69 years old. The raw data are survey based: the country of affiliation is chosen by each user on the basis of a multi-choice selection. This metric counts all video upload events by users. For confidentiality reasons, only normalized values are reported, while relative positions are preserved, magnitudes are not.	Parent company of YouTube.	Google		7-28

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資料: INSEAD, 「GII2012」

2.6 GII2013

GII2013									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		†: soft data *: index data others: hard data	本文表の番号
Innovation Input	Institutions	Political environment	1.1.1	Political stability and absence of violence/terrorism	Index that captures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism. Scores are standardized.	World Governance Indicators, 2012 update	World Bank	*	1-1
Innovation Input	Institutions	Political environment	1.1.2	Government effectiveness	Index that captures perceptions of the quality of public and civil services and the degree of their independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Scores are standardized.	World Governance Indicators, 2012 update	World Bank	*	1-10
Innovation Input	Institutions	Political environment	1.1.3	Press freedom	Index that captures perceptions on violations of press freedom in the world. It reflects the degree of freedom that journalists and news organizations enjoy in each country, and the efforts made by the authorities to respect and ensure respect for this freedom. It is based on events between 1 December 2011 and 30 November 2012.	Press Freedom Index 2013	Reporters Without Borders	*	1-11
Innovation Input	Institutions	Regulatory environment	1.2.1	Regulatory quality	Index that captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private-sector development. Scores are standardized.	World Governance Indicators 2012	World Bank	*	1-13
Innovation Input	Institutions	Regulatory environment	1.2.2	Rule of law	Index that captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Scores are standardized.	World Governance Indicators 2012	World Bank	*	1-15
Innovation Input	Institutions	Regulatory environment	1.2.3	Cost of redundancy dismissal	<i>Doing Business</i> , in its indicators on employing workers, measures flexibility in the regulation on redundancy in a manner consistent with relevant ILO conventions to strike a better balance between labour market flexibility and social protection (including unemployment protection). The redundancy cost indicator is the sum of the cost of advance notice requirements added to severance payments due when terminating a redundant worker, expressed in weeks of salary. The average value of notice requirements and severance payments applicable to a worker with 1 year of tenure, a worker with 5 years of tenure, and a worker with 10 years of tenure is used to assign the score. If the redundancy cost adds up to 8 or fewer weeks of salary, a value of 8 is assigned but the actual number of weeks is published. If the cost adds up to more than 8 weeks of salary, the score is the number of weeks. One month is recorded as 4 and 1/3 weeks. Assumptions about the worker: the worker is a full-time, male, nonexecutive employee; he earns a salary plus benefits equal to the economy's average wage during the entire period of his employment; he has a pay period that is the most common for workers in the economy; he is a lawful citizen who belongs to the same race and religion as the majority of the economy's population; he resides in the economy's largest business city; he is not a member of a labour union, unless membership is mandatory. Assumptions about the business: the business is a limited liability company; it operates in the economy's largest business city; it is 100% domestically owned; it operates in the manufacturing sector; it has 60 employees; it is subject to collective bargaining agreements in economies where such agreements cover more than half the manufacturing sector and apply even to firms not party to them; and it abides by every law and regulation but does not grant workers more benefits than mandated by law, regulation, or (if applicable) collective bargaining agreement.	Doing Business 2012, Employing Workers	World Bank		1-18
Innovation Input	Institutions	Business environment	1.3.1	Ease of starting a business	The ranking is the simple average of the percentile rankings on the component indicators of the ease of starting a business index: procedures (number); time (days); cost to complete each procedure (% of income per capita); and paid-in minimum capital (% of income per capita). <i>Doing Business</i> records all procedures that are officially required for an entrepreneur to start up and formally operate an industrial or commercial business. These include obtaining all necessary licenses and permits and completing any required notifications, verifications, or inscriptions for the company and employees with relevant authorities. To make the data comparable across economies, <i>Doing Business</i> uses a standardized business that is 100% domestically owned, has start-up capital equivalent to 10 times the income per capita, engages in general industrial or commercial activities, and employs between 10 and 50 people within the first month of operations. The distance to frontier measure benchmarks economies to the frontier in regulatory practice, measuring the absolute distance to the best performance on each indicator and showing how much the regulatory environment for local entrepreneurs in each economy has changed over time in absolute terms.	Ease of Doing Business Index 2013, Doing Business 2013	World Bank	*	1-19

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資料: INSEAD, 「GII2013」

GI2013								1: soft data *: index data others: hard data	本文表の 番号
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source			
Innovation Input	Institutions	Business environment	1.3.2	Ease of resolving insolvency	The ranking on the ease of resolving insolvency is based on the recovery rate (cents on the dollar). To make the data comparable across economies, several assumptions about the business and the case are used: the recovery rate is recorded as cents on the dollar recouped by creditors through reorganization, liquidation, or debt enforcement (foreclosure) proceedings. The calculation takes into account the outcome: whether the business emerges from the proceedings as a going concern or the assets are sold piecemeal. Then the costs of the proceedings are deducted (1 cent for each percentage point of the value of the debtor's estate). Finally, the value lost as a result of the time the money remains tied up in insolvency proceedings is taken into account, including the loss of value due to depreciation of furniture, etc. The recovery rate is the present value of the remaining proceeds, based on end-2011 lending rates from the International Monetary Fund's <i>International Financial Statistics</i> , supplemented with data from central banks and the Economist Intelligence Unit. Indicators resolving insolvency—time (in years) and cost (% of estate), while also computed by <i>Doing Business</i> , are not taken into account for the ranking on the ease of resolving insolvency. Refer to indicator 1.3.1 for details regarding the distance to frontier measure.	Ease of Doing Business Index 2012, Doing Business 2013	World Bank	*	1-21
Innovation Input	Institutions	Business environment	1.3.3	Ease of paying taxes	The ranking is the simple average of the percentile rankings on the component indicators of the ease of paying taxes: payments (number per year); time (hours per year); profit tax (%); labour tax and contributions (%); other taxes (%); and total tax rate (% profit). Since 2012, a threshold calculated and adjusted on a yearly basis is applied to the total tax rate. The threshold is equivalent to the highest total tax rate among the top 15% of economies in the ranking on the total tax rate; in 2013 it is 25.7% (i.e., for all economies with a total tax rate below this threshold, the total tax rate is set at 25.7%). The threshold is not based on any underlying theory, but is intended to mitigate the effect of very low tax rates on the ranking of the ease of paying taxes. To make the data comparable across economies, several assumptions about the business and the taxes and contributions are used. The methodology benefited from discussion with members of the International Tax Dialogue and other stakeholders, which led to a refinement of the survey questions on the time to pay taxes, the collection of additional data on the labour tax wedge for further research, and the introduction of a threshold applied to the total tax rate for the purpose of calculating the ranking on the ease of paying taxes. Refer to indicator 1.3.1 for details regarding the distance to frontier measure.	Ease of Doing Business Index 2013, Doing Business 2013	World Bank	*	1-24
Innovation Input	Human capital & research	Education	2.1.1	Expenditure on education	Current operating expenditures in education, including wages and salaries and excluding capital investments in buildings and equipment, as a percentage of gross national income (GNI).	UIS online database(2004-11)	UNESCO Institute for Statistics		2-1
Innovation Input	Human capital & research	Education	2.1.2	Public expenditure on education per pupil	Public current spending on education divided by the total number of students by level, as a percentage of GDP per capita. Public expenditure (current and capital) includes government spending on educational institutions (both public and private), education administration, and subsidies for private entities (students/ households and other private entities).	UIS online database (2003-11)	UNESCO Institute for Statistics		2-10
Innovation Input	Human capital & research	Education	2.1.3	School life expectancy	Total number of years of schooling that a child of a certain age can expect to receive in the future, assuming that the probability of his or her being enrolled in school at any particular age is equal to the current enrolment ratio for that age.	UIS online database (2003-11)	UNESCO Institute for Statistics		2-12
Innovation Input	Human capital & research	Education	2.1.4	Assessment in reading, mathematics, and science	The Organisation for Economic Co-operation and Development (OECD) Programme for International Student Assessment (PISA) develops three-yearly surveys that examine 15-year-old students' performance in reading, mathematics, and science. The scores are calculated each year so that the mean is 500 and the standard deviation 100. The scores for China come from Shanghai; those for India from Himachal Pradesh and Tamil Nadu (average); those for the United Arab Emirates from Dubai; and those for the Bolivarian Republic of Venezuela from Miranda.	OECD Programme for International Student Assessment (PISA) 2009 and 2010 (2009-10)	OECD		2-13
Innovation Input	Human capital & research	Education	2.1.5	Pupil-teacher ratio, secondary	The number of pupils enrolled in secondary school divided by the number of secondary school teachers (regardless of their teaching assignment). Where the data are missing for some countries, the ratios for upper-secondary are reported; if these are also missing, the ratios for lower-secondary are reported instead.	UIS online database(2004-11)	UNESCO Institute for Statistics		2-14

