



YOUTH ECONOMICS

WE COUNT

GLOBAL INDEX 2015

Putting the Young at the Top
of the Global Agenda

Version 10/2/15



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On the overlooked power of migrants and youth

By José Ramos-Horta and Felix Marquardt*

The refugee crisis in Europe is only the most dramatic illustration of a broader phenomenon of growing and accelerating migratory fluxes. In a world where the seventy-five richest people on earth own as much wealth as the poorest half of humanity, the fact an increasing number of people want a decent piece of the global pie should hardly come as a surprise. Indeed, dissatisfaction with economic and political conditions is at the root of most migratory movements throughout history.

What is new is that « a shift from states selecting migrants to migrants selecting states » is underway, as Peter Sutherland, the United Nations’s special representative for migration, put it in a recent lecture at the London School of Economics. Indeed, the French Office for the Protection of Refugees and Stateless people recently found itself unable to convince the thousand refugees from Iraq and Syria it aimed to offer asylum to to board the buses bound for France which it had sent to Munich. Language, rising xenophobia and high unemployment were cited as the main reasons for this lack of enthusiasm. In the long run, ageing countries that look at immigration as a problem rather than an opportunity are bound to become increasingly fragile.

In 2012, the Barrez-vous! (« Scram! ») movement argued that France had become an over-centralized gerontocracy and encouraged frustrated French youth to pack their bags and seek growth opportunities elsewhere, both for their own sake and as a wake-up call for France’s political class. In founding the think tank Youthonomics, we ventured to gauge how youth are faring on a much broader scale.

Using fifty-nine different criteria, including youth unemployment, quality and cost of education, the ability of young people to afford housing and save for the future, public deficit, access to technology, political and religious freedom, average age of elected leaders and many more, we created the Youthonomics Global Index, which ranks sixty-four countries according to whether they are creating the conditions that will allow youth to flourish and prosper. Our findings show an astonishing callousness towards younger generations, with many developed countries like France, Japan or Italy performing poorly, and others such as the United States or the United Kingdom showing dismal prospects for youth in the coming years.

In a 2009 study entitled “Generational Economics in a Changing World,” Ronald Lee and Andrew Mason argued that in many areas of the world, for the first time since humans were primarily hunters-gatherers (save in times of famine, epidemic or war), there is no longer a net transfer of wealth from parents to children. Worse still, younger generations are expected to finance the retirements of their elders without any foreseeable prospect of seeing their own retirements financed in turn. Adding insult to injury, in the wake of the subprime mortgage crisis, baby

boomers opted to take billions in debt accumulated by hedge funds, pension funds, banks and other private financial institutions and to convert it into public debt, thereby effectively passing its burden on to their grandchildren and great-grandchildren.

Because of the novelty of this situation, its long-term consequences have yet to be fully understood. Last century, the French-Lithuanian philosopher Emmanuel Levinas theorized on the importance of transmitting knowledge and values from one generation to the next. Indeed, he saw transmission as one of the key behavioral differences between man and animal.

But what of the importance of transmitting wealth? What might happen when, for the first time, a generation opts not to transmit anything to the next? What might happen when millennials understand just how badly their parents and grandparents jeopardized their future?

Much has been said about the risk of a clash of civilizations, of cultures, of religions ensuing in the 21st century. What if the greatest threat we faced was actually a clash of generations?

Politicians tend to treat young people offhandedly: youth don’t vote, they are (the new) poor—on average the subprime crisis made them poorer while it made many retirees richer—and, in most developed countries, they represent a shrinking portion of the population. These politicians seem to forget that unprecedented opportunities for international mobility means young people have unprecedented leverage to finally obtain the consideration they deserve. If they aren’t heard out, if their basic needs aren’t met, they will increasingly simply choose to pack their bags and go. We are already seeing children and grandchildren of immigrants in Europe and the U.S. return to their countries of origin to create businesses and seek greater opportunity.

Countries and governments that introduce policies which improve the prospects of their young and allow them to flourish should be commended on the global stage for doing so, thereby allowing young people elsewhere to call on their own governments to introduce best practices. A global youth work visa would greatly help rebalance things in favor of a generation that is still reeling in the aftermath of the financial crisis by leveling the global playing field and allowing young people throughout the world to make use of the most widely available means to vote to date: their feet.

**José Ramos-Horta is a former President of Timor Leste and a Nobel Peace Prize laureate. Felix Marquardt is a former head of communications of the International Herald Tribune, a columnist and an activist. They are the cofounders of the think tank Youthonomics.*

The Youthonomics Global Index aims to speak to:

Youth

- By providing youth worldwide with a frame of reference that allows them to put pressure on their governments to introduce policies that specifically favor their own and future generations.
- If such policies fail to be introduced, by providing guidance on how to apply the ultimate pressure young people can put on politicians — moving on elsewhere — in the form of a clear map of the world according to who treats young people most favorably.
- By helping young parents make crucial decisions regarding their own children's education (what foreign language they should learn, where they should go to college, get a summer job or their first internship).

Voters

- By allowing the identification of best practices around the world, and therefore providing youth, parents and the rest of society with a tool to gauge political platforms in their country according to whether the policies therein are favorable to young people.

Governments

- By alerting them to the gravity of the current situation and reassessing public policies in favor of youth.
- By commending or shaming them on the global stage and encouraging them to keep up the good work, get their act in gear, or else.
- By providing a scientific and substantiated international benchmarking to fight the stubborn habit of some national politicians who pretend that what happens in other countries has no relevance for and should have no bearing on their policymaking.

