



Annex



Table A1:

## Pre-University Education Index: Variables and Weights

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
Knowledge Capital (0.4)	Enrolment and Completion (0.5)			Gross intake ratio to the last grade of primary education, both sexes (%)	1/7	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=160">http://data.uis.unesco.org/index.aspx?queryid=160</a>
				Gross graduation ratio from primary education, both sexes (%)	1/7	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=161">http://data.uis.unesco.org/index.aspx?queryid=161</a>
				Gross graduation ratio from lower secondary education, both sexes (%)	1/7	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=161">http://data.uis.unesco.org/index.aspx?queryid=161</a>
				Effective transition rate from primary to lower secondary general education, both sexes (%)	1/7	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=159">http://data.uis.unesco.org/index.aspx?queryid=159</a>
				Gross intake ratio to the last grade of lower secondary general education, both sexes (%)	1/7	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=160">http://data.uis.unesco.org/index.aspx?queryid=160</a>
				Cumulative drop-out rate to the last grade of primary education, both sexes (%)	1/7	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=156">http://data.uis.unesco.org/index.aspx?queryid=156</a>
				Cumulative drop-out rate to the last grade of lower secondary general education, both sexes (%)	1/7	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=157">http://data.uis.unesco.org/index.aspx?queryid=157</a>
	Outcomes (0.5)	Basic Skills (0.333)	Literacy Skills (0.333)	Youth literacy rate, population 15-24 years, both sexes (%)	0.5	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=166">http://data.uis.unesco.org/index.aspx?queryid=166</a>
				Mean score of 15-year-old students in reading literacy	0.5	Organisation for Economic Co-operation and Development (OECD). (2014). PISA 2012 Results in Focus: What 15-year-olds know and what they can do with what they know. Retrieved from: <a href="https://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf">https://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf</a>
			Mathematics Skills (0.333)	4th Grade achievement in mathematics	1/3	Mullis, I.V.S., Martin, M.O., Foy, P., and Arora, A. (2012). TIMSS 2011 International Results in Mathematics. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College; Amsterdam: International Association for the Evaluation of Educational Achievement (IEA) Secretariat. Retrieved from: <a href="http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf">http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf</a>
				8th Grade achievement in mathematics	1/3	Mullis, I.V.S., Martin, M.O., Foy, P., and Arora, A. (2012). TIMSS 2011 International Results in Mathematics. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College; Amsterdam: International Association for the Evaluation of Educational Achievement (IEA) Secretariat. Retrieved from: <a href="http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf">http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf</a>
				Mean score of 15-year-old students in mathematics literacy	1/3	Organisation for Economic Co-operation and Development (OECD). (2014). PISA 2012 Results in Focus: What 15-year-olds know and what they can do with what they know. Retrieved from: <a href="https://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf">https://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf</a>

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source		
Knowledge Capital (0.4)	Outcomes (0.5)	Basic Skills (0.333)	Scientific Skills (0.333)	4th Grade achievement in science	1/3	Mullis, I.V.S., Martin, M.O., Foy, P., and Arora, A. (2012). TIMSS 2011 International Results in Mathematics. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College; Amsterdam: International Association for the Evaluation of Educational Achievement (IEA) Secretariat. Retrieved from: <a href="http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf">http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf</a>		
				8th Grade achievement in science	1/3	Mullis, I.V.S., Martin, M.O., Foy, P., and Arora, A. (2012). TIMSS 2011 International Results in Mathematics. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College; Amsterdam: International Association for the Evaluation of Educational Achievement (IEA) Secretariat. Retrieved from: <a href="http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf">http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf</a>		
				Mean score of 15-year-old students in science literacy	1/3	Organisation for Economic Co-operation and Development (OECD). (2014). PISA 2012 Results in Focus: What 15-year-olds know and what they can do with what they know. Retrieved from: <a href="https://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf">https://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf</a>		
		Lifelong Learning Skills (0.333)	Problem Solving (0.25)	Skillfulness of students in problem solving	1	United Nations Development Programme (UNDP) and Mohammed bin Rashid Al Maktoum Foundation. (2012). Arab Knowledge Report 2010-2011: Preparing Future Generations for the Knowledge Society. Dubai: Al Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2011/en/AKR2011_Full_En.pdf">http://www.knowledge4all.com/uploads/files/AKR2011/en/AKR2011_Full_En.pdf</a>		
				Communication (0.25)	Skillfulness of students in Arabic written communication	1	United Nations Development Programme (UNDP) and Mohammed bin Rashid Al Maktoum Foundation. (2012). Arab Knowledge Report 2010-2011: Preparing Future Generations for the Knowledge Society. Dubai: Al Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2011/en/AKR2011_Full_En.pdf">http://www.knowledge4all.com/uploads/files/AKR2011/en/AKR2011_Full_En.pdf</a>	
					Research and Analysis (0.25)	Skillfulness of students in information retrieval and analysis	1	United Nations Development Programme (UNDP) and Mohammed bin Rashid Al Maktoum Foundation. (2012). Arab Knowledge Report 2010-2011: Preparing Future Generations for the Knowledge Society. Dubai: Al Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2011/en/AKR2011_Full_En.pdf">http://www.knowledge4all.com/uploads/files/AKR2011/en/AKR2011_Full_En.pdf</a>
						Technological Skills (0.25)	Skillfulness of students in using technology	1
		Values and Trends (0.333)		Q7. If politicians were predominantly women, do you believe the world would in general be a better place, a worse place or no different?	1/3	Gallup International. (2013). End of Year Survey 2013: Country Results. Retrieved September 6, 2016, from: <a href="http://www.wingia.com/en/services/end_of_year_survey_2013/country_results/7/37/">http://www.wingia.com/en/services/end_of_year_survey_2013/country_results/7/37/</a>		
				Q7b. To what extent do you agree or disagree with each of the following statement: Democracy may have problems but it is the best system of government.	1/3	Gallup International. (2013). End of Year Survey 2013: Country Results. Retrieved September 6, 2016, from: <a href="http://www.wingia.com/en/services/end_of_year_survey_2013/country_results/7/37/">http://www.wingia.com/en/services/end_of_year_survey_2013/country_results/7/37/</a>		
				Q11. Overall, do you think globalization is a good thing, bad thing, or neither good nor bad?	1/3	Gallup International. (2013). End of Year Survey 2013: Country Results. Retrieved September 6, 2016, from: <a href="http://www.wingia.com/en/services/end_of_year_survey_2013/country_results/7/37/">http://www.wingia.com/en/services/end_of_year_survey_2013/country_results/7/37/</a>		

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
Enabling Environment (0.3)	Family Environment (0.333)	Home Educational Resources (0.333)		Question: Number of study supports in the home: Own room and Internet connection	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: Home educational resources (Index)	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
		Parental Level of Education (0.333)		Question: Highest level of education of parents	1	Team Index Calculations based on data from: TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
		Parental Involvement at Home (0.333)		Question: How often do your parents ask what you learned in school?	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: How often do your parents make sure that you set aside time for your homework?	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
	Early Childhood Education (0.333)	Enrolment (0.5)		Gross enrolment ratio, pre-primary, both sexes (%)	0.5	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/?queryid=142">http://data.uis.unesco.org/?queryid=142</a>
				Attendance in early childhood development (36-59 months)	0.5	UNICEF Data & Analytics. (2016). State of the World's Children Report 2016. Retrieved September 6, 2016, from: <a href="https://public.tableau.com/views/UNICEFSOWC2016/StateoftheWorldsChildren?:embed=y&amp;:display_count=yes&amp;:showTabs=y&amp;:toolbar=no&amp;:showVizHome=no">https://public.tableau.com/views/UNICEFSOWC2016/StateoftheWorldsChildren?:embed=y&amp;:display_count=yes&amp;:showTabs=y&amp;:toolbar=no&amp;:showVizHome=no</a>
		Outcomes (0.5)		Early Child Development Index	1	UNICEF. (2016). Multiple Indicator Cluster Surveys (MICS) 2016. Retrieved August 31, 2016, from: <a href="http://mics.unicef.org/surveys">http://mics.unicef.org/surveys</a>
	School Environment (0.333)	Parental Involvement at School (0.2)		Question: How would you characterize parental involvement in school activities within your school? (Opinion of school)	1/6	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: How would you characterize parental support for student achievement within your school? (Opinion of school)	1/6	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: How would you characterize parental support for student achievement within your school? (Opinion of mathematics teachers)	1/6	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: How would you characterize parental involvement in school activities within your school? (Opinion of mathematics teachers)	1/6	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source	
Enabling Environment (0.3)	School Environment (0.333)	Parental Involvement at School (0.2)		Question: How would you characterize parental support for student achievement within your school? (Opinion of science teachers)	1/6	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.	
				Question: How would you characterize parental involvement in school activities within your school? (Opinion of science teachers)	1/6	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.	
		Classroom Environment (0.2)	Learning Time (0.25)		Teaching hours	1/7	ALECSO: Arab Educational Observatory. (2013). Data and Indicators of the Arab Educational Observatory. Tunisia: Arab Organization for Culture and Science. Retrieved September 6, 2016, from: <a href="http://www.alecso.org/marsad/site/?page_id=321&amp;lang=ar">http://www.alecso.org/marsad/site/?page_id=321&amp;lang=ar</a>
					Question: What is the total instructional time (hours), excluding breaks, in a typical day?	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement
					Question: To what degree is absenteeism a problem among teachers in your school?	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
					Question: To what degree is arriving late or leaving early a problem among teachers in your school?	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
					Question: To what degree is classroom disturbance a problem among <eighth-grade> students in your school?	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
					Question: How difficult was it to fill <eighth-grade> teaching vacancies for this school year for science?	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
					Question: How difficult was it to fill <eighth-grade> teaching vacancies for this school year for mathematics?	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
			Educational Settings (0.25)		Question: Teacher working conditions (Index) (Opinion of mathematics teachers)	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
					Question: Teacher working conditions (Index) (Opinion of science teachers)	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
Enabling Environment (0.3)	School Environment (0.333)	Classroom Environment (0.2)	Pedagogical Relation (0.25)	Question: Thinking about your current school, indicate the extent to which you agree or disagree that the students are respectful of the teachers. (Opinion of mathematics teachers)	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: Thinking about your current school, indicate the extent to which you agree or disagree that the students are respectful of the teachers. (Opinion of science teachers)	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
			Number of Students in the Classroom (0.25)	Pupil-teacher ratio in primary education (headcount basis)	1/3	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=180">http://data.uis.unesco.org/index.aspx?queryid=180</a>
				Pupil-teacher ratio in lower secondary education (headcount basis)	1/3	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=180">http://data.uis.unesco.org/index.aspx?queryid=180</a>
				Pupil-teacher ratio in upper secondary education (headcount basis)	1/3	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=180">http://data.uis.unesco.org/index.aspx?queryid=180</a>
			Educational Framework (0.2)	Preparation for the Profession (0.25)	Percentage of teachers in pre-primary education who are trained, both sexes (%)	0.25
		Percentage of teachers in primary education who are trained, both sexes (%)			0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx">http://data.uis.unesco.org/index.aspx</a>
		Percentage of teachers in lower secondary education who are trained, both sexes (%)			0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx">http://data.uis.unesco.org/index.aspx</a>
		Percentage of teachers in upper secondary education who are trained, both sexes (%)			0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx">http://data.uis.unesco.org/index.aspx</a>
		Collaborative Work (0.25)		Question: Collaborate to improve teaching (Index) (Opinion of science teachers)	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: Collaborate to improve teaching (Index) (Opinion of mathematics teachers)	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
Enabling Environment (0.3)	School Environment (0.333)	Educational Framework (0.2)	Professional Satisfaction (0.25)	Question: Teacher career satisfaction (Index) (Opinion of mathematics teachers)	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: Teacher career satisfaction (Index) (Opinion of science teachers)	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
			Relation with the Family (0.25)	Question: How often do you meet or talk individually with the student's parents to discuss his/her learning progress? (Opinion of mathematics teachers)	0.25	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: How often do you send home a progress report on the student's learning? (Opinion of mathematics teachers)	0.25	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: How often do you meet or talk individually with the student's parents to discuss his/her learning progress? (Opinion of science teachers)	0.25	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: How often do you send home a progress report on the student's learning? (Opinion of science teachers)	0.25	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
				Question: How often do you send home a progress report on the student's learning? (Opinion of science teachers)	0.25	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
		Use of Education Technology (0.2)	Technological Infrastructure (0.5)	Internet access in schools	1/3	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a>  For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a>  For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
				Educational institutions with computer-assisted instruction (CAI)	1/3	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/">http://data.uis.unesco.org/</a>
				Educational institutions with computer laboratories	1/3	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/">http://data.uis.unesco.org/</a>



Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source	
<b>Enabling Environment (0.3)</b>	<b>School Environment (0.333)</b>	<b>Use of Education Technology (0.2)</b>	<b>Use of CAI Technologies (0.5)</b>	<b>Strategies to promote integration of ICT in education</b>	0.5	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/">http://data.uis.unesco.org/</a>	
				<b>Curriculum includes recommendations for ICT-assisted instruction to form part of subject delivery in mathematics, natural sciences, social sciences, reading, writing, and literature and second language</b>	0.5	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 5, 2016, from: <a href="http://data.uis.unesco.org/">http://data.uis.unesco.org/</a>	
		<b>School Leadership (0.2)</b>	<b>Security and Organization (0.333)</b>	<b>Question: School discipline and safety (Index)</b>	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.	
				<b>Question: Safe and orderly school (Index) (Opinion of mathematics teachers)</b>	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.	
				<b>Question: Safe and orderly school (Index) (Opinion of science teachers)</b>	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.	
				<b>Question: To what degree is physical injury to teachers or staff a problem among &lt;eighth-grade&gt; students in your school?</b>	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.	
				<b>Question: To what degree is physical injury to other students a problem among &lt;eighth-grade&gt; students in your school?</b>	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.	
				<b>Question: Students bullied at school (Index)</b>	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.	
				<b>Question: During this year, how often were you hit or hurt by other student(s) at school?</b>	1/7	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.	
				<b>Cooperation with the family (0.333)</b>	<b>Question: How often does your school organize workshops or seminars for parents on learning or pedagogical issues?</b>	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.
					<b>Question: How often does your school discuss parents' concerns or wishes about the school's organization?</b>	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source	
Enabling Environment (0.3)	School Environment (0.333)	School Leadership (0.2)	Academic Success (0.333)	Question: School emphasis on academic success - teacher reports (Index) (Opinion of mathematics teachers)	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.	
				Question: School emphasis on academic success - teacher reports (Index) (Opinion of science teachers)	0.5	TIMSS & PIRLS International Study Center. (2013). TIMSS 2011 International Database. Boston: IEA International Association for the Evaluation of Educational Achievement.	
Development Context (0.3)	Expenditure on Education (0.2)			Government expenditure per primary student as % of GDP per capita (%)	0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016 from: <a href="http://data.uis.unesco.org/index.aspx?queryid=189">http://data.uis.unesco.org/index.aspx?queryid=189</a>	
				Government expenditure per secondary student as % of GDP per capita (%)	0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016 from: <a href="http://data.uis.unesco.org/index.aspx?queryid=189">http://data.uis.unesco.org/index.aspx?queryid=189</a>	
				Government expenditure in educational institutions as % of GDP (%)	0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=182">http://data.uis.unesco.org/index.aspx?queryid=182</a>	
				Expenditure on education as % of total government expenditure (%)	0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=183">http://data.uis.unesco.org/index.aspx?queryid=183</a>	
	Cultural Context (0.2)				Educational attainment: at least completed primary (ISCED 1 or higher), population 25+ years, both sexes (%)	0.2	UNESCO Institute for Statistics. (2015)Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/">http://data.uis.unesco.org/</a> .
					Educational attainment: at least completed lower secondary (ISCED 2 or higher), population 25+ years, both sexes (%)	0.2	UNESCO Institute for Statistics. (2015). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/">http://data.uis.unesco.org/</a>
					Educational attainment: at least completed upper-secondary (ISCED 3 or higher), population 25+ years, both sexes (%)	0.2	UNESCO Institute for Statistics. (2015). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/">http://data.uis.unesco.org/</a>
					Enrolment in tertiary education per 100,000 inhabitants, both sexes	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=131">http://data.uis.unesco.org/index.aspx?queryid=131</a>
					Adult literacy rate, population 15+ years, both sexes (%)	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=166">http://data.uis.unesco.org/index.aspx?queryid=166</a>

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source	
Development Context (0.3)	Health Context (0.2)			Access to improved sanitation facilities (% of population)	1/6	WHO/ UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation. (2016). Data and Estimates. Retrieved September 6, 2016, from: <a href="http://www.wssinfo.org/data-estimates/tables/">http://www.wssinfo.org/data-estimates/tables/</a>	
				Total health expenditure (% of GDP)	1/6	World Health Organization. (2016). Global Health Observatory Data Repository. Retrieved September 6, 2016, from: <a href="http://apps.who.int/gho/data/node.imr.WHS7_143?lang=en">http://apps.who.int/gho/data/node.imr.WHS7_143?lang=en</a>	
				Life expectancy at birth, both sexes (years)	1/6	World Health Organization. (2016). Global Health Observatory Data Repository. Retrieved September 6, 2016, from: <a href="http://apps.who.int/gho/data/node.main.688?lang=en">http://apps.who.int/gho/data/node.main.688?lang=en</a>	
				Total density per 100000 population: hospitals	1/6	World Health Organization. (2016). Global Health Observatory Data Repository. Retrieved September 6, 2016, from: <a href="http://apps.who.int/gho/data/view.main.30000">http://apps.who.int/gho/data/view.main.30000</a>	
				Average of 13 international health regulations core capacity scores	1/6	World Health Organization. (2016). World Health Statistics 2016 Data Visualizations Dashboard. Retrieved September 6, 2016, from: <a href="http://apps.who.int/gho/data/view.sdq.3-d-d-data-ctry?lang=en">http://apps.who.int/gho/data/view.sdq.3-d-d-data-ctry?lang=en</a>	
				Skilled health professional's density (Per 10000 population)	1/6	World Health Organization. (2016). Global Health Observatory Data. Retrieved September 6, 2016, from: <a href="http://www.who.int/gho/publications/world_health_statistics/2016/whs2016_AnnexA_HealthWorkforce.pdf">http://www.who.int/gho/publications/world_health_statistics/2016/whs2016_AnnexA_HealthWorkforce.pdf</a>	
	Political Context (0.2)				Political stability and absence of violence/terrorism	0.25	World Bank. (2015). World Governance Indicators. Retrieved September 5, 2016, from: <a href="http://info.worldbank.org/governance/wgi/index.aspx#home">http://info.worldbank.org/governance/wgi/index.aspx#home</a>
					Corruption Perceptions Index	0.25	Transparency International. (2015). Corruption Perceptions Index 2015. Retrieved September 5, 2016, from: <a href="http://www.transparency.org/cpi2015#results-table">http://www.transparency.org/cpi2015#results-table</a>
					Transparency of government policymaking	0.25	World Economic Forum. (2015). The Global Competitiveness Report 2015 – 2016. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/gcr2015-2016/Global_Competitiveness_Report_2015-2016.pdf">http://www3.weforum.org/docs/gcr2015-2016/Global_Competitiveness_Report_2015-2016.pdf</a>  For Libya and Yemen: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a>  For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
					Country well-being (Percent thriving in 3+ elements)	0.25	Gallup Healthways Well-Being Index. (2014). State of Global Well-Being: 2014 Country Well-Being Rankings. Retrieved from: <a href="http://info.healthways.com/hubs/Well-Being_Index/2014_Data/Gallup-Healthways_State_of_Global_Well-Being_2014_Country_Rankings.pdf?t=1471642049488">http://info.healthways.com/hubs/Well-Being_Index/2014_Data/Gallup-Healthways_State_of_Global_Well-Being_2014_Country_Rankings.pdf?t=1471642049488</a>
	Social Context (0.2)	Gender Parity (0.333)	Education (0.25)		Gross enrolment ratio, pre-primary, gender parity index (GPI)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=142">http://data.uis.unesco.org/index.aspx?queryid=142</a> .
					Gross enrolment ratio, primary, gender parity index (GPI)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=142">http://data.uis.unesco.org/index.aspx?queryid=142</a> .
					Gross enrolment ratio, lower secondary, gender parity index (GPI)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=142">http://data.uis.unesco.org/index.aspx?queryid=142</a> .

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
Development Context (0.3)	Social Context (0.2)	Gender Parity (0.3333)	Education (0.25)	Gross enrolment ratio, upper secondary, gender parity index (GPI)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=142">http://data.uis.unesco.org/index.aspx?queryid=142</a> .
				Gross graduation ratio from primary education, gender parity index (GPI)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/">http://data.uis.unesco.org/</a> .
				Gross graduation ratio from lower secondary education, gender parity index (GPI)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 6, 2016, from: <a href="http://data.uis.unesco.org/">http://data.uis.unesco.org/</a> .
			Literacy (0.25)	Youth literacy rate, population 15-24 years, gender parity index (GPI)	1/3	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 8, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=166">http://data.uis.unesco.org/index.aspx?queryid=166</a>
				Literacy rate, population 25-64 years, gender parity index (GPI)	1/3	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 8, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=166">http://data.uis.unesco.org/index.aspx?queryid=166</a>
				Elderly literacy rate, population 65+ years, gender parity index (GPI)	1/3	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 8, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=166">http://data.uis.unesco.org/index.aspx?queryid=166</a>
			Employment (0.25)	Difference between rates of unemployment for females and males (rates as a percentage of respective male and female labour force)	1	Index Team Calculations based on data from: International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved September 8, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx</a>
			Civic Participation (0.25)	Difference between the percentage of women and the percentage of men in parliament (%)	1	Index Team Calculations based on data from: Inter-Parliamentary Union. (2016). PARLINE Database on National Parliaments. Retrieved September 5, 2016, from: <a href="http://www.ipu.org/wmn-e/classif.html">http://www.ipu.org/wmn-e/classif.html</a>
			Income Distribution (0.333)	Multidimensional Poverty Index	0.5	United Nations Development Programme (UNDP). (2015). Human Development Report: Work for Human Development. Retrieved from: <a href="http://hdr.undp.org/sites/default/files/2015_human_development_report_1.pdf">http://hdr.undp.org/sites/default/files/2015_human_development_report_1.pdf</a>
				Poverty headcount ratio at national poverty lines (% of population)	0.5	World Bank. (2016). World Development Indicators. Retrieved September 5, 2016, from: <a href="http://data.worldbank.org/indicator/SI.POV.NAHC">http://data.worldbank.org/indicator/SI.POV.NAHC</a> .