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資料:INSEAD,「GI2013」

GII2013									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		1: soft data *: index data others: hard data	本文表の番号
Innovation Input	Human capital & research	Tertiary education	2.2.1	Tertiary enrolment	The ratio of total tertiary enrolment, regardless of age, to the population of the age group that officially corresponds to the tertiary level of education. Tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.	UIS online database(2003-11)	UNESCO Institute for Statistics		2-17
Innovation Input	Human capital & research	Tertiary education	2.2.2	Graduates in science and engineering	The share of all tertiary graduates in manufacturing, engineering, and construction over all tertiary graduates.	UIS online database (2003-11)	UNESCO Institute for Statistics		2-19
Innovation Input	Human capital & research	Tertiary education	2.2.3	Tertiary inbound mobility	The number of students from abroad studying in a given country, as a percentage of the total tertiary enrolment in that country.	UIS online database (2003-11)	UNESCO Institute for Statistics		2-21
Innovation Input	Human capital & research	Tertiary education	2.2.4	Gross tertiary outbound enrolment	Mobile students coming from a country/region as a percentage of the population of tertiary student age in their home country.	UIS online database (2006-11)	UNESCO Institute for Statistics		2-22
Innovation Input	Human capital & research	Research & development (R&D)	2.3.1	Researchers	Researchers per million population, headcounts. Researchers in R&D are professionals engaged in the conception or creation of new knowledge, products, processes, methods, or systems and in the management of the projects concerned. Postgraduate PhD students (ISCED97 level 6) engaged in R&D are included. The series with full-time equivalents (FTE) also exists, but has a lower country coverage.	UIS online database (2003-11)	UNESCO Institute for Statistics		2-24
Innovation Input	Human capital & research	Research & development (R&D)	2.3.2	Gross expenditure on R&D (GERD)	Total domestic intramural expenditure on R&D during a given period as a percentage of GDP. Intramural R&D expenditure is all expenditure for R&D performed within a statistical unit or sector of the economy during a specific period, whatever the source of funds.	UIS online database (2004-12)	UNESCO Institute for Statistics		2-25
Innovation Input	Human capital & research	Research & development (R&D)	2.3.3	QS university ranking average score of top 3 universities	Average score of the top three universities per country. If fewer than three universities are listed in the QS ranking of the global top 700 universities, the sum of the scores of the listed universities is divided by three, thus implying a score of zero for the non-listed universities.	QS World University Ranking 2012/2013 Top Universities	QS Quacquarelli Symonds Ltd	*	2-29
Innovation Input	Infrastructure	Information & communication technologies (ICTs)	3.1.1	ICT access	The ICT access index is a composite indicator that weights five ICT indicators (20% each): (1) Fixed telephone lines per 100 inhabitants; (2) Mobile cellular telephone subscriptions per 100 inhabitants; (3) International Internet bandwidth (bit/s) per Internet user; (4) Percentage of households with a computer; and (5) Percentage of households with Internet access. It is the first sub-index in ITU's ICT Development Index (IDI).	① Measuring the Information Society 2012 ② ICT Development Index 2012 (2010-11)	International Telecommunication Union (ITU)	*	3-8
Innovation Input	Infrastructure	Information & communication technologies (ICTs)	3.1.2	ICT use	The ICT use index is a composite indicator that weights three ICT indicators (33% each): (1) Percentage of individuals using the Internet; (2) Fixed (wired) broadband Internet subscriptions per 100 inhabitants; (3) Active mobile-broadband subscriptions per 100 inhabitants. It is the second sub-index in ITU's ICT Development Index (IDI).	① Measuring the Information Society 2012 ② ICT Development Index 2012 (2010-11)	International Telecommunication Union (ITU)	*	3-10
Innovation Input	Infrastructure	Information & communication technologies (ICTs)	3.1.3	Government's online service	To arrive at a set of online service index values, research teams assessed each country's national websites, including the national central portal, e-services portal, and e-participation portal as well as the websites of the related ministries of education, labour, social services, health, finance, and environment, as applicable. In addition to being assessed for content and features, the national sites were tested for a minimal level of web content accessibility as described in the Web Content Accessibility Guidelines of the World Wide Web Consortium. The survey covers four stages of government's online service development, with points assigned for (1) an emerging presence, providing limited and basic information; (2) an enhanced presence, providing greater public policy and governance sources of information, such as policies, laws and regulation, downloadable databases, etc.; (3) a transactional presence, allowing two-way interactions between government and citizens (G2C and C2G), including paying taxes and applying for ID cards, birth certificates, passports, license renewals, etc.; and (4) a connected presence, characterized by G2G, G2C, and C2G interactions; participatory deliberative policy-and decision-making. A citizen-centric approach was followed. It is the first of three components of the E-Government Development Index (EGDI) of the United Nations Public Administration Network (UNPAN), together with components on telecommunication infrastructure and human capital.	e-Government Survey 2012 (2010-12)	United Nations Public Administration Network	*	3-11