Institutions (IMF, World Bank, Rating Agencies)

- By giving them a tool to refine their assessment of country outlooks according to how well or how poorly the latter treat their youth.
- To promote data gathering and dissemination about youth, which is still hard to find. The Youthonomics Global Index points to specific issue-areas where such data is crucial and lacking.

Though they have yet to realize just how much power they yield, young people are the lifeblood of the economy of our nations, the basis of their innovative potential, the key to their competitiveness and entire future. They are our most crucial asset in a fast-moving world that requires constant adaptation. Mistreating the young isn't just unfair and downright immoral. It's dangerously shortsighted.

Youthonomics's broader role, as a think tank empowering youth, will be to:

- Campaign at the UN and throughout the world for the adoption of a Global Youth Visa, allowing young people under the age of 25 to work in member states for a period of two years.
- Release the Youthonomics Global Index on an annual basis.
- Gauge political platforms of candidates in elections worldwide according to how well or poorly they cater to the needs of young people and future generations (and following up to see whether they have delivered on their promises when elected).
- Develop an innovative, disrupting global job search app.

Overall, Youthonomics and the Youthonomics Global Index aim to place youth back at the center of the global political debate.

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The Youthonomics Global Index 2015 ranks 64 countries around the world, and uses 59 indicators across a range of issues that impact the conditions in which youth grow. It provides an unprecedented and immensely rich dataset analyzing the situation of youth worldwide. The first publication of the index has a simple motto: Putting the Young at the Top of the Global Agenda. The many difficulties faced by young people worldwide are well documented in the press, and increasingly in academic literature. The Youthonomics Global Index combines existing analyses and data available to provide a major building block for systematically thinking about the issues faced by youth.



The Youthonomics Global Index

has nine pillars. It reveals a divide within the developed world and within the developing world. In certain developed countries, the conditions of youth are systematically better on a number of issues. There are youth-friendly countries, and other which have not done enough for their youth. The same goes for developing countries: at similar income levels, some do significantly better than others.



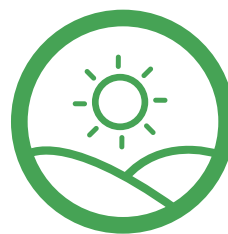
The Youth Now Sub-Index

has six sub- pillars: early education, university and skills, access to employment, work and living conditions, wellbeing and health. It allows the identification of each country's areas of strengths and weaknesses.



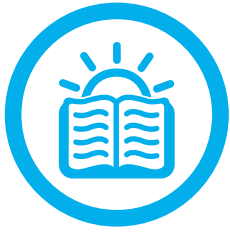
The Youth Outlook Sub-Index

has three sub- pillars: public finance, economic opportunities and political weight. These concern national youth issues whose effects are yet to be felt, and allows us to observe the direction in which a country's youth seem to be heading. A Youth Optimism Ratio is then calculated, which tells us which youth can expect an improvement in their life conditions.



We introduce Youthtopia,

an ideal country that has as its nine pillars the characteristics of each pillar leader. It represents a first step toward identifying international best practices in each issue area.



Early Education

Slovenia leads the way, followed by Australia, Switzerland, Japan, the Netherlands, Austria and New Zealand. While wealth explains in large part the results some countries, like Slovenia, clearly over perform while some underperform.



University and Skills

The first four countries are Switzerland, Austria, Finland and the Netherlands, followed by Belgium, Australia and Denmark. A notable feature of the top four is that they strongly support vocational training, equipping their youth with specific skills that will help them enter the labor market. The scores of countries such as Austria or Belgium suggest that having good and accessible universities does not imply an indebted youth.



Access to Employment

Switzerland, Germany, Norway and the Netherlands top the access to employment ranking. Beyond low levels of unemployment, the relative quality of their entrepreneurial environment and the low rate of exclusion push those countries to the top. The Access to Employment pillar is the least correlated with income and depends heavily on economic cycle. At the bottom of the ranking we find developed economies in crisis: Portugal, Italy, Greece and Spain, as well as Egypt, Indonesia and South Africa.



Work and Living Conditions

Unsurprisingly, the Work and Living Conditions pillar is the one that shows the highest correlation with income – Norway and Luxembourg easily top the ranking. But it is insufficient to have high wages youth need not to be discriminated against. Countries such as Norway, Switzerland,

the Netherlands, Belgium or Denmark score well on both absolute and relative financial conditions. Countries such as the United States, Austria, France, the United Kingdom or Japan have high wages but are more biased against youth.



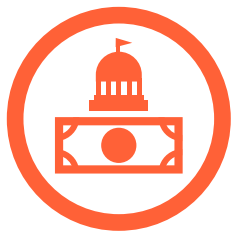
Wellbeing

The Netherlands, Spain, Denmark and Italy top the rankings, followed by Germany, Portugal and Switzerland. Norway and Denmark display the highest level of social wellbeing. Egypt, Bangladesh and Spain score highest in personal wellbeing. While most developed economies get the highest score in individual liberties, Russia, Rwanda, Vietnam and China score the lowest.



Health

Israel, Spain, Italy, Switzerland and Greece are the Health pillar's top five, while six countries of sub-Saharan Africa make up the bottom of the ranking.