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
<b>Development Context (0.3)</b>	<b>Social Context (0.2)</b>	<b>Regional Parity (0.333)</b>		<b>Net attendance rates in primary education (%), urban vs rural (net difference)</b>	0.2	Index Team Calculations based on data from: UNESCO Institute for Statistics. (2015). Data Centre. Retrieved August 31, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=284">http://data.uis.unesco.org/index.aspx?queryid=284</a>
				<b>Poverty gap at national poverty lines (%), urban vs rural (net difference)</b>	0.2	Index Team Calculations based on data from: World Bank. (2015). World Bank Open Data. Retrieved August 31, 2016, from: <a href="http://data.worldbank.org/indicator/SI.POV.URGP">http://data.worldbank.org/indicator/SI.POV.URGP</a>
				<b>Improved sanitation facilities (%), urban vs rural (net difference)</b>	0.2	Index Team Calculations based on data from: WHO/ UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation. (2016). Data and Estimates. Retrieved September 13, 2016, from: <a href="http://www.wssinfo.org/data-estimates/tables/">http://www.wssinfo.org/data-estimates/tables/</a>
				<b>Improved water source (%), urban vs rural (net difference)</b>	0.2	Index Team Calculations based on data from: WHO/ UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation. (2016). Data and Estimates. Retrieved September 13, 2016, from: <a href="http://www.wssinfo.org/data-estimates/tables/">http://www.wssinfo.org/data-estimates/tables/</a>
				<b>Composite Coverage Index (%), urban vs rural (net difference)</b>	0.2	Index Team Calculations based on data from: WHO. (2015). RMNCH Interventions Combined, Composite Coverage Index. Retrieved September 13, 2016 from: <a href="http://gamapsrver.who.int/gho/interactive_charts/health_equity/inequalities_residence/Map_Place%20oP%20residence.html">http://gamapsrver.who.int/gho/interactive_charts/health_equity/inequalities_residence/Map_Place%20oP%20residence.html</a>

Table A2:

## Technical Vocational Education and Training Index: Variables and Weights

Pillar	Sub-Pillar	Variable	Weight	Source	
Education and Training (0.2)	Enrolment (0.5)	Percentage of students in secondary education enrolled in vocational programmes, both sexes (%)	0.5	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 14, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=135">http://data.uis.unesco.org/index.aspx?queryid=135</a> .	
		Percentage of students in secondary vocational education who are female (%)	0.5	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 14, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=140">http://data.uis.unesco.org/index.aspx?queryid=140</a> .	
	Relation with the Labour Market (0.5)	Inadequately educated workforce	1/7	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>	
		Extent of training for TVET students	1/7	ETF. (سنوات مختلفة). Fondation Européenne pour la formation. Retrieved August 25, 2016, from: <a href="http://www.etf.europa.eu/">http://www.etf.europa.eu/</a> UNESCO.UNEVOC. (سنوات مختلفة). قاعدة البيانات العالمية حول التعليم والتدريب التقني والمهني. Retrieved August 25, 2016 from: <a href="http://www.unevoc.unesco.org/">http://www.unevoc.unesco.org/</a>	
		Availability of specialized training services	1/7	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>	
		Percent of firms offering formal training	1/7	World Bank. (2016). Enterprises Surveys. Retrieved September 14, 2016, from: <a href="http://www.enterprisesurveys.org/data">http://www.enterprisesurveys.org/data</a>	
		TVET involvement in entrepreneurship	1/7	ETF. (سنوات مختلفة). Fondation Européenne pour la formation. Retrieved August 25, 2016 from: <a href="http://www.etf.europa.eu/">http://www.etf.europa.eu/</a> UNESCO.UNEVOC. (سنوات مختلفة). قاعدة البيانات العالمية حول التعليم والتدريب التقني والمهني. Retrieved August 25, 2016 from: <a href="http://www.unevoc.unesco.org/">http://www.unevoc.unesco.org/</a>	
		Participation of TVET authorities in the organising body for the TVET examinations	1/7	ETF. (سنوات مختلفة). Fondation Européenne pour la formation. Retrieved August 25, 2016 from: <a href="http://www.etf.europa.eu/">http://www.etf.europa.eu/</a> UNESCO.UNEVOC. (سنوات مختلفة). قاعدة البيانات العالمية حول التعليم والتدريب التقني والمهني. Retrieved August 25, 2016 from: <a href="http://www.unevoc.unesco.org/">http://www.unevoc.unesco.org/</a>	
		Participation of TVET authorities in the committees responsible for setting the TVET curricula	1/7	ETF. (سنوات مختلفة). Fondation Européenne pour la formation. Retrieved August 25, 2016 from: <a href="http://www.etf.europa.eu/">http://www.etf.europa.eu/</a> UNESCO.UNEVOC. (سنوات مختلفة). قاعدة البيانات العالمية حول التعليم والتدريب التقني والمهني. Retrieved August 25, 2016 from: <a href="http://www.unevoc.unesco.org/">http://www.unevoc.unesco.org/</a>	
	Organizational Framework (0.5)	Economic Policies (0.5)	Total investment (% of GDP)	0.25	International monetary fund. (2016). Data and Statistics. Retrieved September 15, 2016, from: <a href="http://www.imf.org/external/pubs/ft/weo/2016/02/weodata/index.aspx">http://www.imf.org/external/pubs/ft/weo/2016/02/weodata/index.aspx</a>
			Tax incentives for young businesses	0.25	UNESCO. UNEVOC. Entrepreneurship Education in the Arab States. (2013). Retrieved August 25, 2016, from: <a href="http://www.unevoc.unesco.org">http://www.unevoc.unesco.org</a>
Starting a business, procedures (number)			0.25	World Bank. (2016). Doing Business 2016: Measuring Regulating Quality and Efficiency. 13th edition. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/-/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf">http://www.doingbusiness.org/-/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf</a>	
Ease of doing business			0.25	World Bank. (2016). Doing Business 2016: Measuring Regulating Quality and Efficiency. 13th edition. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/-/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf">http://www.doingbusiness.org/-/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf</a>	

Pillar	Sub-Pillar	Variable	Weight	Source
Organizational Framework (0.5)	Labour Market Features (0.5)	High-skilled employment share (25-54 age group)	1/14	World Economic Forum. (2016). The Human Capital Report 2016. Geneva: World Economic Forum. Retrieved September 26, 2016, from: <a href="http://reports.weforum.org/human-capital-report-2016/?doing_wp_cron=1474892898.4192020893096923828125">http://reports.weforum.org/human-capital-report-2016/?doing_wp_cron=1474892898.4192020893096923828125</a>
		Poor work ethic in national labor force	1/14	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		Labor force with less than primary education (% of total labor force)	1/14	International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved September 26, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx</a> .
		Total tax rate, % of commercial profits	1/14	World Bank and PwC. (2016). Paying Taxes 2016: The Global Picture. Washington DC: The World Bank. Retrieved from: <a href="https://www.pwc.com/gx/en/paying-taxes-2016/paying-taxes-2016.pdf">https://www.pwc.com/gx/en/paying-taxes-2016/paying-taxes-2016.pdf</a>
		Ratio of minimum wage as a share of value added per worker	1/14	World Bank. (2016). Doing Business 2016: Measuring Regulating Quality and Efficiency. 13th edition. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf">http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf</a> .
		Disputes rate per 1000 workers	1/14	جامعة الدول العربية ، المنظمة العربية للشغل 2013. (2013). «التقرير العربي الأول، حول سوق العمل». Retrieved August 23, 2016 from: <a href="http://alolabor.org/wp">http://alolabor.org/wp</a>
		Mean weekly hours actually worked per employed person	1/14	International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved September 14, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx</a>
		Pay and productivity	1/14	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		Female participation in the labor force, ratio to men (15+)	1/14	Team Index Calculations Based on: International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved October 3, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm01.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm01.xlsx</a>
		Labor force not contributing to social security (percent)	1/14	World Bank. (2013). Jobs for Shared Prosperity: Time for Action in the Middle East and North Africa. Retrieved from: <a href="https://openknowledge.worldbank.org/handle/10986/13284">https://openknowledge.worldbank.org/handle/10986/13284</a> .
Labor market efficiency	1/14	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>		

Pillar	Sub-Pillar	Variable	Weight	Source
Organizational Framework (0.5)	Labour Market Features (0.5)	Restrictive labor regulations	1/14	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		Labor regulations	1/14	World Bank. (2016). Enterprises Surveys. Retrieved September 14, 2016, from: <a href="http://www.enterprisesurveys.org/Custom-Query">http://www.enterprisesurveys.org/Custom-Query</a> .
		Availability of a government authority to regulate labour supply and demand	1/14	Fondation Européenne pour la formation. Retrieved August 25 ,2016, from: <a href="http://www.etf.europa.eu/">http://www.etf.europa.eu/</a>
Development Context (0.3)	Education (0.333)	Government expenditure per primary and secondary student as % of GDP per capita (%)	0.125	Index Team Calculation: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 26, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=189">http://data.uis.unesco.org/index.aspx?queryid=189</a> .
		Government expenditure on education as % of GDP (%)	0.125	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 14, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=181">http://data.uis.unesco.org/index.aspx?queryid=181</a> .
		Higher education and training	0.125	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		Adult literacy rate, population 15+ years, both sexes (%)	0.125	Team Index Calculation based on data from: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 14, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=166">http://data.uis.unesco.org/index.aspx?queryid=166</a> .
		Gross enrolment ratio, primary, gender parity index (GPI)	0.125	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 14, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=142">http://data.uis.unesco.org/index.aspx?queryid=142</a> .
		Rate of out-of-school children of primary school age, both sexes (%)	0.125	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 14, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=121">http://data.uis.unesco.org/index.aspx?queryid=121</a> .
		Net enrolment rate, secondary, both sexes (%)	0.125	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 14, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=144">http://data.uis.unesco.org/index.aspx?queryid=144</a> .
		Net enrolment rate, primary, both sexes (%)	0.125	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 14, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=144">http://data.uis.unesco.org/index.aspx?queryid=144</a> .



Pillar	Sub-Pillar	Variable	Weight	Source
Development Context (0.3)	Demography (0.333)	Employment in agriculture, both sexes (%)	0.5	International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved September 14, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx</a>
		Population growth rate (%) (Average annual)	0.5	United Nations, Department of Economic and Social Affairs, Population Division. (2015). World Population Prospects: The 2015 Revision. Retrieved September 15, 2016, from: <a href="https://esa.un.org/unpd/wpp/Download/Standard/Population/">https://esa.un.org/unpd/wpp/Download/Standard/Population/</a> .
	State of Development (0.333)	AKI 2015 Economy Index	0.2	United Nations Development Programme (UNDP) and Mohammed bin Rashid Al Maktoum Foundation. (2014). Arab Knowledge Report 2014: Youth and Localisation of Knowledge. Dubai: Al Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2014/en/AKR2014_Full_En.pdf">http://www.knowledge4all.com/uploads/files/AKR2014/en/AKR2014_Full_En.pdf</a> .
		Youth unemployment rate (%), 15-24 age group	0.2	International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved September 14, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx</a> .
		Unemployment rate (%), (15+)	0.2	International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved September 14, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx</a> .
		Human Development Index (HDI)	0.2	United Nations Development Programme (UNDP). (2016). Human Development Report 2015, Work for Human Development, Retrieved from: <a href="http://hdr.undp.org/sites/default/files/2015_human_development_report.pdf">http://hdr.undp.org/sites/default/files/2015_human_development_report.pdf</a> .
		GDP per capita (Current US\$)	0.2	World Bank. (2016). World Development Indicators. Retrieved September 9, 2016, from: <a href="http://data.worldbank.org/indicator/NY.GDP.PCAP.CD">http://data.worldbank.org/indicator/NY.GDP.PCAP.CD</a> .