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資料:INSEAD,「GII2013」

GII2013									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	1: soft data *: index data others: hard data	本文表の番号	
Innovation Input	Infrastructure	Information & communication technologies (ICTs)	3.1.4	Online e-participation	The United Nations E-Participation Index is based on the survey used for the UN Online Service Index. The survey was expanded with questions emphasizing quality in the connected presence stage of e-government. These questions focus on the use of the Internet to facilitate the provision of information by governments to citizens ('e-information sharing'), interaction with stakeholders ('e-consultation'), and engagement in decision making processes ('e-decision making'). A country's E-Participation Index value reflects how useful these features are and the extent to which they have been deployed by the government compared with all other countries. The purpose of this measure is to offer insight into how different countries are using online tools to promote interaction between citizen and government, as well as among citizens, for the benefit of all. The index ranges from 0 to 1, with 1 showing greater e-participation.	e-Government Survey 2012	United Nations Public Administration Network	*	3-13
Innovation Input	Infrastructure	General infrastructure	3.2.1	Electricity output	Electricity production, measured at the terminals of all alternator sets in a station. In addition to hydropower, coal, oil, gas, and nuclear power generation, this indicator covers generation by geothermal, solar, wind, and tide and wave energy, as well as that from combustible renewables and waste. Production includes the output of electricity plants that are designed to produce electricity only as well as that of combined heat and power plants. Electricity output in kWh is scaled by population.	World Energy Balances online data service (2010-11)	International Energy Agency		3-15
Innovation Input	Infrastructure	General infrastructure	3.2.2	Electricity consumption	Electric power consumption, measured by the production of power plants and combined heat and power plants less transmission, distribution, and transformation losses and own use by heat and power plants. The total value in kWh is scaled by population.	World Energy Balances online data service (2010-11)	International Energy Agency		3-16
Innovation Input	Infrastructure	General infrastructure	3.2.3	Logistics performance	A multidimensional assessment of logistics performance, the Logistics Performance Index (LPI) compares the trade logistics profiles of 155 countries and rates them on a scale of 1 (worst) to 5 (best). The ratings are based on 6,000 individual country assessments by nearly 1,000 international freight forwarders, who rated the eight foreign countries their company serves most frequently. The LPI's six components include: (1) the efficiency of the clearance process (speed, simplicity, and predictability of formalities) by border control agencies, including customs; (2) the quality of trade and transport-related infrastructure (ports, railroads, roads, information technology); (3) the ease of arranging competitively priced shipments; (4) the competence and quality of logistics services (transport operators, customs brokers); (5) the ability to track and trace consignments; and (6) the frequency with which shipments reach the consignee within the scheduled or expected delivery time. Details of the survey methodology are in Arvis et al.'s Connecting to Compete 2012: Trade Logistics in the Global Economy (2012). Scores are averaged across all respondents.	①Logistics Performance Index 2012; Arvis et al., 2012 ②Connecting to Compete 2012: Trade Logistics in the Global Economy (2010-12)	World Bank and Turku School of Economics	*	3-17
Innovation Input	Infrastructure	General infrastructure	3.2.4	Gross capital formation	Ratio of total gross capital formation in current local currency to GDP in current local currency. Gross capital formation or investment is measured by the total value of the gross fixed capital formation and changes in inventories and acquisitions less disposals of valuables for a unit or sector, on the basis of the System of National Accounts (SNA) of 1993. Gross fixed capital formation consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales and 'work in progress'. Net acquisitions of valuables are also considered capital formation.	World Economic Outlook 2012 database (2010-12)	International Monetary Fund (IMF)		3-20
Innovation Input	Infrastructure	Ecological sustainability	3.3.1	GDP per unit of energy use	Purchasing power parity gross domestic product (PPP GDP) per kilogram of oil equivalent of energy use. Energy use or total primary energy supply (TPES) is calculated as the production of fuels + inputs from other sources + imports - exports - international marine bunkers +/- stock changes. It includes coal, crude oil, natural gas liquids, refinery feed-stocks, additives, petroleum products, gases, combustible renewables and waste, electricity, and heat. Domestic supply (also called 'energy apparent consumption') differs from final consumption in that it does not take account of distribution losses. The supply (or use) of energy commodities is converted to kilograms or tons of oil equivalent (koe, toe) using standard coefficients for each energy source.	World Energy Balances online data service (2010-11)	International Energy Agency		3-22
Innovation Input	Infrastructure	Ecological sustainability	3.3.2	Environmental performance	This index ranks countries on 22 performance indicators tracked across policy categories that cover both environmental public health and ecosystem vitality. These indicators gauge how close countries are to established environmental policy goals. The index ranges from 0 to 100, 100 indicating best performance.	Yale University and Columbia University Environmental Performance Index 2012	Yale University and Columbia University	*	3-24