Public Finance

Norway, Kazakhstan, Uganda and Nepal top the ranking and the top 10 is made of three types of countries: (1) Norway, Kazakhstan, Sweden and Estonia have accumulated large liabilities for pensioners and the eldest, but have low debt and deficit. (2) Uganda, Nepal, Côte d'Ivoire, and Rwanda have not yet built these safety nets and have demographics on their side. (3) Indonesia and the Philippines have a good score in both types of liabilities. Japan, the U.S., Korea, Belgium and Brazil are the bottom five countries. Broadly speaking, advanced countries have accumulated large explicit and implicit liabilities, which will weigh heavy on future government budgets and youth.



Economic Opportunities

The top three are China, Australia and Switzerland. China has high growth and investment, while the followers have great sustainability scores. There is an inverted relationship between growth and sustainability. Countries that rank well are fast-growing and quickly built up the capacity for sustainable growth — human capital, infrastructures, R&D, resource management — or countries that have sustainable growth prospects but nonetheless reach respectable growth rates. The bottom four countries are Russia, Mali, Pakistan and Argentina.



Political Weight

Five sub-Saharan African countries top the Political Weight pillar ranking: Ghana, Mali, Rwanda, Kenya, and Uganda. In those countries, youth represent a large share of the population. They do not face labor or budget discrimination, although they have poor access to policymaking. But a young population does not guarantee political weight: the bottom four countries are Thailand, Vietnam, China and Sri Lanka. Generally older populations do not imply bad rankings: Denmark, Norway, Sweden or the Netherlands rank well. They take the four top spots in access to policymaking with high shares of young MPs and youth political interest. However, France, Great Britain, Portugal, Spain and Italy rank in the bottom 20 countries in political weight. This demonstrates the large gap between developed countries in youth political participation.

Perhaps the political presence of youth can explain why some countries score well in the Youthonomics Global Index, while others don't.

— **Youthonomics** —
RANKINGS 2015

YOUTHONOMICS GLOBAL INDEX 2015 RANKINGS




RANK	COUNTRY	YOUTH NOW		YOUTH OUTLOOK		YOUTHONOMICS GLOBAL INDEX	YOUTH OPTIMISM
		Rank Score	Rank Score	Score	Rank		
1	Norway	3 91.6	1 79.5	87.6	26		
2	Switzerland	1 95.6	28 52.2	81.1	55		
3	Denmark	6 87.8	12 61.5	79.0	39		
4	Sweden	12 81.5	3 72.6	78.5	25		
5	Netherlands	2 92.3	36 48.7	77.8	56		
6	Australia	7 85.3	21 57.7	76.1	41		
7	Germany	5 88.7	37 48.6	75.3	54		
8	Finland	9 82.8	16 59.4	75.0	37		
9	Austria	4 88.8	39 46.0	74.6	58		
10	Canada	8 83.3	34 49.6	72.1	52		
11	Luxembourg	13 79.5	33 49.7	69.6	48		
12	New Zealand	14 78.8	32 49.9	69.2	45		
13	United States	10 82.3	47 41.9	68.8	59		
14	Ireland	17 77.0	31 50.7	68.2	42		
15	Israel	19 74.3	26 54.8	67.8	34		
16	United Kingdom	15 78.7	45 44.5	67.3	53		
17	Belgium	11 82.2	52 36.4	67.0	62		
18	Estonia	24 66.5	8 67.0	66.7	21		
19	France	18 76.2	41 45.7	66.0	51		
20	Czech Republic	21 71.6	27 53.8	65.7	33		
21	Slovenia	16 77.9	56 35.2	63.7	61		
22	South Korea	22 71.2	44 44.6	62.4	47		
23	Malaysia	28 62.7	18 58.5	61.3	23		
24	Chile	27 63.1	22 57.3	61.2	24		
25	Latvia	30 61.7	19 58.2	60.5	22		
26	Japan	20 73.6	59 31.3	59.5	64		
27	Poland	25 66.3	48 41.5	58.1	46		
28	Kazakhstan	41 52.0	5 69.0	57.7	15		
29	Slovakia	29 62.5	42 45.7	56.9	35		
30	Portugal	23 69.2	60 30.6	56.3	63		
31	China	35 55.3	24 56.4	55.7	20		
32	Italy	26 65.6	58 34.2	55.1	57		
33	Lithuania	31 59.5	40 45.9	55.0	31		
34	Turkey	37 55.0	38 46.1	52.0	28		
35	Uruguay	38 54.8	43 45.3	51.6	29		
36	Greece	33 56.9	49 41.2	51.6	36		
37	Spain	32 59.4	53 35.8	51.5	50		
38	Hungary	34 56.6	50 40.3	51.2	38		
39	Philippines	50 41.5	7 67.1	50.1	10		
40	Mexico	44 48.4	30 50.8	49.2	19		
41	Peru	45 45.2	23 56.8	49.0	16		
42	Thailand	36 55.2	54 35.4	48.6	44		
43	Argentina	42 50.7	46 42.5	48.0	27		
44	Indonesia	49 41.8	15 60.0	47.9	13		
45	Nepal	52 39.7	11 62.6	47.3	11		
46	Ukraine	40 53.5	57 34.9	47.3	43		
47	Honduras	51 40.3	14 60.4	47.0	12		
48	Ghana	55 36.2	6 68.4	46.9	7		
49	India	53 38.4	10 63.6	46.8	9		
50	Colombia	48 43.0	29 51.1	45.7	17		
51	Croatia	39 54.1	64 26.3	44.8	60		
52	Rwanda	59 29.9	4 72.3	44.0	6		
53	Vietnam	43 49.6	62 30.0	43.1	49		
54	Sri Lanka	46 44.4	55 35.4	41.4	30		
55	Bangladesh	58 32.7	17 58.6	41.3	8		
56	Pakistan	57 34.5	35 49.4	39.4	14		
57	Russia	47 43.9	61 30.1	39.3	40		
58	Kenya	60 22.4	9 64.9	36.5	3		
59	Egypt	56 34.7	51 37.3	35.6	18		
60	Brazil	54 37.6	63 28.8	34.7	32		
61	Uganda	64 13.6	2 76.4	34.5	1		
62	Mali	61 21.1	20 57.8	33.3	4		
63	South Africa	62 20.5	25 56.1	32.4	5		
64	Cote d'Ivoire	63 17.1	13 61.3	31.8	2		