Table A3:

## Higher Education Index: Variables and Weights

Pillar	Sub-Pillar	Variable	Weight	Source
Higher Education Inputs (0.3)	Enabling Environment (0.167)	Political stability and absence of violence/terrorism	1/6	World Bank. (2016). World Governance Indicators. Retrieved October 10, 2016, from: <a href="http://info.worldbank.org/governance/wgi/#home">http://info.worldbank.org/governance/wgi/#home</a> .
		Government effectiveness	1/6	World Bank. (2016). World Governance Indicators. Retrieved October 10, 2016, from: <a href="http://info.worldbank.org/governance/wgi/#home">http://info.worldbank.org/governance/wgi/#home</a> .
		Regulatory quality	1/6	World Bank. (2016). World Governance Indicators. Retrieved October 10, 2016, from: <a href="http://info.worldbank.org/governance/wgi/#home">http://info.worldbank.org/governance/wgi/#home</a> .
		Rule of law	1/6	World Bank. (2016). World Governance Indicators. Retrieved October 10, 2016, from: <a href="http://info.worldbank.org/governance/wgi/#home">http://info.worldbank.org/governance/wgi/#home</a> .
		Foundations of wellbeing	1/6	Social Progress Imperative. (2016). 2016 Social Progress Index. Retrieved September 7, 2016, from: <a href="http://www.socialprogressimperative.org/global-index/#data_table/countries/com1/dim1.com1,dim2,dim3">http://www.socialprogressimperative.org/global-index/#data_table/countries/com1/dim1.com1,dim2,dim3</a> .
		Educational attainment: At least completed upper secondary (ISCED 3 or higher), population 25+ years, both sexes (%)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=168">http://data.uis.unesco.org/index.aspx?queryid=168</a> .
	Expenditure (0.333)	Government expenditure on tertiary education as % of GDP (%)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=181">http://data.uis.unesco.org/index.aspx?queryid=181</a>
		Expenditure on tertiary as % of total government expenditure (%)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=183">http://data.uis.unesco.org/index.aspx?queryid=183</a>
		Expenditure on tertiary as % of government expenditure on education (%)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=184">http://data.uis.unesco.org/index.aspx?queryid=184</a>
		Government expenditure per tertiary student (constant PPP\$)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=191">http://data.uis.unesco.org/index.aspx?queryid=191</a>
		All staff compensation as % of total expenditure in tertiary public institutions (%)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=186">http://data.uis.unesco.org/index.aspx?queryid=186</a>
		Capital expenditure as % of total expenditure in tertiary public institutions (%)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=188">http://data.uis.unesco.org/index.aspx?queryid=188</a>
	Enrolment (0.167)	Percentage of all students in tertiary education enrolled in ISCED 6, both sexes (%)	1/9	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=134">http://data.uis.unesco.org/index.aspx?queryid=134</a> .
		Percentage of all students in tertiary education enrolled in ISCED 7, both sexes (%)	1/9	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=134">http://data.uis.unesco.org/index.aspx?queryid=134</a> .
		Percentage of all students in tertiary education enrolled in ISCED 8, both sexes (%)	1/9	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=134">http://data.uis.unesco.org/index.aspx?queryid=134</a> .
		Gross enrolment ratio, tertiary, female (%)	1/9	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=142">http://data.uis.unesco.org/index.aspx?queryid=142</a> .
		Gross enrolment ratio, tertiary, male (%)	1/9	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=142">http://data.uis.unesco.org/index.aspx?queryid=142</a> .

Pillar	Sub-Pillar	Variable	Weight	Source
Higher Education Inputs (0.3)	Enrolment (0.167)	Gross enrolment ratio, tertiary, gender parity index (GPI)	1/9	Index Team Calculations based on data from: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=142">http://data.uis.unesco.org/index.aspx?queryid=142</a> .
		Percentage of students in tertiary education who are female (%)	1/9	Index Team Calculations based on data from: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 8, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=139">http://data.uis.unesco.org/index.aspx?queryid=139</a> .
		Difference between enrolment rates in scientific vs non-scientific programmes	1/9	Index Team Calculations based on data from: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 8, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=137">http://data.uis.unesco.org/index.aspx?queryid=137</a> .
		Percentage of enrolment in tertiary education in private institutions (%)	1/9	Index Team Calculations based on data from: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 8, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=136">http://data.uis.unesco.org/index.aspx?queryid=136</a> .
	Human Resources (0.167)	Pupil-teacher ratio in tertiary education (headcount basis)	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=180">http://data.uis.unesco.org/index.aspx?queryid=180</a> .
		Percentage of teachers in tertiary education who are female (%)	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=178">http://data.uis.unesco.org/index.aspx?queryid=178</a> .
		Extent of staff training	0.2	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> .  For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> .  For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .
		Researchers (FTE) - higher education %	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=65">http://data.uis.unesco.org/index.aspx?queryid=65</a> .
	Researchers FTE higher education ICSED 8 / Researchers FTE higher education	0.2	Index Team Calculations based on data from: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=65">http://data.uis.unesco.org/index.aspx?queryid=65</a> and <a href="http://data.uis.unesco.org/index.aspx?queryid=66">http://data.uis.unesco.org/index.aspx?queryid=66</a> .	
	Student Exchange (0.167)	Net flow of internationally mobile students (inbound - outbound), both sexes (number)	0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=243">http://data.uis.unesco.org/index.aspx?queryid=243</a> .
		Gross outbound enrolment ratio to North America and Western Europe, both sexes (%)	0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=175">http://data.uis.unesco.org/index.aspx?queryid=175</a> .
		% Change in students studying at the undergraduate level in the US (2013/2014 and 2014/2015)	0.25	Institute of International Education. (2016). "International Scholar Totals by Place of Origin, 2013/14 - 2014/15." Open Doors Report on International Educational Exchange. Retrieved September 8, 2016, from: <a href="http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/By-Academic-Level-and-Place-of-Origin/2014-15">http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/By-Academic-Level-and-Place-of-Origin/2014-15</a> .
		% Change in students studying at the graduate level in the US (2013/2014 and 2014/2015)	0.25	Institute of International Education. (2016). "International Scholar Totals by Place of Origin, 2013/14 - 2014/15." Open Doors Report on International Educational Exchange. Retrieved September 8, 2016, from: <a href="http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/By-Academic-Level-and-Place-of-Origin/2014-15">http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/By-Academic-Level-and-Place-of-Origin/2014-15</a> .

Higher Education Processes  
(0.1)

Pillar	Variables	Weight	Source
Higher Education Processes (0.1)	Establishment of a national authority for quality assurance in the higher education sector	0.125	The source for each national information is cited; there is also this 2009 publication: <a href="http://unesdoc.unesco.org/images/0018/001892/189272a.pdf">http://unesdoc.unesco.org/images/0018/001892/189272a.pdf</a>
	Quality of the education system	0.125	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
	Quality of math and science education	0.125	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
	Quality of scientific research institutions	0.125	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
	QS world ranking of the country's leading university	0.125	QS World University Rankings. (2016). University Rankings 2016/17. Retrieved September 9, 2016, from: <a href="http://www.topuniversities.com/university-rankings/world-university-rankings/2016">http://www.topuniversities.com/university-rankings/world-university-rankings/2016</a> .
	School life expectancy, tertiary, both sexes (years)	0.125	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=147">http://data.uis.unesco.org/index.aspx?queryid=147</a> .
	Internet access in schools	0.125	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
	Availability of specialized training services	0.125	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .

Pillar	Sub-Pillar	Variable	Weight	Source
Higher Education Outputs (0.6)	Graduation (0.111)	Graduates from ISCED 6 programmes in tertiary education, both sexes (number)	0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=162">http://data.uis.unesco.org/index.aspx?queryid=162</a> .
		Graduates from ISCED 7 programmes in tertiary education, both sexes (number)	0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=162">http://data.uis.unesco.org/index.aspx?queryid=162</a> .
		Graduates from ISCED 8 programmes in tertiary education, both sexes (number)	0.25	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=162">http://data.uis.unesco.org/index.aspx?queryid=162</a> .
		Difference between completion rates for scientific vs. non-scientific programmes (%)	0.25	Index Team Calculations based on data from: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 8, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=162">http://data.uis.unesco.org/index.aspx?queryid=162</a> .
	Employment After Graduation (0.222)	Labor force with tertiary education, both sexes (% of total) (15+)	0.2	International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved September 8, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx</a> .
		Labor force with tertiary education, male (% of male labor force) (15+)	0.2	International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved September 8, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx</a> .
		Labor force with tertiary education, female (% of female labor force) (15+)	0.2	International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved September 8, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx</a> .
		Unemployment with tertiary education, male (% of total unemployment, male) (15+)	0.2	International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved September 8, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx</a> .
		Unemployment with tertiary education, female (% of total unemployment, female) (15+)	0.2	International Labor Organization (ILO). (2015). Key Indicators of the Labor Market (KILM), 9th Edition. Retrieved September 8, 2016, from: <a href="http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx">http://www.ilo.org/legacy/english/global-reports/kilm2015/kilm14.xlsx</a> .
	Knowledge Capital Among Graduates (0.333)	Skillfulness of students in problem solving	0.1	UNDP & Mohammed Bin Rashid al Maktoum Foundation. (2014). The Arab Knowledge Report 2014: Youth and Localisation of Knowledge. Dubai: Al-Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf">http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf</a>
		Skillfulness of students in Arabic written communication	0.1	UNDP & Mohammed Bin Rashid al Maktoum Foundation. (2014). The Arab Knowledge Report 2014: Youth and Localisation of Knowledge. Dubai: Al-Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf">http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf</a>
		Skillfulness of students in foreign language(s)	0.1	UNDP & Mohammed Bin Rashid al Maktoum Foundation. (2014). The Arab Knowledge Report 2014: Youth and Localisation of Knowledge. Dubai: Al-Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf">http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf</a>
		Skillfulness of students in information retrieval and analysis	0.1	UNDP & Mohammed Bin Rashid al Maktoum Foundation. (2014). The Arab Knowledge Report 2014: Youth and Localisation of Knowledge. Dubai: Al-Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf">http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf</a>
		Skillfulness of students in using technology	0.1	UNDP & Mohammed Bin Rashid al Maktoum Foundation. (2014). The Arab Knowledge Report 2014: Youth and Localisation of Knowledge. Dubai: Al-Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf">http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf</a>

Pillar	Sub-Pillar	Variable	Weight	Source
Higher Education Outputs (0.6)	Knowledge Capital Among Graduates (0.333)	Cultural effectiveness among tertiary education students	0.1	UNDP & Mohammed Bin Rashid al Maktoum Foundation. (2014). The Arab Knowledge Report 2014: Youth and Localisation of Knowledge. Dubai: Al-Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf">http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf</a>
		Societal effectiveness among tertiary education students	0.1	UNDP & Mohammed Bin Rashid al Maktoum Foundation. (2014). The Arab Knowledge Report 2014: Youth and Localisation of Knowledge. Dubai: Al-Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf">http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf</a>
		Economic effectiveness among tertiary education students	0.1	UNDP & Mohammed Bin Rashid al Maktoum Foundation. (2014). The Arab Knowledge Report 2014: Youth and Localisation of Knowledge. Dubai: Al-Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf">http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf</a>
		Students recognition for the values of citizenship and belonging	0.1	UNDP & Mohammed Bin Rashid al Maktoum Foundation. (2014). The Arab Knowledge Report 2014: Youth and Localisation of Knowledge. Dubai: Al-Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf">http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf</a>
		Students recognition for the values of openness and global communication	0.1	UNDP & Mohammed Bin Rashid al Maktoum Foundation. (2014). The Arab Knowledge Report 2014: Youth and Localisation of Knowledge. Dubai: Al-Ghurair. Retrieved from: <a href="http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf">http://www.knowledge4all.com/uploads/files/AKR2014UAE/ar/AKR2014_UAE_FuII_Ar.pdf</a>
	Knowledge Production by Higher Education Institutions (0.333)	PCT patents, applications/million population	1/6	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .
		Citable documents	1/6	SCImago and Country Rank. (2016). Scimago Journal & Country Rank. Retrieved September 7, 2016, from: <a href="http://www.scimagojr.com/countryrank.php?order=desc&amp;year=2015">http://www.scimagojr.com/countryrank.php?order=desc&amp;year=2015</a> .
		H Index	1/6	SCImago and Country Rank. (2016). Scimago Journal & Country Rank. Retrieved September 7, 2016, from: <a href="http://www.scimagojr.com/countryrank.php?order=h&amp;year=2015">http://www.scimagojr.com/countryrank.php?order=h&amp;year=2015</a> .
		University-industry collaboration in R&D	1/6	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .
		Availability of scientists and engineers	1/6	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .
SJR ranking of the best scientific journal in the country	1/6	SCImago and Country Rank. (2016). Country Rankings. Retrieved September 7, 2016, from: <a href="http://www.scimagojr.com/journalrank.php">http://www.scimagojr.com/journalrank.php</a>		

Table A4:

## Information and Communications Technology Index: Variables and Weights

Pillar	Sub-Pillar	Variable	Weight	Source
Technological Capabilities (0.5)	Infrastructure and Digital Content (0.34)	Electricity production, kWh/capita	0.235	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		Percentage of the population covered by a mobile-cellular network	0.235	International Telecommunication Union (ITU). (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 1, 2016.
		International internet bandwidth (Kbits/s) per internet user	0.265	Index Team Calculations based on data from: International Telecommunication Union (ITU). (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 1, 2016.
		Secure internet servers (per 1 million people)	0.265	World Bank. (2016). World Development Indicators. Retrieved September 1, 2016 from: <a href="http://data.worldbank.org/indicator/IT.NET.SECR.P6">http://data.worldbank.org/indicator/IT.NET.SECR.P6</a>
	Affordability of Telecommunication Services (0.16)	Mobile-cellular prepaid price of a one-minute local call (off-peak, on-net), in USD	0.375	International Telecommunication Union (ITU). (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 1, 2016.
		Fixed-broadband monthly subscription charge, in USD	0.375	International Telecommunication Union (ITU). (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 1, 2016.
		Internet and telephony sectors competition	0.25	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
	ICT Usage (0.5)	Fixed-telephone subscriptions per 100 inhabitants	0.06	International Telecommunication Union (ITU). (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 1, 2016.
		Mobile-cellular telephone subscriptions per 100 inhabitants	0.08	International Telecommunication Union (ITU). (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 1, 2016.
		Fixed-broadband subscriptions per 100 inhabitants	0.08	International Telecommunication Union (ITU). (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 1, 2016.
		Active mobile-broadband subscriptions per 100 inhabitants	0.08	International Telecommunication Union (ITU). (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 1, 2016.