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資料: INSEAD, 「GII2013」

GII2013									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		1: soft data *: index data others: hard data	本文表の番号
Innovation Input	Infrastructure	Ecological sustainability	3.3.3	ISO 14001 environmental certificates	Number of certificates of conformity to 'ISO 14001:2004 Environmental management systems: Requirements with guidance for use' issued, according to the ISO survey. Single-site and multiple-site certificates are not distinguished. The ISO survey is published on an annual basis by the International Organization for Standardization (ISO). Only certification bodies accredited by national members of the International Accreditation Forum (www.iaf.nu) were used as sources (except for certificates in the Russian Federation, which were accredited locally). Certification of conformity with standards is not a requirement and the standards can be implemented without certification, but certification is perceived as adding value and trust. ISO is a network of the national standards institutes of 163 countries, and it is the world's largest developer of voluntary International Standards for business, government, and society, with a portfolio of more than 18,800 standards in almost every sector of economic activity and technology. ISO itself does not perform certification to its standards, does not issue certificates, and does not control certification performed independently of ISO by other organizations. The data are reported per billion PPP\$ GDP.	①The ISO Survey of Certifications 2011 ②World Economic Outlook 2012 database (PPP\$ GDP) (2008-11)	①International Organization for Standardization (ISO) ②International Monetary Fund (IMF)		3-26
Innovation Input	Market sophistication	Credit	4.1.1	Ease of getting credit	The ranking is the simple average of the percentile rankings on the component indicators of the ease of getting credit index: strength of legal rights index (range 0-10); and depth of credit information index (range 0-6). <i>Doing Business</i> measures the legal rights of borrowers and lenders with respect to secured transactions through one set of indicators and the sharing of credit information through another. The first set of indicators describes how well collateral and bankruptcy laws facilitate lending. The second set measures the coverage, scope, and accessibility of credit information available through public credit registries and private credit bureaus. Although <i>Doing Business</i> compiles data on getting credit for public registry coverage (% of adults) and for private bureau coverage (% of adults), these indicators are not included in the ranking. Refer to indicator 1.3.1 for details regarding the distance to frontier measure.	①Ease of Doing Business Index 2013 ②Doing Business 2013	World Bank	*	4-8
Innovation Input	Market sophistication	Credit	4.1.2	Domestic credit to private sector	Financial resources provided to the private sector, such as through loans, purchases of non-equity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries, these claims include credit to public enterprises.	①International Financial Statistics and data files ②World Development Indicators database (2005-11) ③OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates		4-10
Innovation Input	Market sophistication	Credit	4.1.3	Microfinance institutions' gross loan portfolio	Combined gross loan balances per microfinance institution (current US\$), divided by GDP (current US\$) and multiplied by 100.	①Mix Market database ②World Economic Outlook 2012 database (current US\$ GDP) (2007-12)	①Microfinance Information Exchange (MIX) ②International Monetary Fund (IMF)		4-11
Innovation Input	Market sophistication	Investment	4.2.1	Ease of protecting investors	The ranking is the simple average of the percentile rankings on the component indicators of the ease of protecting investors index: the extent of disclosure index (0-10); the extent of director liability index (0-10); the ease of shareholder suits index (0-10); and the strength of investor protection index (0-10). <i>Doing Business</i> measures the strength of minority shareholder protections against directors' misuse of corporate assets for personal gain. The indicators distinguish three dimensions of investor protections: transparency of related-party transactions (extent of disclosure index), liability for self-dealing (extent of director liability index), and shareholders' ability to sue officers and directors for misconduct (ease of shareholder suits index). The data come from a survey of corporate and securities lawyers and are based on securities regulations, company laws, civil procedure codes, and court rules of evidence. Refer to indicator 1.3.1 for details regarding the distance to frontier measure.	Ease of Doing Business Index 2013, <i>Doing Business</i> 2013	World Bank	*	4-14
Innovation Input	Market sophistication	Investment	4.2.2	Market capitalization	Market capitalization (also known as 'market value') is the share price times the number of shares outstanding. Listed domestic companies are the domestically incorporated companies listed on the country's stock exchanges at the end of the year. Listed companies do not include investment companies, mutual funds, or other collective investment vehicles.	①OECD GDP estimates ②World Development Indicators database (2006-11)	①Standard and Poor's ②World Bank ③OECD GDP estimates		4-16
Innovation Input	Market sophistication	Investment	4.2.3	Total value of stocks traded	Total value of shares traded during the period. This indicator complements the market capitalization ratio by showing whether market size is matched by trading.	①OECD GDP estimates ②World Development Indicators database (2006-11)	①Standard and Poor's ②World Bank ③OECD GDP estimates		4-17
Innovation Input	Market sophistication	Investment	4.2.4	Venture capital deals	Thomson Reuters data on private equity deals, per deal, with details on the location of investment, investment company, investor firms, and funds, among others. The series corresponds to a query on venture capital deals from 1 January 2012 to 31 December 2012, with the data collected by investment location, for a total of 8,452 deals in 80 countries in 2012. The data are reported per trillion PPP\$ GDP.	①Thomson One Banker Private Equity database ②World Economic Outlook 2012 database (PPP\$ GDP)	①Thomson Reuters ②International Monetary Fund (IMF)		4-19

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資料: INSEAD, 「GII2013」

GI2013									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		†: soft data *: index data others: hard data	本文表の番号
Innovation Input	Market sophistication	Trade & competition	4.3.1	Applied tariff rate, weighted mean	The average of effectively applied rates weighted by the product import shares corresponding to each partner country. Data are classified using the Harmonized System of trade at the six- or eight-digit level. Tariff line data were matched to Standard International Trade Classification (SITC) revision 3 codes to define commodity groups and import weights. To the extent possible, specific rates have been converted to their ad valorem equivalent rates and have been included in the calculation of weighted mean tariffs. Effectively applied tariff rates at the six- and eight-digit product level are averaged for products in each commodity group. When the effectively applied rate is unavailable, the most-favoured nation rate is used instead. World Bank estimates use the World Integrated Trade Solution (WITS) system, based on tariff data from the UNCTAD Trade Analysis and Information System (TRAINS) database and import weights calculated using the UN Comtrade database.	World Development Indicators database (2003–10)	World Bank, based on WITS, UNCTAD TRAINS, and UN COMTRADE		4-21
Innovation Input	Market sophistication	Trade & competition	4.3.2	Market access for non-agricultural exports	Non-agricultural market access (NAMA) conditions are measured by the actual average weighted (AAW) tariff rate applied by the five major export markets. The applied tariff rate is the difference between the most-favoured nation (MFN) duty and the preference margin (if any); and average tariff rates are weighted by actual imports calculated from mirror imports data (in any of the two reference years, 2010 or 2009). For example, imports from Albania into the EU (the USA) benefit from an AAW preference margin of 4.7 (1.8) over an AAW MFN duty of 4.7 (3.5), thus implying an AAW applied tariff of 0.0 (1.7). Once the three other major export markets for Albania are considered as well (China, Turkey, and Macedonia FYR), the NAMA conditions for Albania can be summarized in an AAW applied tariff of 0.08%. For EU countries, the extra-EU data are assigned to each of the 27 countries. When information on preferential tariff regimes is missing, MFN treatment is assumed (it is also assumed that a country avails itself of preferential tariffs, even if the exporter chooses not to for whatever reason—such as the more onerous prerequisites attached to the preferential tariff).	World Tariff Profiles 2012 Annex 1 of the WTO Agreement on Agriculture (NAMA classification) (2009–10)	①World Trade Organization (WTO) ②International Trade Centre (ITC) ③United Nations Conference on Trade and Development (UNCTAD)		4-23
Innovation Input	Market sophistication	Trade & competition	4.3.3	Intensity of local competition	-	Executive Opinion Survey 2011–2012 (2011–12)	World Economic Forum	†	4-26
Innovation Input	Business sophistication	Knowledge workers	5.1.1	Employment in knowledge-intensive services	Sum of people in categories 1 to 3 as a percentage of total people employed, according to the International Standard Classification of Occupations (ISCO). Categories included: ISCO-08: 1 Managers, 2 Professionals, and 3 Technicians and associate professionals (years 2009–10); ISCO-88: 1 Legislators, senior officials and managers, 2 Professionals, 3 Technicians and associate professionals; ISCO-1968: 1 Professional, technical and related workers (category 0 Armed forces is excluded), 2 Administrative and managerial workers, 3 Clerical and related workers (years 2003–08).	①LABORSTA Database of Labour Statistics (2003–08) ②ILOSTAT Database of Labour Statistics Beta version (2009–10)	International Labour Organization (ILO)		5-13
Innovation Input	Business sophistication	Knowledge workers	5.1.2	Firms offering formal training	The percentage of firms offering formal training programmes for their permanent, full-time employees.	Enterprise Surveys (2003–10)	International Finance Corporation and World Bank		5-15
Innovation Input	Business sophistication	Knowledge workers	5.1.3	GERD performed by business enterprise	Gross expenditure on R&D performed by business enterprise as a percentage of GDP.	UIS online database (2003–12)	UNESCO Institute for Statistics		5-17
Innovation Input	Business sophistication	Knowledge workers	5.1.4	GERD financed by business enterprise	Percentage of gross expenditure on R&D financed by business enterprise.	UIS online database (2004–12)	UNESCO Institute for Statistics		5-18
Innovation Input	Business sophistication	Knowledge workers	5.1.5	GMAT mean score	Mean scores at the Graduate Management Admission Test (GMAT) by residency and by citizenship, weighted by total number of residents and citizens taking the test, respectively. The GMAT is a standardized test aimed at measuring aptitude to succeed academically in graduate business studies. It is an important part of the admissions process for more than 5,600 graduate management programs in approximately 2,000 business schools worldwide. The GMAT exam consists of four sections: Verbal, Quantitative, Integrated Reasoning, and Analytical Writing. GMAT total scores are calculated based on performance in the Verbal and Quantitative sections of the exam only. Scores are reported in increments of 10, on a scale ranging from 200 to 800. Mean score data for groups with fewer than 5 GMAT exams taken are not released and therefore not considered.	GMAC Exam (2005–12)	Graduate Management Admission Council (GMAC)		5-19