PART A:

— Youthonomics —

GLOBAL INDEX RESULTS

- Chapter 1:** **The Youthonomics Global Index**
What opportunities do young people have now
and in the future?
- Chapter 2:** **The Youth Now Sub-Index**
A 2015 snapshot of life for youth
- Chapter 3:** **The Youth Outlook Sub-Index**
A preview of global conditions facing today's youth
tomorrow
- Chapter 4:** **Youthtopia**
Best practices from around the world

The Youthonomics Global Index

What opportunities do young people have now and in the future?

The 2008 global economic crisis has been particularly hard for one set of people: youth. Although attention to their problems has increased, in particular with reference to youth unemployment and student loan debt, the problems they face remain under-discussed.

The Youthonomics Global Index aims to compare the economic, social and political conditions in which youth from various countries flourish, as well as the ways in which conditions could improve. It does not attempt to measure subjective wellbeing, although it may serve as a proxy for wellbeing in many countries. The Youthonomics Global Index's prime purpose is to assess the opportunity for self-realization of young people — economically, socially and politically. To do so, it examines different aspects of juvenile life, and evaluates the past and current conditions that will shape the future realities of today's youth.

The term “Youth” refers to individuals aged 15 to 29, who share similar concerns. These concerns include securing a quality education that will prepare them for entry into the job market, a seamless transition to employment, and access to a high standard of living in their early professional lives. These individuals are also similar in that they will be part of the active population for the coming decades. The most innovative feature of the Youthonomics Global Index is that it does not stop at examining where are youth doing better or worse at the moment. By extrapolating from each country's economic, financial, political, demographic and social conditions that have effects yet to be felt by youth, the index also tries to predict where life for young people is likely to improve around the world. The first edition is labeled Putting the Young on Top of the Global Agenda. Youth are not treated optimally nor are their needs taken into account in a number of countries around the world. Because

youth is not on top of the agenda, we only look at a fraction of the issues that impact youth.

The Youthonomics Global Index aims to present the different ways in which youth is suffering from insufficient consideration in policy making and to spur solutions through the identification of best practices. Few policymakers look at what's being done beyond their own national borders, but success stories can be found everywhere. The Youthonomics Global Index aims to give leaders recommendations on what they can do improve the outlook for youth in their respective countries.

The Conceptual Framework

The Youthonomics Global Index relies on nine pillars, which can be split in two sub-indexes — the Youth Now and the Youth Outlook Sub-Indexes.

The Youth Now Sub-Index is composed of six input pillars that capture different facets of youth conditions: (1) Schooling (2) University and Skills (3) Access to Employment (4) Work and Living Conditions (5) Wellbeing, and (6) Health.

The Youth Outlook Sub-Index has three pillars that provide insight into the present and future conditions for youth: (1) Public Finance (2) Economic Opportunities, and (3) Political Weight.

The overall Youthonomics Global Index is the simple average of all nine pillars.

Methodology at a Glance

Each of the nine pillars that make up Youth Now and Youth Outlook is divided into two to five sub-pillars. To construct these sub-pillars, individual variables have been normalized to range from 0 to 100 and averaged to yield a sub-pillar score. These sub-pillars scores were then normalized and averaged to yield the nine pillar scores. Pillar scores were then normalized and averaged to yield the Youthonomics Global Index.

Coverage

While constructing the index, we aimed to use the least amount of weighting possible. Every variable is weighted equally to construct a sub-pillar and every sub-pillar is weighted equally when constructing a pillar, except when: (1) there is missing data (2) a variable or sub-pillar was evidently intuitively less relevant to the construction. In both of these cases, the weight was then systematically changed to 0.5. Annex B details the Youthonomics methodological framework. In total, 59 variables have been used in the Youthonomics Global Index's construction.

The Youthonomics Global Index 2015 covers 64 countries for which sufficient data was available.

We prioritized rigor when selecting country sample, and therefore included countries only when they satisfied minimal data requirements. The index nonetheless covers all continents and levels of development.

This year's sample comprises:

- 27 European countries
- 10 Middle Eastern or African countries
- 2 North American countries
- 8 Latin American countries
- 15 Asian countries
- Australia and New Zealand

Based on the limited data available on youth topics, another goal for Youthonomics became clear: to pressure governments to collect and disseminate data that will enable the inclusion of more and more countries every year.