Pillar	Sub-Pillar	Variable	Weight	Source
Technological Capabilities (0.5)	ICT Usage (0.5)	Percentage of households with computer	0.06	International Telecommunication Union (ITU). (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 1, 2016.
		Percentage of households with Internet	0.08	International Telecommunication Union (ITU). (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 1, 2016.
		Percentage of individuals using the Internet	0.08	International Telecommunication Union (ITU). (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 1, 2016.
		Use of virtual social networks	0.06	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		Firm-level technology absorption	0.06	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		ICT use for business-to-business transactions	0.06	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		Business-to-consumer internet use	0.06	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		Extent of staff training	0.06	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>



Pillar	Sub-Pillar	Variable	Weight	Source
Technological Capabilities (0.5)	ICT Usage (0.5)	Importance of ICTs to government vision of the future	0.06	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a>  For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a>  For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		Government Online Service Index	0.06	United Nations Department of Economic and Social Affairs (UNDESA). (2016). Division for Public Administration and Development Management. United Nations Public Administration Country Studies (UNPACS) Data Center. Retrieved September 1, 2016, from: <a href="https://publicadministration.un.org/egovkb/en-us/Data-Center">https://publicadministration.un.org/egovkb/en-us/Data-Center</a>
		Government success in ICT promotion	0.06	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a>  For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a>  For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
Enabling Environment (0.5)	Education (0.26)	Quality of primary education	0.131	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a>  For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a>  For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		Quality of math and science education	0.123	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a>  For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a>  For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		Gross enrolment ratio, secondary, both sexes (%)	0.123	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 1, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=142">http://data.uis.unesco.org/index.aspx?queryid=142</a>
		Adult literacy rate, population 15+ years, both sexes (%)	0.123	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 1, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=166">http://data.uis.unesco.org/index.aspx?queryid=166</a>

Pillar	Sub-Pillar	Variable	Weight	Source
Enabling Environment (0.5)	Education (0.26)	Internet access in schools	0.123	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> .  For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> .  For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .
		Percentage of students in secondary education enrolled in vocational programmes, both sexes (%)	0.123	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 1, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=135">http://data.uis.unesco.org/index.aspx?queryid=135</a> .
		Gross enrolment ratio, tertiary, both sexes (%)	0.123	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 1, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=142">http://data.uis.unesco.org/index.aspx?queryid=142</a> .
		Quality of the education system	0.131	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> .  For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> .  For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .
	Knowledge Economy (0.4)	Effectiveness of law-making bodies	0.07	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a>  For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a>  For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		Laws relating to ICTs	0.07	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a>  For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a>  For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>

Pillar	Sub-Pillar	Variable	Weight	Source
Enabling Environment (0.5)	Knowledge Economy (0.4)	Judicial independence	0.07	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .
		Efficiency of legal framework in settling disputes	0.07	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .
		Intellectual property protection	0.08	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .
		Unlicensed software installation rates	0.08	The Software Alliance (BSA). (2016). Seizing Opportunity Through License Compliance: BSA Global Software Survey. Washington: BSA Worldwide Headquarters. Retrieved from: <a href="http://globalstudy.bsa.org/2016/downloads/studies/BSA_GSS_US.pdf">globalstudy.bsa.org/2016/downloads/studies/BSA_GSS_US.pdf</a>
		Enforcing contracts, procedures (number)	0.07	World Bank. (2015). Doing Business 2015: Going Beyond Efficiency. 12th edition. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/~media/GIABW/Doing%20Business/Documents/Annual-Reports/English/DB15-Full-Report.pdf">www.doingbusiness.org/~media/GIABW/Doing%20Business/Documents/Annual-Reports/English/DB15-Full-Report.pdf</a>
		Enforcing contracts, time (days)	0.07	World Bank. (2016). Doing Business 2016: Measuring Regulating Quality and Efficiency. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/~media/GIABW/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf">http://www.doingbusiness.org/~media/GIABW/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf</a>
		Availability of latest technologies	0.07	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .
		Venture capital availability	0.07	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> . For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a> .
		Total tax rate (% of commercial profit)	0.07	World Bank and PwC. (2016). Paying Taxes 2016: The Global Picture. Washington DC: The World Bank. Retrieved from: <a href="https://www.pwc.com/gx/en/paying-taxes-2016/paying-taxes-2016.pdf">https://www.pwc.com/gx/en/paying-taxes-2016/paying-taxes-2016.pdf</a>

Pillar	Sub-Pillar	Variable	Weight	Source
Enabling Environment (0.5)	Knowledge Economy (0.4)	Starting a business, time (days)	0.07	World Bank. (2016). Doing Business 2016: Measuring Regulating Quality and Efficiency. 13th edition. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf">http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf</a>
		Starting a business, procedures (number)	0.07	World Bank. (2016). Doing Business 2016: Measuring Regulating Quality and Efficiency. 13th edition. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf">http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf</a>
		Intensity of local competition	0.07	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
	Research and Innovation (0.16)	Global Innovation Index	0.375	Cornell University, INSEAD, and WIPO. (2016). The Global Innovation Index 2016: Winning with Global Innovation. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and the World Intellectual Property Organization. Retrieved from <a href="http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf">www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf</a> For Sudan: Cornell University, INSEAD, and WIPO. (2015). The Global Innovation Index 2015: Effective Innovation Policies for Development. Fontainebleau, Ithaca, and Geneva: Cornell University, INSEAD, and WIPO. Retrieved from: <a href="https://www.globalinnovationindex.org/userfiles/file/reportpdf/GII-2015-v5.pdf">https://www.globalinnovationindex.org/userfiles/file/reportpdf/GII-2015-v5.pdf</a> For Syria: Cornell University, INSEAD, and WIPO. (2013). The Global Innovation Index 2013: The Local Dynamics of Innovation. Geneva, Ithaca, and Fontainebleau: Cornell University, INSEAD, and WIPO. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf">www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf</a>
		PCT patents, applications / million population	0.3125	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011-2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		ICT PCT patents, applications / million population	0.3125	World Economic Forum, INSEAD and Cornell University (2016). The Global Information Technology Report: Innovating in the Digital Economy. Geneva, Switzerland: World Economic Forum and INSEAD. <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva, Switzerland: World Economic Forum and INSEAD. <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum & INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>

Pillar	Sub-Pillar	Variable	Weight	Source
Enabling Environment (0.5)	Knowledge for Development (0.18)	Impact of ICT on business models	2/15	World Economic Forum, INSEAD and Cornell University (2016). The Global Information Technology Report: Innovating in the Digital Economy. Geneva, Switzerland: World Economic Forum and INSEAD. <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva, Switzerland: World Economic Forum and INSEAD. <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum & INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		Impact of ICTs on organizational models	2/15	World Economic Forum, INSEAD and Cornell University (2016). The Global Information Technology Report: Innovating in the Digital Economy. Geneva, Switzerland: World Economic Forum and INSEAD. <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva, Switzerland: World Economic Forum and INSEAD. <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum & INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		Knowledge-intensive jobs, percentage workforce	2/15	World Economic Forum, INSEAD, and Cornell University. (2016). The Global Information Technology Report: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Bahrain, Jordan, Kuwait, Oman, and Yemen: World Economic Forum, INSEAD, and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_Global_IT_Report_2015.pdf">www3.weforum.org/docs/WEF_Global_IT_Report_2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		Impact of ICTs on access to basic services	2/15	World Economic Forum, INSEAD, and Cornell University (2016). The Global Information Technology Report: Innovating in the Digital Economy. Geneva, Switzerland: World Economic Forum and INSEAD. <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD, and Cornell University (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva, Switzerland: World Economic Forum and INSEAD. <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		ICT use and government efficiency	2/15	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report: Innovating in the Digital Economy. Geneva, Switzerland: World Economic Forum and INSEAD. <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva, Switzerland: World Economic Forum and INSEAD. <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		E-Participation Index	2/15	United Nations Department of Economic and Social Affairs (UNDESA). (2016). Division for Public Administration and Development Management. United Nations Public Administration Country Studies (UNPACS) Data Center. Retrieved September 1, 2016, from: <a href="https://publicadministration.un.org/egovkb/en-us/Data-Center">https://publicadministration.un.org/egovkb/en-us/Data-Center</a>
		Healthy life expectancy at birth	0.2	World Health Organization (WHO). (2016). Global Health Observatory Data Repository. Retrieved September 1, 2016, from: <a href="http://apps.who.int/gho/data/view.main.HALEXv">http://apps.who.int/gho/data/view.main.HALEXv</a>

Table A5:

## Economy Index: Variables and Weights

Pillar	Sub-Pillar	Variable	Weight	Source
Organizational Performance and Human Resources (0.5)	Economic Openness (0.25)	Trade (% of GDP)	0.25	World Bank. (2016). World Development Indicators. Retrieved October 9, 2016, from: <a href="http://data.worldbank.org/indicator/NE.TRD.GNFS.ZS">http://data.worldbank.org/indicator/NE.TRD.GNFS.ZS</a>
		Gross fixed capital formation (% of GDP)	0.25	World Bank. (2016). World Development Indicators. Retrieved October 9, 2016, from: <a href="http://data.worldbank.org/indicator/NE.GDLFTOT.ZS">http://data.worldbank.org/indicator/NE.GDLFTOT.ZS</a>
		Prevalence of non-tariff barriers	0.25	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		High-technology exports (% of manufactured exports)	0.25	World Bank. (2016). Trade Indicators. Retrieved October 9, 2016, from: <a href="http://data.worldbank.org/indicator/TX.VAL.TECH.MF.ZS?view=chart">http://data.worldbank.org/indicator/TX.VAL.TECH.MF.ZS?view=chart</a>
	Institutional Organization (0.25)	Soundness of banks	0.2	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		Regulatory quality	0.2	World Bank. (2016). World Governance Indicators. Retrieved October 9, 2016, from: <a href="http://info.worldbank.org/governance/wgi/index.aspx#reports">http://info.worldbank.org/governance/wgi/index.aspx#reports</a>
		Rule of law	0.2	World Bank. (2016). World Governance Indicators. Retrieved October 9, 2016, from: <a href="http://info.worldbank.org/governance/wgi/index.aspx#reports">http://info.worldbank.org/governance/wgi/index.aspx#reports</a> .
		Corruption Perceptions Index	0.2	Transparency International. (2016). Corruption Perceptions Index 2015. Retrieved September 2, 2016, from: <a href="http://www.transparency.org/cpi2015#results-table">http://www.transparency.org/cpi2015#results-table</a>
	Political stability and absence of violence/terrorism	0.2	World Bank. (2016). World Governance Indicators. Retrieved October 9, 2016, from: <a href="http://info.worldbank.org/governance/wgi/index.aspx#reports">http://info.worldbank.org/governance/wgi/index.aspx#reports</a>	
	Institutional Empowerment (0.25)	Government effectiveness	0.2	World Bank. (2016). World Governance Indicators. Retrieved October 9, 2016, from: <a href="http://info.worldbank.org/governance/wgi/index.aspx#reports">http://info.worldbank.org/governance/wgi/index.aspx#reports</a> .
		Laws relating to ICTs	0.2	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		World Press Freedom Index	0.2	Reporters without Borders. (2016). World Press Freedom Index 2016. Retrieved September 4, 2016, from: <a href="https://rsf.org/sites/default/files/details-2016-world-press-freedom-index_2.csv">https://rsf.org/sites/default/files/details-2016-world-press-freedom-index_2.csv</a>
		Domestic credit to private sector (% of GDP)	0.2	World Bank. (2016). World Development Indicators. Retrieved October 9, 2016, from: <a href="http://data.worldbank.org/indicator/FS.AST.PRVT.GD.ZS">http://data.worldbank.org/indicator/FS.AST.PRVT.GD.ZS</a>
		Bank deposits to GDP (%)	0.2	World Bank. (2016). Global Financial Development. Retrieved October 9, 2016, from: <a href="http://data.worldbank.org/data-catalog/global-financial-development">http://data.worldbank.org/data-catalog/global-financial-development</a> .