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GII2013									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source		†: soft data *: index data others: hard data	本文表の番号
Innovation Input	Business sophistication	Knowledge workers	5.1.6	GMAT test takers	Total number of test takers of the Graduate Management Admission Test (GMAT) by citizenship, scaled by population 20–34 years old (if for a given country/economy the data for citizens do not exist, the data for residents are given instead). Refer to indicator 5.1.5 for details.	①GMAC Exam ②World Population Prospects: The 2010 Revision (population data) (2011–12)	①Graduate Management Admission Council (GMAC) ②United Nations, Department of Economic and Social Affairs		5-20
Innovation Input	Business sophistication	Innovation linkages	5.2.1	University/industry research collaboration	-	Executive Opinion Survey 2011–2012 (2011–12)	World Economic Forum	†	5-21
Innovation Input	Business sophistication	Innovation linkages	5.2.2	State of cluster development	-	Executive Opinion Survey 2011–2012 (2011–12)	World Economic Forum	†	5-22
Innovation Input	Business sophistication	Innovation linkages	5.2.3	GERD financed by abroad	Percentage of gross expenditure on R&D financed by abroad—i.e., with foreign financing.	UIS online database (2003–12)	UNESCO Institute for Statistics		5-23
Innovation Input	Business sophistication	Innovation linkages	5.2.4	Joint venture/strategic alliance deals	Thomson Reuters data on joint ventures/strategic alliances deals, per deal, with details on the country of origin of partner firms, among others. The series corresponds to a query on joint ventures/strategic alliances deals from 1 January 2012 to 31 December 2012, for a total of 4,078 deals announced in 2012, with firms headquartered in 139 participating economies. Each participating nation of each company in a deal (n countries per deal) gets, per deal, a score equivalent to 1/n (with the effect that all country scores add up to 4,078). The data are reported per trillion PPP\$ GDP.	① Thomson One Banker Private Equity, SDC Platinum database ② World Economic Outlook 2012 database (PPP\$ GDP) (2011–12)	① Thomson Reuters ② International Monetary Fund (IMF)		5-25
Innovation Input	Business sophistication	Innovation linkages	5.2.5	Patent families filed in at least three offices	A 'patent family' is defined as a set of interrelated patent applications filed in one or more countries/jurisdictions to protect the same invention (either directly or through the WIPO-administered Patent Cooperation Treaty). In this report, 'patent families data' refers to patent applications filed by residents in at least three offices; the data are scaled by PPP\$ GDP (billions). A 'patent' is a set of exclusive rights granted by law to applicants for inventions that are new, non-obvious, and commercially applicable. It is valid for a limited period of time (generally 20 years), during which patent holders can commercially exploit their inventions on an exclusive basis. In return, applicants are obliged to disclose their inventions to the public in a manner that enables others, skilled in the art, to replicate the invention. The patent system is designed to encourage innovation by providing innovators with time-limited exclusive legal rights, thus enabling innovators to appropriate a return on their innovative activity.	① WIPO Statistics Database ② World Economic Outlook 2012 database (PPP\$ GDP) (2006–09)	① World Intellectual Property Organization (WIPO) ② International Monetary Fund (IMF)		5-26
Innovation Input	Business sophistication	Knowledge absorption	5.3.1	Royalties and license fees payments	Royalties and license fees payments (% of total service imports) according to the Extended Balance of Payments Services Classification EBOPS 2002—i.e., code 266 Royalties and license fees (including franchises and similar rights) as a percentage of code 200 Total services. Receipts are between residents and nonresidents for the authorized use of intangible, nonproduced, nonfinancial assets and proprietary rights (such as patents, copyrights, trademarks, industrial processes, and franchises) and for the use, through licensing agreements, of produced originals of prototypes (such as films and manuscripts).	Trade in Commercial Services database, itself based on the International Monetary Fund fifth (1993) edition of the Balance of Payments Manual and Balance of Payments database (2005–11)	World Trade Organization (WTO)		5-28
Innovation Input	Business sophistication	Knowledge absorption	5.3.2	High-tech imports	High-technology imports minus reimports over total imports minus reimports. The list of commodities contains technical products with a high intensity of R&D, based on the Eurostat classification, itself based on SITC Rev 4 and the Organisation for Economic Co-operation and Development (OECD) definition. Commodities belong to the following sectors: aerospace; computers & office machines; electronics; telecommunications; pharmacy; scientific instruments; electrical machinery; chemistry; nonelectrical machinery; and armament.	① UN COMTRADE database ② High-technology aggregations based on SITC Rev 4, April 2009 (2007–12)	① United Nations COMTRADE ② Eurostat		5-30
Innovation Input	Business sophistication	Knowledge absorption	5.3.3	Communications, computer and information services imports	Communication, computer and information services imports (% of total service imports) according to the Extended Balance of Payments Services Classification EBOPS 2002, including codes 245 Communications services (postal, courier services, and telecommunications services); and/or 262 Computer and information services, as a percentage of code 200 Total services.	Trade in Commercial Services database, itself based on the International Monetary Fund fifth (1993) edition of the Balance of Payments Manual and Balance of Payments database (2005–11)	World Trade Organization (WTO)		5-31
Innovation Input	Business sophistication	Knowledge absorption	5.3.4	Foreign direct investment net inflows	Net inflows of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by GDP.	① International Financial Statistics and data files ② World Development Indicators database (2009–11) ③ OECD GDP estimates	① International Monetary Fund (IMF) ② World Bank ③ OECD GDP estimates		5-32