Table 1 shows the countries included in the 2015 Youthonomics Global Index.

Table 1 - Country coverage of the Youthonomics Global Index 2015

Europe (27)	Americas (10)	Middle East /Africa (10)	Asia (15)	Oceania (2)
Austria	North America	MENA	Central Asia	Australia
Belgium	Canada	Egypt	Russia	New Zealand
Croatia	United States	Israel	Kazakhstan	
Czech Republic		Turkey		
Denmark	Latin America		South Asia	
Estonia	Argentina	Sub-Saharan	Bangladesh	
Finland	Brazil	Africa	India	
France	Chile	Ghana	Pakistan	
Germany	Colombia	Rwanda	Nepal	
Great Britain	Honduras	Uganda	Sri Lanka	
Greece	Mexico	Ivory Coast		
Hungary	Peru	Kenya	East Asia	
Ireland	Uruguay	Mali	China	
Italy		South Africa	Japan	
Latvia			Korea	
Lithuania				
Luxembourg			Southeast Asia	
Netherlands			Malaysia	
Norway			Thailand	
Poland			Philippines	
Portugal			Indonesia	
Slovakia			Vietnam	
Slovenia				
Spain				
Sweden				
Switzerland				
Ukraine				

Overview of the Results

The Youthonomics Global Index 2015 shows that developed economies represent a wide range of performance on youth issues.

Nordic countries top the ranking – Norway takes first place, Denmark takes third, Sweden takes fourth and Finland takes eight.

Countries from central Europe broadly follow with Switzerland (2nd), the Netherlands (5th), Germany (7th) an Austria (9th) before Commonwealth countries - Australia (6th), Canada (10th), New Zealand (12th).

The United States rank 13th. Some rich countries such as the United Kingdom (16th), Belgium (17th),

France (19th) or Japan (26th) perform poorly, relative to their level of economic development.

Crisis-hit European economies (Portugal, Italy, Greece or Spain) fall behind several high-income developing economies.

Clearly, youth are at a disadvantage in some countries, regardless of the level of economic development.

Broadly speaking, after Eastern European countries, fast-growing Asian countries follow, before Latin American ones and African ones.

Large developing economies such as Russia, Egypt, Brazil or South Africa fare particularly poorly.

The Youth Now Sub-Index

A 2015 snapshot of life for youth

The Youth Now Sub-Index aims to provide an at-a-glance evaluation of the state of youth in 2015. It examines the present realities facing youth in six parts.

The **Early Education** section describes the academic and social skills young people carry into their adult lives. The **University and Skills** section gives us an overview of the status and accessibility of higher education, social and professional skills young people acquire before beginning working life.

The **Access to Employment** section tells us about the ease of transitioning from school into employment, while the **Work and Living Conditions** section evaluates the quality of youth employment opportunities and the material living conditions that accompany these.

The **Wellbeing** section goes beyond the education-employment nexus to look at issues of social cohesion, safety, psychological and behavioral problems, as well as individual liberties. Finally, the **Health** section examines young people’s overall Health level.

Chapters 5 to 9 detail the construction of each one of these pillars.

Results

Switzerland, the Netherlands and Norway top the Youth Now rankings, followed by Austria and Germany.

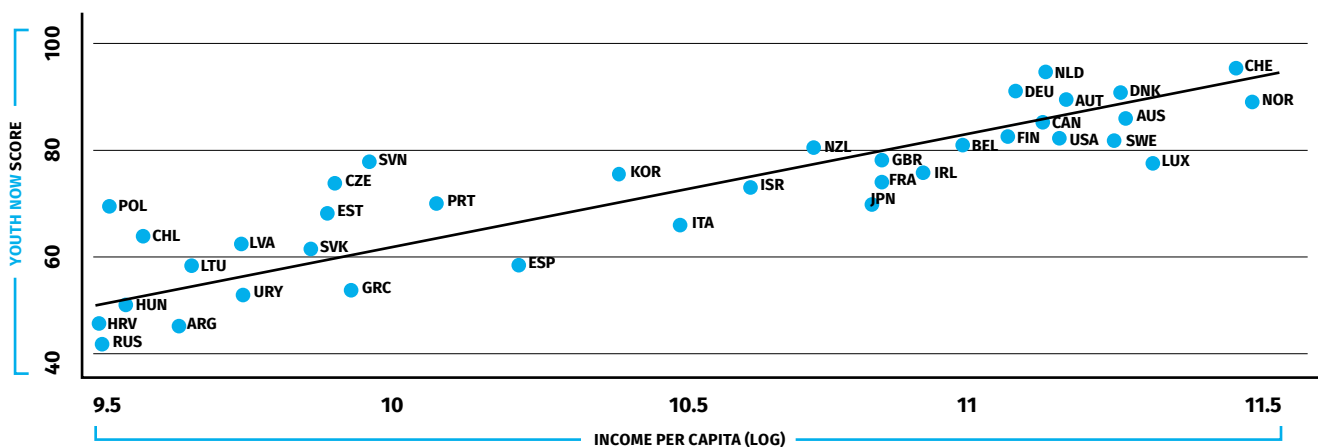
Predictably, the Youth Now Sub-Index correlates strongly with economic development. Figure 2 shows the link between the Youth Now Sub-Index and income per capita. The latter enables countries to develop educational infrastructures; a developed economy goes hand in hand with advanced education and wage growth. Higher incomes also lead to higher health level. Unsurprisingly, income per capita correlates less with access to work, as the latter results more from the current economic climate as well as institutional and cultural determinants of youth discrimination within labor markets.