Pillar	Sub-Pillar	Variable	Weight	Source
Organizational Performance and Human Resources (0.5)	Human Resources (0.25)	Total R&D personnel (HC) - Total	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 4, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=61">http://data.uis.unesco.org/index.aspx?queryid=61</a>
		Percentage of graduates from tertiary education graduating from science, engineering, construction, and manufacturing, both sexes (%)	1/6	Index Team Calculations based on data from: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 30, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=163">http://data.uis.unesco.org/index.aspx?queryid=163</a> .
		Extent of staff training	1/6	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> .  For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a>  For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		Gross enrolment ratio, tertiary, both sexes (%)	1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 2, 2016, from: <a href="http://data.uis.unesco.org/Index.aspx?queryid=142">http://data.uis.unesco.org/Index.aspx?queryid=142</a>
		GDP per capita (current US\$)	1/6	World Bank. (2016). World Development Indicators. Retrieved October 9, 2016, from: <a href="http://data.worldbank.org/indicator/NY.GDP.PCAP.CD">http://data.worldbank.org/indicator/NY.GDP.PCAP.CD</a>
		Percentage of individuals using the internet	1/6	International Telecommunication Union (ITU) (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 4, 2016.
		Competitiveness and Creative Development (0.3)	Competitiveness of the Economic Structure (0.5)	Starting a business, procedures (number)
Starting a business, time (days)	1/6			World Bank. (2016). Doing Business 2016: Measuring Regulating Quality and Efficiency. 13th edition. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/~media/GIABW/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf">http://www.doingbusiness.org/~media/GIABW/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf</a> .
Enforcing contracts, procedures (number)	1/6			World Bank. (2015). Doing Business 2015: Going Beyond Efficiency. 12th edition. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/~media/GIABW/Doing%20Business/Documents/Annual-Reports/English/DB15-Full-Report.pdf">www.doingbusiness.org/~media/GIABW/Doing%20Business/Documents/Annual-Reports/English/DB15-Full-Report.pdf</a> .
Enforcing contracts, time (days)	1/6			World Bank. (2016). Doing Business 2016: Measuring Regulating Quality and Efficiency. 13th edition. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/~media/GIABW/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf">http://www.doingbusiness.org/~media/GIABW/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf</a> .
Foreign direct investment, net inflows (BoP, in current million US\$)	1/6			Index Team Calculations based on data from: World Bank. (2016). World Development Indicators. Retrieved October 9, 2016, from: <a href="http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD">http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD</a> .
Total tax rate (% of commercial profits)	1/6			World Bank and PwC. (2016). Paying Taxes 2016: The Global Picture. Washington DC: The World Bank. Retrieved from <a href="https://www.pwc.com/gx/en/paying-taxes-2016/paying-taxes-2016.pdf">https://www.pwc.com/gx/en/paying-taxes-2016/paying-taxes-2016.pdf</a>
Development of the Economic Structure (0.5)	GERD as a percentage of GDP		1/6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 4, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=74">http://data.uis.unesco.org/index.aspx?queryid=74</a> .
	Manufacturing, value added (% of GDP)		1/6	World Bank. (2016). World Development Indicators. Retrieved October 9, 2016, from: <a href="http://data.worldbank.org/indicator/NV.IND.MANF.ZS">http://data.worldbank.org/indicator/NV.IND.MANF.ZS</a> .
	E-Government Index		1/6	United Nations Department of Economic and Social Affairs (UNDESA). (2016). Division for Public Administration and Development Management. United Nations Public Administration Country Studies (UNPACS) Data Centre. Retrieved September 4, 2016, from: <a href="https://publicadministration.un.org/egovkb/en-us/Data-Center">https://publicadministration.un.org/egovkb/en-us/Data-Center</a> .

Pillar	Sub-Pillar	Variable	Weight	Source
Competitiveness and Creative Development (0.3)	Development of the Economic Structure (0.5)	Venture capital availability	1/6	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		Intensity of local competition	1/6	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
		Science and engineering articles in all fields combined	1/6	National Science Foundation. (2016). Science & Engineering Indicators 2016. Retrieved September 5, 2016, from: <a href="https://www.nsf.gov/statistics/2016/nsb20161/#/downloads/report">https://www.nsf.gov/statistics/2016/nsb20161/#/downloads/report</a> .
Economy-Related ICTs (0.2)	Technological Knowledge Exchange (0.5)	High-technology exports (current US\$)	1/3	World Bank. (2016). World Development Indicators. Retrieved October 9, 2016, from: <a href="http://data.worldbank.org/indicator/TX.VAL.TECH.CD">http://data.worldbank.org/indicator/TX.VAL.TECH.CD</a>
		Share of imported ICT goods as percentage of total goods imported.	1/3	United Nations Conference on Trade and Development (UNCTAD). (2016). ICT goods imports (% total goods imports). Retrieved September 4, 2016, from: <a href="http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx">http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx</a>
		Investment in telecoms with private participation (in current million US\$)	1/3	Index Team Calculations based on data from: World Bank. (2016). Private Participation in Infrastructure Database. Retrieved October 9, 2016, from: <a href="http://data.worldbank.org/indicator/IE.PPI.TELE.CD">http://data.worldbank.org/indicator/IE.PPI.TELE.CD</a>
	Enabling Environment (0.5)	Mobile-cellular telephone subscriptions per 100 inhabitants	1/6	International Telecommunication Union (ITU) (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 4, 2016.
		Mobile-cellular prepaid price of a one-minute local call (off-peak, on-net), in USD	1/6	International Telecommunication Union (ITU) (2016). World Telecommunication/ICT Indicators Database online. Retrieved September 4, 2016.
		Impact of ICTs on access to basic services	1/6	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>



Pillar	Sub-Pillar	Variable	Weight	Source
<b>Economy-Related ICTs (0.2)</b>	<b>Enabling Environment (0.5)</b>	<b>ICT use and government efficiency</b>	1/6	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a>  For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a>  For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
		<b>Government Online Services Index</b>	1/6	United Nations Department of Economic and Social Affairs (UNDESA). (2016). Division for Public Administration and Development Management. United Nations Public Administration Country Studies (UNPACS) Data Center. Retrieved September 4, 2016, from: <a href="https://publicadministration.un.org/egovkb/en-us/Data-Center">https://publicadministration.un.org/egovkb/en-us/Data-Center</a>
		<b>Government success in ICT promotion</b>	1/6	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a>  For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a>  For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>

Table A6:

## Research, Development and Innovation Index: Variables and Weights

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source	
Research and Development (0.4)	R&D Inputs (0.5)	Expenditure (0.35)		GERD as a percentage of GDP	0.3	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 4, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=74">http://data.uis.unesco.org/index.aspx?queryid=74</a>	
				GERD per researcher HC (in '000 PPP\$, constant prices - 2005)	0.3	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 4, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=74">http://data.uis.unesco.org/index.aspx?queryid=74</a>	
				GERD -performed by government as a percentage of GDP	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=81">http://data.uis.unesco.org/index.aspx?queryid=81</a>	
				GERD -basic research (%)	1/15	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=79">http://data.uis.unesco.org/index.aspx?queryid=79</a>	
				GERD -applied research (%)	1/15	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=79">http://data.uis.unesco.org/index.aspx?queryid=79</a>	
				GERD -experimental development (%)	1/15	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=79">http://data.uis.unesco.org/index.aspx?queryid=79</a>	
			Human Resources (0.45)		Researchers per million inhabitants (HC)	0.6	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=64">http://data.uis.unesco.org/index.aspx?queryid=64</a>
				Technicians per million inhabitants (HC)	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=70">http://data.uis.unesco.org/index.aspx?queryid=70</a>	
				Educational attainment: at least master's or equivalent (ISCED 7 or higher), population 25+ years, both sexes (%)	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=168">http://data.uis.unesco.org/index.aspx?queryid=168</a>	
			Funding (0.2)		GERD - financed by Business enterprise (%)	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=76">http://data.uis.unesco.org/index.aspx?queryid=76</a>
				GERD - financed by Government (%)	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=76">http://data.uis.unesco.org/index.aspx?queryid=76</a>	
				GERD - financed by Higher education (%)	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=76">http://data.uis.unesco.org/index.aspx?queryid=76</a>	
				GERD - financed by Private non-profit (%)	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=76">http://data.uis.unesco.org/index.aspx?queryid=76</a>	
				GERD - financed by Not specified source (%)	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=76">http://data.uis.unesco.org/index.aspx?queryid=76</a>	
			R&D Outputs (0.5)	Scientific Publishing (0.35)		Average documents per researcher	0.7
		Citations per document			0.3	SC imago Journal & Country Rank. (2016). SC imago Journal & Country Rank. Retrieved October 6, 2016, from: <a href="http://www.scimagojr.com/countryrank.php?year=2015&amp;region=Middle%20East">www.scimagojr.com/countryrank.php?year=2015&amp;region=Middle%20East</a>	

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source	
Research and Development (0.4)	R&D Outputs (0.5)	Institutional Framework of Scientific Research (0.2)		Quality of scientific research institutions	0.6	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> . For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>	
				University-industry collaboration in R&D	0.4	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>	
		Patents (0.35)		PCT patents, applications/million population	0.2	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>	
				Average number of patents granted annually (2013 - 2015)	0.6	Index Team Calculations based on data from: U.S. Patent and Trademark Office: Patent Technology Monitoring Team (PTMT). (2016). Patent Counts by Country, State, and Year - Utility Patents (December 2015). Alexandria, VA: U.S. Patent and Trademark Office. Retrieved August 24, 2016, from: <a href="http://www.uspto.gov/web/offices/ac/ido/oeip/taf/cst_utl.htm">www.uspto.gov/web/offices/ac/ido/oeip/taf/cst_utl.htm</a>	
				Ratio of the country's annual average of patents to the total Arab regional annual average of patents (2013 - 2015)	0.2	Index Team Calculations based on data from: U.S. Patent and Trademark Office: Patent Technology Monitoring Team (PTMT). (2016). Patent Counts by Country, State, and Year - Utility Patents (December 2015). Alexandria, VA: U.S. Patent and Trademark Office. Retrieved August 24, 2016, from: <a href="http://www.uspto.gov/web/offices/ac/ido/oeip/taf/cst_utl.htm">www.uspto.gov/web/offices/ac/ido/oeip/taf/cst_utl.htm</a>	
			Balance of Payments for ICT Products (0.10)		Share of imported ICT goods as percentage of total goods imported	1	United Nations Conference on Trade and Development (UNCTAD). (2016). ICT goods imports (% total goods imports). Retrieved September 4, 2016, from: <a href="http://unctadstat.unctad.org/wds/TableView/tableView.aspx">http://unctadstat.unctad.org/wds/TableView/tableView.aspx</a>
		Innovation (0.3)	Social Innovation (1)	Inputs (0.4)	Markets, Services, and Competition (0.4)	Domestic credit to private sector (% of GDP)	0.25
	DTF score for getting credit (0–100)					0.1	World Bank. (2016). Doing Business 2016: Measuring Regulating Quality and Efficiency. 13th edition. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf">http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf</a>