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資料: INSEAD, 「GII2013」

GII2013								
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	1: soft data *: index data others: hard data	本文表の番号
Innovation Output	Knowledge & technology outputs	Knowledge creation	6.1.1	National office resident patent applications	Number of patent applications filed by residents at the national patent office. Data are scaled by PPP\$ GDP (billions). 'Patent' is defined in the description of indicator 5.2.5. Patent applications by resident data are based on 'equivalent count', by which applications at regional offices are multiplied by the corresponding number of member states. This concerns the Eurasian Patent Office (EAPO) and the African Intellectual Property Organization (OAPI). For the European Patent Office (EPO) and the African Regional Intellectual Property Organization (ARIPO), each application is counted as one application abroad if the applicant does not reside in a member state; or as one resident and one application abroad if the applicant resides in a member state.	WIPO Statistics Database; World Intellectual Property Organization (WIPO)		6-8
Innovation Output	Knowledge & technology outputs	Knowledge creation	6.1.2	Patent Cooperation Treaty resident applications	Number of patent applications filed by residents under the World Intellectual Property Organization (WIPO) - administered Patent Cooperation Treaty (PCT). Data are reported for PCT member countries only, and scaled by PPP\$ GDP (billions). 'Patent' is defined in the description of indicator 5.2.5. PCT applications are assigned to a particular country of origin according to the country of residence of the first-named applicant. The PCT system simplifies the process of multiple national patent filings by reducing the requirement to file a separate application in each jurisdiction. However, the decision of whether to grant patent rights remains in the hands of national and regional patent offices, and the patent rights remain limited to the jurisdiction of the patent granting authority. The PCT international application process starts with the international phase, during which an international search and, possibly, a preliminary examination are performed, and concludes with the national phase, during which national and regional patent offices decide on the patentability of an invention according to national law.	WIPO Statistics Database; World Intellectual Property Organization (WIPO)		6-9
Innovation Output	Knowledge & technology outputs	Knowledge creation	6.1.3	National office resident utility model applications	Number of utility model (UM) applications filed by residents at the national patent office. Resident UM data are scaled by PPP\$ GDP (billions). Like a patent, UM is a special form of patent right granted by a state/jurisdiction to an inventor or inventor's assignee for a fixed period of time. The terms and conditions for granting a utility model are slightly different from those for normal patents (including a shorter term of protection and less stringent patentability requirements). The term 'utility model' can also describe what are known in certain countries as 'petty patents', 'short-term patents', or 'innovation patents'.	WIPO Statistics Database; World Intellectual Property Organization (WIPO)		6-10
Innovation Output	Knowledge & technology outputs	Knowledge creation	6.1.4	Scientific and technical publications	The number of scientific and engineering articles published in the following fields: physics, biology, chemistry, mathematics, clinical medicine, biomedical research, engineering and technology, and earth and space sciences. Article counts are from a set of journals covered by the Science Citation Index (SCI) and the Social Sciences Citation Index (SSCI). Articles are classified by year of publication and assigned to each country/economy on basis of the institutional address (es) listed on the article. Articles are counted on a count basis (rather than a fractional basis)—that is, for articles with collaborating institutions from multiple countries/economies, each country/economy receives credit on basis of its participating institutions. The data are reported per trillion PPP\$ GDP.	①Web of Science, Science Citation Index (SCI) and Social Sciences Citation Index (SSCI); ②World Economic Outlook 2012 database (PPP\$ GDP) (2010-12)	①Thomson Reuters ②International Monetary Fund (IMF)	6-12
Innovation Output	Knowledge & technology outputs	Knowledge creation	6.1.5	Citable documents H index	The H index is an economy's number of published articles (H) that have received at least H citations, in the period 1996-2011. It quantifies both country scientific productivity and scientific impact and is also applicable to scientists, journals, etc. The SCImago Journal & CountryRank is a portal that includes journal and economy scientific indicators developed from the information contained in the Scopus® database (Elsevier B.V.). This platform takes its name from the SCImago Journal Rank (SJR), developed by SCImago from the algorithm Google PageRank™. The H index is tabulated from the number of citations received in subsequent years by articles published in a given year, divided by the number of articles published that year.	SCImago (2007) SJR Retrieved 7 April 2013	SCImago Journal & CountryRank *	6-14
Innovation Output	Knowledge & technology outputs	Knowledge impact	6.2.1	Growth rate of GDP per person engaged	Growth of GDP per person engaged provides a measure of labour productivity (defined as output per unit of labour input). GDP per person employed is gross domestic product (GDP) divided by total employment in the economy. PPP\$ GDP is converted to 1990 constant international dollars using PPP rates. An international dollar has the same purchasing power over GDP that a US dollar has in the United States of America.	Key Indicators of the Labour Market (KILM) database, Table 17 Labour productivity, special tabulations	International Labour Organization (ILO)	6-15
Innovation Output	Knowledge & technology outputs	Knowledge impact	6.2.2	New business density	Number of new firms, defined as firms registered in the current year of reporting, per thousand population aged 15-64 years old.	Doing Business 2013, Entrepreneurship (2008-11)	World Bank	6-17
Innovation Output	Knowledge & technology outputs	Knowledge impact	6.2.3	Total computer software spending	Computer software spending includes the total value of purchased or leased packaged software such as operating systems, database systems, programming tools, utilities, and applications. It excludes expenditures for internal software development and outsourced custom software development. The data is a combination of actual figures and estimates. Data are reported as a percentage of GDP.	①Information and Communication Technology Database ②World Economic Outlook 2012 database (current US\$ GDP)	①)HS Global Insight ②International Monetary Fund (IMF)	6-19