Income matters, but some countries have managed to use their economic advantages in a particularly youth-friendly way. Indeed, if Norway’s and Switzerland’s score could be predicted by their levels of income, countries such as the Netherlands, Germany or Austria owe their top-10 ranking to a seemingly better policies and a better use of their resources for youth.

Slovenia, Czech Republic and Poland somewhat exceed expectations, whereas Russia, Argentina, Uruguay, Greece, Spain, Italy or Luxembourg score far below what their level of economic development could command,

Table 2 displays the ranking of the Youth Now Sub-Index by pillar.

Figure 2 - Youth Now and Income per Capita



Rank	Country	Income		Early Education	University and Skills	Access to Employment	Work and Living Conditions	Wellbeing	Health	Youth Now
		Group / per Capita		Rank	Rank	Rank	Rank	Rank	Rank	Score
1	Switzerland	1	90670	3	1	1	4	7	4	95.6
2	Netherlands	1	51210	5	4	4	6	1	6	92.3
3	Norway	1	103050	16	15	3	1	8	16	91.6
4	Austria	1	50390	6	2	6	14	18	11	88.8
5	Germany	1	47640	11	19	2	3	5	10	88.7
6	Denmark	1	61310	10	7	10	8	3	23	87.8
7	Australia	1	64680	2	6	14	9	10	15	85.3
8	Canada	1	51690	21	24	5	12	14	9	83.3
9	Finland	1	48910	13	3	31	5	24	27	82.8
10	United States	1	55200	17	16	8	13	27	24	82.3
11	Belgium	1	47030	15	5	37	7	17	14	82.2
12	Sweden	1	61600	14	10	32	15	12	13	81.5
13	Luxembourg	1	69880	20	47	24	2	15	7	79.5
14	New Zealand	1	39300	7	28	20	10	11	20	78.8
15	United Kingdom	1	42690	9	13	33	17	16	17	78.7
16	Slovenia	1	23220	1	11	38	22	20	18	77.9
17	Ireland	1	44660	22	8	51	11	22	8	77.0
18	France	1	43080	12	21	42	16	9	12	76.2
19	Israel	1	34990	29	14	27	26	13	1	74.3
20	Japan	1	42000	4	32	11	24	19	50	73.6
21	Czech Republic	1	18970	31	18	22	28	21	19	71.6
22	South Korea	1	27090	8	25	23	21	33	48	71.2
23	Portugal	1	21320	28	12	57	19	6	28	69.2
24	Estonia	1	18530	18	30	13	30	36	37	66.5
25	Poland	1	13730	34	20	45	25	26	29	66.3
26	Italy	1	34280	30	33	59	18	4	3	65.6
27	Chile	1	14900	33	23	39	45	28	22	63.1
28	Malaysia	2	10660	36	38	21	23	48	34	62.7
29	Slovakia	1	17810	25	17	53	43	23	26	62.5
30	Latvia	1	15660	24	34	34	29	43	33	61.7
31	Lithuania	1	15380	19	22	26	48	51	40	59.5
32	Spain	1	29940	32	36	64	20	2	2	59.4
33	Greece	1	22090	37	9	62	32	25	5	56.9
34	Hungary	1	13470	35	37	43	46	35	25	56.6
35	China	2	7380	40	42	25	33	50	30	55.3
36	Thailand	2	5410	38	44	9	34	55	43	55.2
37	Turkey	2	10850	43	40	47	27	37	39	55.0
38	Uruguay	1	16360	41	39	50	36	32	31	54.8
39	Croatia	1	13020	63	35	58	35	31	21	54.1
40	Ukraine	3	3560	27	31	40	47	53	46	53.5
41	Kazakhstan	2	11670	23	29	12	54	62	53	52.0
42	Argentina	1	14560	49	26	52	49	40	32	50.7
43	Vietnam	3	1890	42	51	16	44	54	36	48.8
44	Mexico	2	9980	48	43	44	41	41	38	48.4
45	Peru	2	6410	50	49	46	57	39	35	45.2
46	Sri Lanka	3	3400	26	48	48	55	59	41	44.4
47	Russia	1	13210	45	27	30	39	64	56	43.9
48	Colombia	2	7780	46	45	41	42	60	49	43.0
49	Indonesia	3	3650	52	41	61	37	30	45	41.8
50	Philippines	3	3440	47	59	55	38	42	52	41.5
51	Honduras	3	2190	54	56	19	50	58	47	40.3
52	Nepal	4	730	55	58	17	58	52	55	39.7
53	India	3	1610	53	52	29	61	44	57	38.4
54	Brazil	2	11760	44	53	54	53	49	51	37.6
55	Ghana	3	1620	56	61	35	52	29	59	36.2
56	Egypt	3	3280	51	50	60	59	46	42	34.7
57	Pakistan	3	1410	58	62	28	62	45	54	34.5
58	Bangladesh	3	1080	59	60	56	64	34	44	32.7
59	Rwanda	4	650	61	54	7	60	61	58	29.9
60	Kenya	3	1280	57	63	49	40	56	60	22.4
61	Mali	4	720	64	55	36	63	47	61	21.1
62	South Afrlca	2	6800	60	46	63	31	38	62	20.5
63	Côte d'ivoire	3	1550	39	57	15	56	57	64	17.1
64	Uganda	4	660	62	64	18	51	63	63	13.6

The Youth Outlook Sub-Index

A preview of global conditions faced by today's youth tomorrow

An innovative feature of the Youthonomics Global Index is that it includes factors whose effects will likely influence future outcomes for today's youth, that can be somewhat predicted now. These factors reflect projected commitments such as planned pension expenditures, anticipated developments such as short-term economic events, and highly predictable demographic trends.