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
Innovation (0.3)	Social Innovation (1)	Inputs (0.4)	Markets, Services, and Competition (0.4)	DTF score for protecting minority investors (0–100)	0.2	World Bank. (2016). Doing Business 2016: Measuring Regulating Quality and Efficiency. 13th edition. Washington: International Bank for Reconstruction and Development / The World Bank. Retrieved from: <a href="http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf">http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf</a>
				Stocks traded, total value (% of GDP)	0.15	World Bank. (2016). World Development Indicators. Retrieved October 10, 2016, from: <a href="http://data.worldbank.org/indicator/CM.MKT.TRAD.GD.ZS">http://data.worldbank.org/indicator/CM.MKT.TRAD.GD.ZS</a>
				Tariff rate, applied, weighted mean, all products (%)	0.1	World Bank. (2016). World Development Indicators. Retrieved October 10, 2016, from: <a href="http://data.worldbank.org/indicator/TM.TAX.MRCH.WM.AR.ZS">http://data.worldbank.org/indicator/TM.TAX.MRCH.WM.AR.ZS</a>
				Trade (% of GDP)	0.1	World Bank. (2016). World Development Indicators. Retrieved October 10, 2016, from: <a href="http://data.worldbank.org/indicator/IE.PPI.TELE.CD">http://data.worldbank.org/indicator/IE.PPI.TELE.CD</a>
				Intensity of local competition	0.1	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>
			Business Environment (0.4)	Knowledge-intensive jobs, percentage workforce	0.4	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Bahrain, Jordan, Kuwait, Oman, and Yemen: World Economic Forum, INSEAD, & Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_Global_IT_Report_2015.pdf">http://www3.weforum.org/docs/WEF_Global_IT_Report_2015.pdf</a> For Syria: World Economic Forum & INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">http://www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
				GERD - financed by abroad (%)	0.15	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=76">http://data.uis.unesco.org/index.aspx?queryid=76</a>
				State of cluster development	0.15	Cornell University, INSEAD, and WIPO. (2016). The Global Innovation Index 2016: Winning with Global Innovation. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and the World Intellectual Property Organization. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf">www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf</a>
				High-tech net imports (% of total trade)	0.1	Cornell University, INSEAD, and WIPO. (2016). The Global Innovation Index 2016: Winning with Global Innovation. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and the World Intellectual Property Organization. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf">www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf</a>

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
Innovation (0.3)	Social Innovation (1)	Inputs (0.4)	Business Environment (0.4)	ICT services imports (% of total trade)	0.1	Cornell University, INSEAD, and WIPO. (2016). The Global Innovation Index 2016: Winning with Global Innovation. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and the World Intellectual Property Organization. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf">www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf</a> For Sudan: Cornell University, INSEAD, and WIPO. (2015). The Global Innovation Index 2015: Effective Innovation Policies for Development. Fontainebleau, Ithaca, and Geneva: Cornell University, INSEAD, and WIPO. Retrieved from: <a href="https://www.globalinnovationindex.org/userfiles/file/reportpdf/GII-2015-v5.pdf">https://www.globalinnovationindex.org/userfiles/file/reportpdf/GII-2015-v5.pdf</a> For Syria: Cornell University, INSEAD, and WIPO. (2013). The Global Innovation Index 2013: The Local Dynamics of Innovation. Geneva, Ithaca, and Fontainebleau: Cornell University, INSEAD, and WIPO. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf">www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf</a>
				Foreign direct investment, net inflows (% of GDP)	0.1	World Bank. (2016). World Development Indicators. Retrieved October 10, 2016, from: <a href="http://data.worldbank.org/indicator/BX.KLT.DINV.WD.GD.ZS">http://data.worldbank.org/indicator/BX.KLT.DINV.WD.GD.ZS</a>
			Other Creative Inputs (0.2)	GERD performed by business enterprise as a percentage of GDP	0.3	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=81">http://data.uis.unesco.org/index.aspx?queryid=81</a>
				Cultural and creative services exports (% of total trade)	0.4	Cornell University, INSEAD, and WIPO. (2016). The Global Innovation Index 2016: Winning with Global Innovation. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and the World Intellectual Property Organization. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf">www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf</a>
				Total computer software spending (% of GDP)	0.3	Cornell University, INSEAD, and WIPO. (2016). The Global Innovation Index 2016: Winning with Global Innovation. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and the World Intellectual Property Organization. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf">www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf</a>
			Outputs (0.6)	Social Impact of Innovation (0.2)	GDP per capita growth (annual %)	0.265
		New business density [number of newly registered corporations per 1,000 working-age people (15–64 age group)]			0.245	World Bank Group. (2016). Doing Business: Measuring Business Regulations. Retrieved October 6, 2016, from: <a href="http://www.doingbusiness.org/data/exploretopics/entrepreneurship">www.doingbusiness.org/data/exploretopics/entrepreneurship</a>
		Medium and high-tech MVA share in total manufacturing (percent)			0.245	United Nations Industrial Development Organization (UNIDO). (2015). Industrial Development Report 2016: The Role of Technology and Innovation in Inclusive and Sustainable Industrial Development. Vienna: UNIDO. Retrieved from: <a href="https://www.unido.org/fileadmin/user_media_upgrade/Resourses/Publications/EBOOK_IDR2016_FULLREPORT.pdf">https://www.unido.org/fileadmin/user_media_upgrade/Resourses/Publications/EBOOK_IDR2016_FULLREPORT.pdf</a>
		ISO 9001 quality management systems—requirements: number of certificates issued (per billion PPPS GDP)			0.245	Cornell University, INSEAD, and WIPO. (2016). The Global Innovation Index 2016: Winning with Global Innovation. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and the World Intellectual Property Organization. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf">www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf</a> For Sudan: Cornell University, INSEAD, and WIPO. (2015). The Global Innovation Index 2015: Effective Innovation Policies for Development. Fontainebleau, Ithaca, and Geneva: Cornell University, INSEAD, and WIPO. Retrieved from: <a href="https://www.globalinnovationindex.org/userfiles/file/reportpdf/GII-2015-v5.pdf">https://www.globalinnovationindex.org/userfiles/file/reportpdf/GII-2015-v5.pdf</a> For Syria: Cornell University, INSEAD, and WIPO. (2013). The Global Innovation Index 2013: The Local Dynamics of Innovation. Geneva, Ithaca, and Fontainebleau: Cornell University, INSEAD, and WIPO. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf">www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf</a>

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
Innovation (0.3)	Social Innovation (1)	Outputs (0.6)	Knowledge Penetration (0.2)	High-technology exports (% of manufactured exports)	0.35	World Bank. (2016). World Development Indicators. Retrieved October 7, 2016, from: <a href="http://data.worldbank.org/indicator/TX.VAL.TECH.MF.ZS?view=chart">http://data.worldbank.org/indicator/TX.VAL.TECH.MF.ZS?view=chart</a>
				Foreign direct investment, net outflows (% of GDP)	0.325	World Bank. (2016). World Development Indicators. Retrieved October 6, 2016, from: <a href="http://data.worldbank.org/indicator/BM.KLT.DINV.WD.GD.ZS">http://data.worldbank.org/indicator/BM.KLT.DINV.WD.GD.ZS</a>
				ICT services exports (% total trade)	0.325	Cornell University, INSEAD, and WIPO. (2016). The Global Innovation Index 2016: Winning with Global Innovation. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and the World Intellectual Property Organization. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf">www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf</a> For Sudan: Cornell University, INSEAD, and WIPO. (2015). The Global Innovation Index 2015: Effective Innovation Policies for Development. Fontainebleau, Ithaca, and Geneva: Cornell University, INSEAD, and WIPO. Retrieved from: <a href="https://www.globalinnovationindex.org/userfiles/file/reportpdf/GII-2015-v5.pdf">https://www.globalinnovationindex.org/userfiles/file/reportpdf/GII-2015-v5.pdf</a> For Syria: Cornell University, INSEAD, and WIPO. (2013). The Global Innovation Index 2013: The Local Dynamics of Innovation. Geneva, Ithaca, and Fontainebleau: Cornell University, INSEAD, and WIPO. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf">www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf</a>
			Intangible Assets (0.15)	Difference between resident and total trademark application class count per 100 billion USD GDP (2011 PPPs)	0.36	Index Team Calculations based on data from: World Intellectual Property Organization. (2015). WIPO IP Statistics Data Center. Retrieved October 5, 2016, from: <a href="http://ipstats.wipo.int/ipstatv2/IpsStatsResultvalue">http://ipstats.wipo.int/ipstatv2/IpsStatsResultvalue</a>
				Impact of ICTs on business models	0.32	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>
				Impact of ICTs on organizational models	0.32	World Economic Forum, INSEAD and Cornell University. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen: World Economic Forum, INSEAD and Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GITR2015.pdf">www3.weforum.org/docs/WEF_GITR2015.pdf</a> For Syria: World Economic Forum and INSEAD. (2012). The Global Information Technology Report 2012: Living in a Hyperconnected World. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/Global_IT_Report_2012.pdf">www3.weforum.org/docs/Global_IT_Report_2012.pdf</a>

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source	
Innovation (0.3)	Social Innovation (1)	Outputs (0.6)	Creative Products and Services (0.15)	Number of national feature films produced (per million population 15–69 years old)	1/3	Cornell University, INSEAD, and WIPO. (2016). The Global Innovation Index 2016: Winning with Global Innovation. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and the World Intellectual Property Organization. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf">www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf</a> For Syria: Cornell University, INSEAD, and WIPO. (2013). The Global Innovation Index 2013: The Local Dynamics of Innovation. Geneva, Ithaca, and Fontainebleau: Cornell University, INSEAD, and WIPO. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf">www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf</a>	
				Printing and publishing manufactures output (% of manufactures total output)	1/3	Cornell University, INSEAD, and WIPO. (2016). The Global Innovation Index 2016: Winning with Global Innovation. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and the World Intellectual Property Organization. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf">www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf</a>	
				Creative goods exports (% of total trade)	1/3	Cornell University, INSEAD, and WIPO. (2016). The Global Innovation Index 2016: Winning with Global Innovation. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and the World Intellectual Property Organization. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf">www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf</a> For Sudan: : Cornell University, INSEAD, and WIPO. (2015). The Global Innovation Index 2015: Effective Innovation Policies for Development. Fontainebleau, Ithaca, and Geneva: Cornell University, INSEAD, and WIPO. Retrieved from: <a href="https://www.globalinnovationindex.org/userfiles/file/reportpdf/GII-2015-v5.pdf">https://www.globalinnovationindex.org/userfiles/file/reportpdf/GII-2015-v5.pdf</a> For Syria: Cornell University, INSEAD, and WIPO. (2013). The Global Innovation Index 2013: The Local Dynamics of Innovation. Geneva, Ithaca, and Fontainebleau: Cornell University, INSEAD, and WIPO. Retrieved from: <a href="http://www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf">www.wipo.int/edocs/pubdocs/en/economics/gii/gii_2013.pdf</a>	
			Intellectual Copyrights (0.3)	Intellectual property protection	1	World Economic Forum. (2016). The Global Competitiveness Report 2016 – 2017. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf">http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf</a> For Libya: World Economic Forum. (2014). The Global Competitiveness Report 2014 – 2015. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf">http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf</a> For Syria: World Economic Forum. (2011). The Global Competitiveness Report 2011 – 2012. Geneva: World Economic Forum. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf">http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf</a>	
Enabling Environment and Infrastructure (0.3)	Political and Legal Environment (0.14)			Political stability and absence of violence/terrorism	0.25	World Bank. (2016). World Governance Indicators. Retrieved October 10, 2016, from: <a href="http://info.worldbank.org/governance/wgi/#home">http://info.worldbank.org/governance/wgi/#home</a>	
				Government effectiveness	0.4	World Bank. (2016). World Governance Indicators. Retrieved October 10, 2016, from: <a href="http://info.worldbank.org/governance/wgi/#home">http://info.worldbank.org/governance/wgi/#home</a>	
				Regulatory quality	0.2	World Bank. (2016). World Governance Indicators. Retrieved October 10, 2016, from: <a href="http://info.worldbank.org/governance/wgi/#home">http://info.worldbank.org/governance/wgi/#home</a>	
				Rule of law	0.15	World Bank. (2016). World Governance Indicators. Retrieved October 10, 2016, from: <a href="http://info.worldbank.org/governance/wgi/#home">http://info.worldbank.org/governance/wgi/#home</a>	
	Economic and Social Environment (0.22)	Macroeconomic Performance (0.6)			Budget surplus or deficit (% OF GDP)	0.15	Central Intelligence Agency (CIA). (2016). The World Factbook. Retrieved October 10, 2016, from: <a href="https://www.cia.gov/library/publications/the-world-factbook/fields/2222.html">https://www.cia.gov/library/publications/the-world-factbook/fields/2222.html</a>
					Gross national savings (% of GDP)	0.25	International Monetary Fund (IMF). (2016). World Economic Forum Database, October 2016. Retrieved October 5, 2016, from: <a href="http://www.imf.org">http://www.imf.org</a>
					General government debt, total (% of GDP)	0.15	International Monetary Fund (IMF). (2016). World Economic Forum Database, October 2016. Retrieved October 5, 2016, from: <a href="http://www.imf.org">http://www.imf.org</a>
					GDP per capita (current US\$)	0.25	World Bank. (2016). World Development Indicators. Retrieved October 6, 2016, from: <a href="http://data.worldbank.org/indicator/NY.GDP.PCAP.CD">http://data.worldbank.org/indicator/NY.GDP.PCAP.CD</a>
					General government structural balance (percent of GDP)	0.2	International Monetary Fund (IMF). (2016). World Economic Forum Database, October 2016. Retrieved October 5, 2016, from: <a href="http://www.imf.org">http://www.imf.org</a>