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GII2013								
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	1: soft data *: index data others: hard data	本文表の番号
Innovation Output	Knowledge & technology outputs	Knowledge impact	6.2.4	ISO 9001 quality certificates	Number of certificates of conformity to standard 'ISO 9001:2008 Quality management systems—Requirements' issued, according to the ISO Survey. Single-site and multiple-site certificates are not distinguished. The data are reported per billion PPP\$ GDP. Refer to indicator 3.3.3 for details.	①The ISO Survey of Certifications 2011 ②World Economic Outlook 2012 database (PPP\$ GDP) (2010–11)	①International Organization for Standardization (ISO) ②International Monetary Fund (IMF)	6-21
Innovation Output	Knowledge & technology outputs	Knowledge impact	6.2.5	High-tech and medium-high-tech output	High-tech and medium-high-tech output as a percentage of total manufactures output, on the basis of the Organisation for Economic Co-operation and Development (OECD) classification of Technology Intensity Definition, itself based on International Standard Industrial Classification ISIC Revision 3.	①Industrial Statistics Database, 3- and 4-digit level of International Standard Industrial Classification ISIC ②Directorate for Science, Technology and Industry, Economic Analysis and Statistics Division, 'ISIC REV. 3 Technology Intensity Definition: Classification of Manufacturing Industries into Categories Based on R&D Intensities,' 7 July 2011 (2003–09)	①United Nations Industrial Development Organization (UNIDO) ②OECD	6-23
Innovation Output	Knowledge & technology outputs	Knowledge diffusion	6.3.1	Royalty and license fees receipts	Royalties and license fees receipts (% of total service imports) according to the Extended Balance of Payments Services Classification EBOPS 2002—i.e., code 266 Royalties and license fees (including franchises and similar rights) as a percentage of code 200 Total services. Receipts are between residents and nonresidents for the authorized use of intangible, nonproduced, nonfinancial assets and proprietary rights (such as patents, copyrights, trademarks, industrial processes, and franchises) and for the use, through licensing agreements, of produced originals of prototypes (such as films and manuscripts).	Trade in Commercial Services database, itself based on the International Monetary Fund fifth (1993) edition of the Balance of Payments Manual and Balance of Payments database (2003–11)	World Trade Organization (WTO)	6-25
Innovation Output	Knowledge & technology outputs	Knowledge diffusion	6.3.2	High-tech exports	High-technology exports minus re-exports over total exports minus re-exports. See indicator 5.3.2 for details.	①UN COMTRADE database ②High-technology aggregations based on SITC Rev 4, April 2009 (2007–12)	①United Nations COMTRADE ②Eurostat	6-26
Innovation Output	Knowledge & technology outputs	Knowledge diffusion	6.3.3	Communications, computer and information services exports	Communication, computer and information services exports (% of total service exports) according to the Extended Balance of Payments Services Classification EBOPS 2002, including codes 245 Communications services (postal, courier services, and telecommunications services), and/or 262 Computer and information services, as a percentage of code 200 Total services.	Trade in Commercial Services database, itself based on the International Monetary Fund fifth (1993) edition of the Balance of Payments Manual and Balance of Payments database (2005–11)	World Trade Organization (WTO)	6-29
Innovation Input	Knowledge & technology outputs	Knowledge diffusion	6.3.4	Foreign direct investment net outflows	Net outflows of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net outflows of investment from the reporting economy to the rest of the world and is divided by GDP.	①International Financial Statistics and data files ②extracted from World Bank World Development Indicators database (2005–11) ③OECD GDP estimates	①International Monetary Fund (IMF) ②World Bank ③OECD GDP estimates	6-30

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GII2013									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	†: soft data *: index data others: hard data	本文表の番号	
Innovation Output	Creative outputs	Intangible assets	7.1.1	National office resident trademark registrations	Number of trademark registrations at the national trademark office, based on equivalent class counts. Data are scaled by PPP\$ GDP (billions). A 'trademark' is a distinctive sign that identifies certain goods or services as those produced or provided by a specific person or enterprise. The holder of a registered trademark has the legal right to exclusive use of the mark in relation to the products or services for which it is registered. The owner can prevent unauthorized use of the trademark, or a confusingly similar mark, so as to prevent consumers and the public in general from being misled. Unlike patents, trademarks can be maintained indefinitely by paying renewal fees. The procedures for registering trademarks are governed by the rules and regulations of national and regional IP offices. Trademark rights are limited to the jurisdiction of the authority that registers the trademark. Resident trademark registrations are based on equivalent class counts. 'Class count' refers to the number of classes specified in a trademark registration. In the international trademark system and at certain offices, an applicant can file a trademark application that specifies one or more of the 45 goods and services classes of the Nice Classification. Offices use either a single or multi-class filing system. For example, the offices of Japan, the Republic of Korea, and the United States of America (USA) as well as many European offices have multi-class filing systems. The offices of Brazil, China, and Mexico follow a single-class filing system, requiring a separate application for each class in which applicants seek trademark protection. To capture the differences in application numbers across offices, it is useful to compare their respective registration class counts. 'Equivalent registrations' refers to registrations at regional offices and are equivalent to multiple registrations, one in each of the states that is a member of those offices. To calculate the number of equivalent registrations for regional office data, each registration is multiplied by the corresponding number of member states.	①WIPO Statistics Database ②World Economic Outlook 2012 database (PPP\$ GDP) (2004-11)	①World Intellectual Property Organization (WIPO) ② International Monetary Fund (IMF)	7-9	
Innovation Output	Creative outputs	Intangible assets	7.1.2	Madrid system trademark registrations by country of origin	Number of international trademark registrations by country of origin under the WIPO-administered Madrid system. Data are reported for PCT member countries only, and scaled by PPP\$ GDP (billions). 'Trademark' is defined in the description of indicator 7.1.1. The Madrid System for the International Registration of Marks, established under the Madrid Agreement and the Madrid Protocol and administered by WIPO, makes it possible for an applicant to register a trademark in a large number of countries by filing a single application at their national or regional IP office that is party to the system. The Madrid system simplifies the process of multinational trademark registration by reducing the requirement to file separate applications at each office. It also simplifies the subsequent management of the mark, since it is possible to record changes or to renew the registration through a single procedural step. Registration through the Madrid system does not create an 'international' trademark, and the decision to register or refuse the trademark remains in the hands of national and/or regional office(s). Trademark rights are limited to the jurisdiction of the trademark registration office(s).	①WIPO Statistics Database ②World Economic Outlook 2012 database (PPP\$ GDP) (2010-12)	①World Intellectual Property Organization (WIPO) ② International Monetary Fund (IMF)	7-12	
Innovation Output	Creative outputs	Intangible assets	7.1.3	ICTs and business model creation	-	Executive Opinion Survey 2011-2012 (2011-12)	World Economic Forum	†	7-13
Innovation Output	Creative outputs	Intangible assets	7.1.4	ICTs and organizational models creation	-	Executive Opinion Survey 2011-2012 (2011-12)	World Economic Forum	†	7-15
Innovation Output	Creative outputs	Creative goods & services	7.2.1	Audiovisual and related services exports	Audiovisual and related services exports (% of total service imports) according to the Extended Balance of Payments Services Classification EBOPS 2002—i.e., EBOPS code 288 Audiovisual and related services, as a percentage of code 200 Total services.	Trade in Commercial Services database, itself based on the International Monetary Fund fifth (1993) edition of the Balance of Payments Manual and Balance of Payments database (2003-11)	World Trade Organization (WTO)		7-18