The Youthonomics Global Index has three such pillars, which together constitute the Youth Outlook Sub-Index. Their effects are yet to be felt by youth, and hence their inclusion gives an indication of whether today's youth can hope to see conditions in a country improve in the near-term.

The Public Finance section examines the expected limitations to government spending. It also includes any change in the fiscal burden supported by the coming active population – youth - that will be generated by public finance liabilities.

The Economic Opportunities section assesses the coming economic cycle of the current youth cohort who, if not already the case, will enter the labor market in the coming years. It also investigates whether that growth is sustainable.

The political weight pillar evaluates the existing economic and public policy bias against youth, as well as the opportunity they have to articulate their interests and exert political influence to help focus state action toward a better representation of their interests.

Results

The Outlook Sub-Index presents a very different group of leading countries. Norway, Uganda, Sweden and Rwanda top the rankings.

Contrary to the Youth Now Sub-Index, the first characteristic of the Youth Outlook index is that having a higher average income does not imply a

better performance. In fact, the opposite is true: in most developed economies, youth are left with declining relative conditions and the majority of high income economies are in the bottom half of the Youth Outlook ranking.

The developed countries that rank high Norway, Sweden, Denmark and Finland have managed to leave their youth with public finances in good shape and a dynamic economy, despite aging populations. Other developed economies face similar demographic problems, but these will be compounded by large financial liabilities and degraded economic conditions.

Developed economies need to make an extra effort to counter inevitable population aging and rising dependency ratios. Those that don't make that extra effort have dim outlooks.

The opposite is true for low-income economies. They have demographics on their side, with young populations and in most cases limited financial liabilities. Youth will be at the center of the policymaking processes and the dynamism of their economies will of ten determine their outlooks.

In between high-income and low-income countries, we observe a wide range of outlooks. In countries like China, Indonesia, Thailand or Vietnam, youth have very little political weight, and therefore will have a hard time being heard. China and Indonesia have high growth prospects, but how much of the benefit will accrue to youth is uncertain. Thailand and Vietnam, with much lower growth prospects, can hardly expect large improvements in their conditions.

The Youth Optimism Ratio

There are two ways to interpret the Youthonomics Global Index. One is to see it as a measure of how previous generations have prepared their countries for today's young people, in which factors fully realized now and those whose effects will come later are equal components. The other interpretation of the Youthonomics Global Index is as an estimation of how today's 15 to 29 years olds will be doing in the

near future – an approximation of a Youth Now Sub-Index for 10 years from now.

The Youth Now and Youth Outlook sub-indexes are not strictly comparable – they do not tell us which countries perform better today and which will tomorrow. It will take a long time before Uganda – second in Youth Outlook Sub-Index– reaches youth conditions that are comparable to developed countries.

However, by interpreting the Youthonomics Global Index as a Youth Now Sub-Index 10 years from now, we say which youth can hope to see the situation improve. The Youth Optimism Ratio is computed

as the ratio of the Youthonomics Global Index to the Youth Now Sub-Index. The result is a ratio that allows us to rank countries according to how optimistic youth should be in the medium-term.

Predictably, countries that have poor initial conditions have more optimistic prospects. Uganda, starting at the bottom of the Youth Now rankings, has a great Youth Optimism ratio.