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
Enabling Environment and Infrastructure (0.3)	Economic and Social Environment (0.22)	Population and Public Health (0.4)		Infant mortality rate (probability of dying between birth and age 1 per 1000 live births)	0.3	World Health Organization (WHO). (2016). Global Health Observatory Data Repository. Retrieved October 7, 2016, from: <a href="http://apps.who.int/gho/data/view.main.182">http://apps.who.int/gho/data/view.main.182</a>
				Life expectancy at birth, both sexes (years)	0.28	WHO. (2016). Global Health Observatory Data Repository. Retrieved October 5, 2016, from: <a href="http://apps.who.int/gho/data/node.main.688">http://apps.who.int/gho/data/node.main.688</a>
				Total health expenditure (% of GDP)	0.14	World Health Organization. (2016). Global Health Expenditure Database: National Health Indicators. Retrieved September 14, 2016, from: <a href="http://apps.who.int/nha/database/ViewData/Indicators/en">http://apps.who.int/nha/database/ViewData/Indicators/en</a>
				Adult illiteracy rate, population 15+ years, both sexes (%)	0.28	Team Index Calculation based on data from: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=166">http://data.uis.unesco.org/index.aspx?queryid=166</a>
	Human Resources (0.32)	Pre-University Education (0.35)		Gross expenditure on pre-primary, primary and secondary education (% of GDP)	0.24	Index Team Calculations based on data from: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 7, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=181">http://data.uis.unesco.org/index.aspx?queryid=181</a>
				Government expenditure per secondary student as % of GDP per capita (%)	0.26	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=189">http://data.uis.unesco.org/index.aspx?queryid=189</a>
				Pupil-teacher ratio in secondary education (headcount basis)	0.2	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=180">http://data.uis.unesco.org/index.aspx?queryid=180</a>
				Gross enrolment ratio, secondary, both sexes (%)	0.1	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 5, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=142">http://data.uis.unesco.org/index.aspx?queryid=142</a>
				Mean score of 15-year-old students in reading literacy	1/35	Organisation for Economic Co-operation and Development (OECD). (2014). PISA 2012 Results in Focus: What 15-year-olds know and what they can do with what they know. Retrieved from: <a href="http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf">www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf</a>
				4th Grade achievement in mathematics	1/35	Mullis, I.V.S., Martin, M.O., Foy, P., and Arora, A. (2012). TIMSS 2011 International Results in Mathematics. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College; Amsterdam: International Association for the Evaluation of Educational Achievement (IEA) Secretariat. Retrieved from: <a href="http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf">http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf</a>
				8th Grade achievement in mathematics	1/35	Mullis, I.V.S., Martin, M.O., Foy, P., and Arora, A. (2012). TIMSS 2011 International Results in Mathematics. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College; Amsterdam: International Association for the Evaluation of Educational Achievement (IEA) Secretariat. Retrieved from: <a href="http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf">http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Mathematics_FullBook.pdf</a>
				Mean score of 15-year-old students in mathematics literacy	1/35	Organisation for Economic Co-operation and Development (OECD). (2014). PISA 2012 Results in Focus: What 15-year-olds know and what they can do with what they know. Retrieved from: <a href="http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf">www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf</a>
				4th Grade achievement in science	1/35	Mullis, I.V.S., Martin, M.O., Foy, P., & Arora, A. (2012). TIMSS 2011 International Results in Science. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College. Retrieved from: <a href="http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Science_FullBook.pdf">http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Science_FullBook.pdf</a>
				8th Grade achievement in science	1/35	Mullis, I.V.S., Martin, M.O., Foy, P., & Arora, A. (2012). TIMSS 2011 International Results in Science. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College. Retrieved from: <a href="http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Science_FullBook.pdf">http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_Science_FullBook.pdf</a>
	Mean score of 15-year-old students in science literacy	1/35	Organisation for Economic Co-operation and Development (OECD). (2014). PISA 2012 Results in Focus: What 15-year-olds know and what they can do with what they know. Retrieved from: <a href="http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf">www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf</a>			



Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
Enabling Environment and Infrastructure (0.3)	Human Resources (0.32)	Higher Education (0.45)	Enrolment (0.3)	Gross enrolment ratio, tertiary, both sexes (%)	1	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 2, 2016, from: <a href="http://data.uis.unesco.org/Index.aspx?queryid=142">http://data.uis.unesco.org/Index.aspx?queryid=142</a>
			Engineering and Science Graduates (0.3)	Percentage of graduates from tertiary education graduating from science, engineering, construction, and manufacturing, both sexes (%)	1	Index Team Calculations based on data from: UNESCO Institute for Statistics. (2016). Data Centre. Retrieved September 30, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=163">http://data.uis.unesco.org/index.aspx?queryid=163</a>
			Government Spending (0.4)	Expenditure on tertiary as % of government expenditure on education (%)	0.5	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=184">http://data.uis.unesco.org/index.aspx?queryid=184</a>
		Government expenditure on tertiary education as % of GDP (%)		0.5	UNESCO Institute for Statistics. (2016). Data Centre. Retrieved October 6, 2016, from: <a href="http://data.uis.unesco.org/index.aspx?queryid=181">http://data.uis.unesco.org/index.aspx?queryid=181</a>	
		Capacity Building and Lifelong Learning (0.2)	Percent of firms offering formal training	1	World Bank Group. (2016). Enterprise Surveys: What Businesses Experience. Retrieved October 5, 2016, from: <a href="http://www.enterprisesurveys.org/data/exploretopics/workforce">www.enterprisesurveys.org/data/exploretopics/workforce</a>	
	Infrastructure (0.32)	ICT Infrastructure (0.45)	IDI Access Sub-Index	0.333	International Telecommunication Union. (2015). Measuring the Information Society Report 2015. Geneva: International Telecommunication Union. Retrieved from: <a href="http://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2015/MISR2015-w5.pdf">www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2015/MISR2015-w5.pdf</a> For Palestine and Yemen: International Telecommunication Union. (2014). Measuring the Information Society Report 2014. Geneva: International Telecommunication Union. Retrieved from: <a href="https://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2014/MIS2014_without_Annex_4.pdf">https://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2014/MIS2014_without_Annex_4.pdf</a> For Comoros: International Telecommunication Union. (2013). Measuring the Information Society Report 2013. Geneva: International Telecommunication Union. Retrieved from: <a href="https://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2013/MIS2013_without_Annex_4.pdf">https://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2013/MIS2013_without_Annex_4.pdf</a>	
			IDI Use Sub-Index	0.333	International Telecommunication Union. (2015). Measuring the Information Society Report 2015. Geneva: International Telecommunication Union. Retrieved from: <a href="http://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2015/MISR2015-w5.pdf">http://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2015/MISR2015-w5.pdf</a> For Palestine and Yemen: International Telecommunication Union. (2014). Measuring the Information Society Report 2014. Geneva: International Telecommunication Union. Retrieved from: <a href="https://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2014/MIS2014_without_Annex_4.pdf">https://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2014/MIS2014_without_Annex_4.pdf</a> For Comoros: International Telecommunication Union. (2013). Measuring the Information Society Report 2013. Geneva: International Telecommunication Union. Retrieved from: <a href="https://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2013/MIS2013_without_Annex_4.pdf">https://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2013/MIS2013_without_Annex_4.pdf</a>	
			E-Participation Index	0.334	United Nations Department of Economic and Social Affairs (UNDESA) (2016). Division for Public Administration and Development Management. United Nations Public Administration Country Studies (UNPACS) Data Center. Retrieved September 1, 2016, from <a href="https://publicadministration.un.org/egovkb/en-us/Data-Center">https://publicadministration.un.org/egovkb/en-us/Data-Center</a>	

Pillar	Sub-Pillar	Component	Sub-Component	Variable	Weight	Source
Enabling Environment and Infrastructure (0.3)	Infrastructure (0.32)	General Infrastructure (0.35)		Electricity production, kWh/capita	0.333	World Economic Forum, INSEAD, & Cornell University. (2016). The Global Information Technology Report: Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf">http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf</a> For Libya and Yemen:
				Gross capital formation (% of GDP)	0.333	World Economic Forum, INSEAD, & Cornell University. (2015). The Global Information Technology Report 2015: ICTs for Inclusive Growth. Insight Report. Geneva: World Economic Forum and INSEAD. Retrieved from: <a href="http://www3.weforum.org/docs/WEF_Global_IT_Report_2015.pdf">http://www3.weforum.org/docs/WEF_Global_IT_Report_2015.pdf</a> For Syria:
				International LPI score	0.334	World Bank. (2016). LPI Global Rankings 2016. Retrieved October 4, 2016, 2016, from: <a href="http://lpi.worldbank.org/international/global/2016">http://lpi.worldbank.org/international/global/2016</a> For Yemen: World Bank. (2014). LPI Global Rankings 2014. Retrieved October 4, 2016, 2016, from: <a href="http://lpi.worldbank.org/international/global/2014">http://lpi.worldbank.org/international/global/2014</a>
		Environmental Sustainability (0.2)		GDP per unit of energy use (constant 2011 PPP \$ per kg of oil equivalent)	0.5	World Bank. (2016). World Development Indicators. Retrieved October 5, 2016, from: <a href="http://data.worldbank.org/indicator/EG.GDP.PUSE.KO.PP.KD">http://data.worldbank.org/indicator/EG.GDP.PUSE.KO.PP.KD</a>
				Environmental Performance Index	0.5	Yale University and Columbia University. (2016). Global Metrics for the Environment. New Haven, CT: Yale University. Retrieved from: <a href="http://epi.yale.edu/sites/default/files/2016EPI_Full_Report_opt.pdf">http://epi.yale.edu/sites/default/files/2016EPI_Full_Report_opt.pdf</a>



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