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資料: INSEAD, 「GII2013」

GII2013									
Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	†: soft data *: index data others: hard data	本文表の番号	
Innovation Output	Creative outputs	Creative goods & services	7.2.2	National feature films produced	A film with a running time of 60 minutes or longer. It includes works of fiction, animation, and documentaries. It is intended for commercial exhibition in cinemas. Feature films produced exclusively for television broadcasting, as well as newsreels and advertising films, are excluded. Data are reported per million population 15–69 years old. For Cambodia, Cameroon, Gabon, Mauritius, Nigeria, and the United Republic of Tanzania: this indicator covers only feature films in video format; for Kazakhstan: only fiction and does not include the film production of private studios; for Poland: feature films with a running time of 75 minutes or longer; for the Russian Federation: does not include documentaries; for the United States of America: covers only feature films produced in the English language and does not include documentaries; and for Viet Nam: covers only fiction.	①UIS online database ②Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2010 Revision (population data) (2005–11)	①UNESCO Institute for Statistics ②United Nations		7-20
Innovation Output	Creative outputs	Creative goods & services	7.2.3	Daily newspapers circulation	Paid-for dailies total average circulation. 'Daily newspapers' are periodic publications mainly reporting events that have occurred in the 24-hour period before going to press (issued at least four times a week). Periodic publications are intended for the general public and mainly designed to be a primary source of written information on current events connected with public affairs, international questions, politics, etc. They may also include articles on literary or other subjects as well as illustrations and advertising. The average daily circulation includes the number of copies distributed both inside the country and abroad and either: (1) sold directly; (2) sold by subscription; or (3) mainly distributed free of charge. Data are reported per thousand population 15–69 years old.	①World Press Trends 2010 ②Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2010 Revision (population data) (2009–11)	①World Association of Newspapers and News Publishers ②United Nations		7-21
Innovation Output	Creative outputs	Creative goods & services	7.2.4	Creative goods exports	Total value of creative goods exports, net of re-exports (current US\$) over total value of goods exports, net of re-exports (current US\$).	UN COMTRADE database; 2009 UNESCO Framework for Cultural Statistics, Table 3, International trade of cultural goods and services based on the 2007 Harmonised System (HS 2007) (2007–12)	United Nations COMTRADE		7-22
Innovation Output	Creative outputs	Creative goods & services	7.2.5	Printing and publishing output	Publishing, printing, and reproduction of recorded media output (ISIC Rev. 3 code 22) as a percentage of total manufacturing output (ISIC rev.3 code D).	Industrial Statistics Database, 2-digit level of International Standard Industrial Classification (ISIC Revision 3) (INDSTAT 4 2012) (2003–09)	United Nations Industrial Development Organization (UNIDO)		7-23
Innovation Output	Creative outputs	Online creativity	7.3.1	Generic top-level domains (gTLDs)	A generic top-level domain (gTLD) is one of the categories of top-level domains (TLDs) maintained by the Internet Assigned Numbers Authority (IANA) for use in the Internet. Generic TLDs can be unrestricted (.com, .info, .net, and .org) or restricted—that is, used on the basis of fulfilling eligibility criteria (biz, name, and pro). Of these, the statistic covers the five generic domains biz, info, org, net, and com. Generic domains .name and .pro, and sponsored domains (arpa, aero, asia, cat, coop, edu, gov, int, jobs, mil, museum, tel, travel, and xxx) are not included. Neither are country-code top-level domains (refer to indicator 7.3.2). The statistic represents the total number of registered domains (i.e., net totals by December 2012, existing domains + new registrations – expired domains). Data are collected on the basis of a 4% random sample of the total population of domains drawn from the root zone files (a complete listing of active domains) for each TLD. The geographic location of a domain is determined by the registration address for the domain name registrant that is returned from a whois query. These registration data are parsed by country and postal code and then aggregated to any number of geographic levels such as county, city, or country/economy. The original hard data were scaled by thousand population 15–69 years old. For confidentiality reasons, only normalized values are reported; while relative positions are preserved, magnitudes are not.	①ZookNIC ②Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2010 Revision (population data)	①ZookNIC Inc ②United Nations		7-25

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Sub-Index	Pillar	Sub Pillar	Indicator No.	Indicators	Definition	Source	T: soft data *: index data others: hard data	本文表の番号	
Innovation Output	Creative outputs	Online creativity	7.3.2	Country-code top-level domains (ccTLDs)	A country-code top-level domain (ccTLD) is one of the categories of top-level domains (TLDs) maintained by the Internet Assigned Numbers Authority (IANA) for use in the Internet. Country-code TLDs are two-letter domains especially designated for a particular economy, country, or autonomous territory (there are 324 ccTLDs, in various alphabets/characters). The statistic represents the total number of registered domains (i.e., net totals by December 2012, existing domains + new registrations – expired domains). Data are collected from the registry responsible for each ccTLD and represent the total number of domain registrations in the ccTLD. Each ccTLD is assigned to the country with which it is associated rather than based on the registration address of the registrant. ZookNIC reports that, for the ccTLDs it covers, 85–100% of domains are registered in the same country, the only exceptions are the ccTLDs that have been licensed for commercial worldwide use. Of this year's GI sample of countries, this is the case for the ccTLDs of the following economies: Armenia am, Austria at, Belgium be, Belarus by, Canada ca, Switzerland ch, Colombia co, Denmark dk, Spain es, Finland fi, India in, Iran Islamic Rep. ir, Iceland is, Italy it, Lao PDR la, Latvia lv, Moldova md, Montenegro me, Mongolia mn, Mauritius mu, Nicaragua ni, Serbia rs, and Slovenia si (this list is based on www.wikipedia.org). Data are reported per thousand population 15–69 years old. For confidentiality reasons, only normalized values are reported, while relative positions are preserved, magnitudes are not.	①ZookNIC ②Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2010 Revision (population data)(2003–12)	①ZookNIC Inc ②United Nations		7-26
Innovation Output	Creative outputs	Online creativity	7.3.3	Wikipedia monthly edits	Data extracted from Wikimedia Traffic Analysis Report, Wikipedia Page Edits per Country, Overview on the portal www.wikipedia.org. The count of monthly page edits data is based on a 1:1,000 sampled server log (squids), averages of quarterly reports. Countries are included only if the number of page edits in the period exceeds 100,000 (100 matching records in 1:1,000 sampled log). Page edits by bots are not included. IP addresses that occur more than once on a given day are discarded for that day. A few false negatives are taken for granted. Data are reported per million population 15–69 years old.	①Wikimedia Foundation ②Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2010 Revision (population data) (2010–12)	①Wikimedia Foundation ②United Nations		7-27
Innovation Output	Creative outputs	Online creativity	7.3.4	Video uploads on YouTube	Total number of video uploads on YouTube, per country, scaled by population 15–69 years old. The raw data are survey based: the country of affiliation is chosen by each user on the basis of a multi-choice selection. This metric counts all video upload events by users. For confidentiality reasons, only normalized values are reported; while relative positions are preserved, magnitudes are not.	①parent company of YouTube ②Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2010 Revision (population data)	①Google ②United Nations	*	7-28

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INSEADにおけるグローバルイノベーションインデックス(GII)の変遷の調査

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