Figure 3 - Youth Now Scores and Youth Optimism Ratios

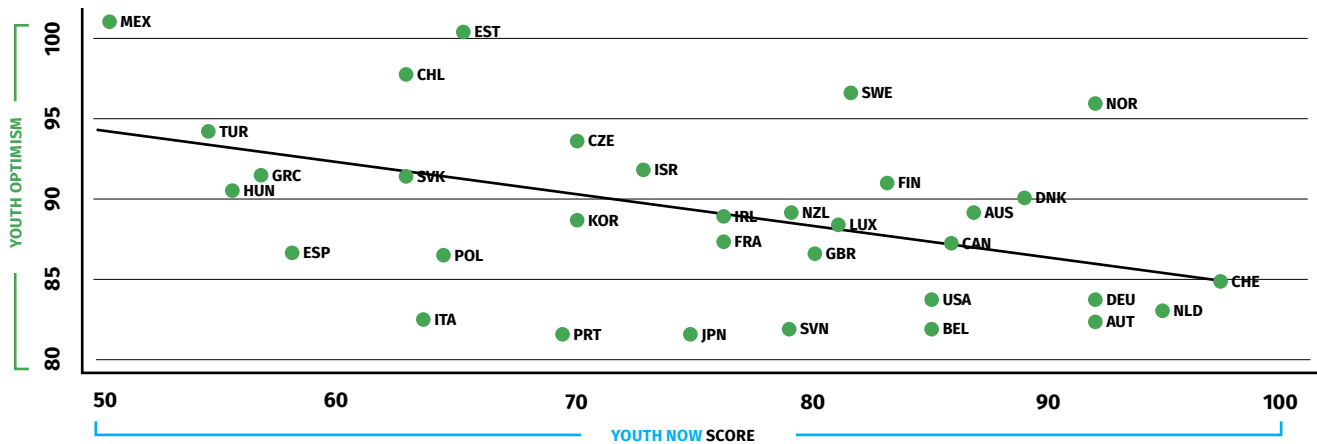


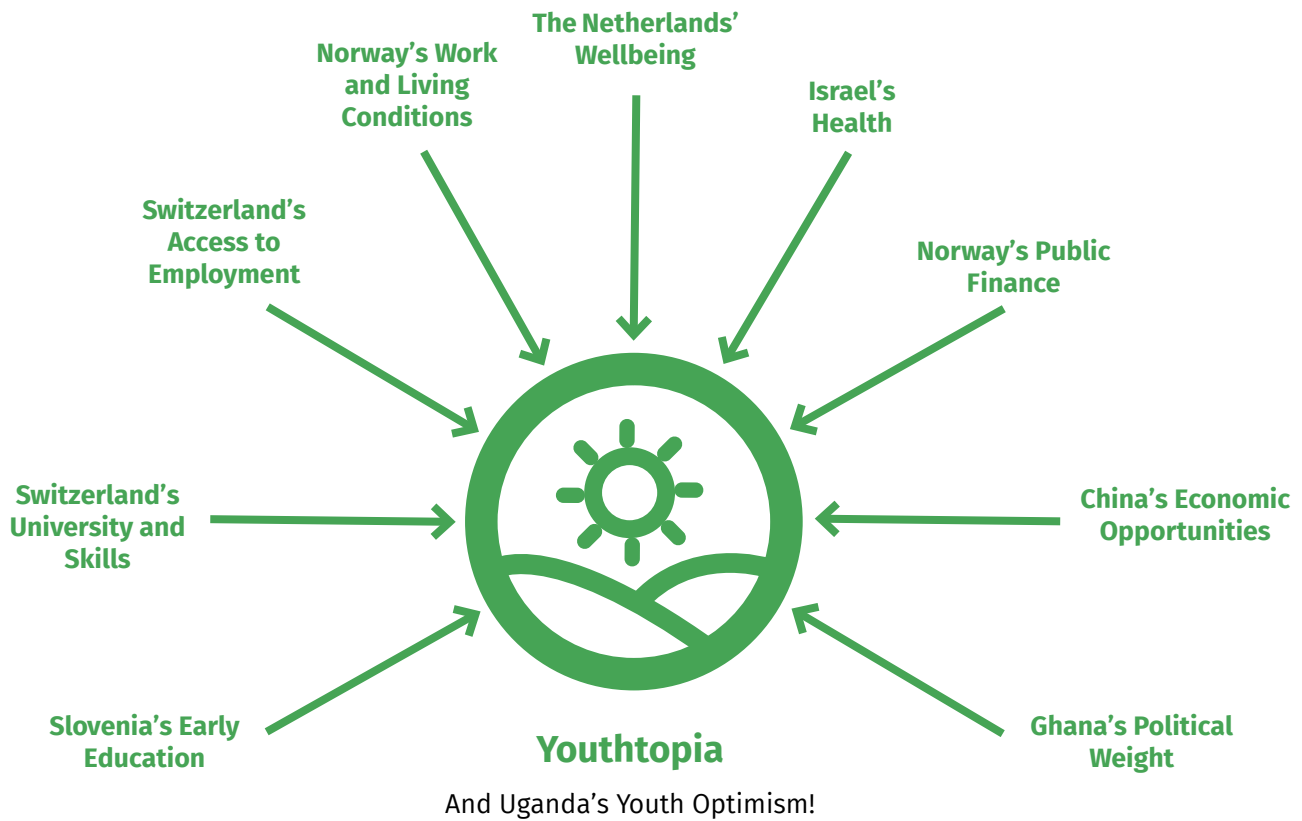


Table 3 - Youth Outlook Rankings

RANK	COUNTRY	INCOME		PUBLIC FINANCE		ECONOMIC OPPORTUNITIES		POLITICAL WEIGHT		YOUTH OUTLOOK
		Group	per Capita	Rank	Score	Rank	Score	Rank	Score	Score
1	Norway	1	103050	1	100.0	7	68.1	17	70.4	79.5
2	Uganda	4	660	3	93.5	33	46.6	5	89.0	76.4
3	Sweden	1	61600	8	77.1	5	72.2	21	68.4	72.6
4	Rwanda	4	650	9	77.1	27	50.3	3	89.6	72.3
5	Kazakhstan	2	11670	2	97.6	43	37.1	12	72.3	69.0
6	Ghana	3	1620	12	74.8	51	30.3	1	100.0	68.4
7	Philippines	3	3440	5	83.9	45	35.8	8	81.8	67.1
8	Estonia	1	18530	10	76.0	6	69.7	36	55.2	67.0
9	Kenya	3	1280	18	65.0	40	40.4	4	89.2	64.9
10	India	3	1610	19	62.5	9	64.3	24	63.8	63.6
11	Nepal	4	730	4	90.3	54	27.9	19	69.7	62.6
12	Denmark	1	61310	25	53.9	20	56.8	10	73.8	61.5
13	Cote d'Ivoire	3	1550	7	79.5	46	33.0	15	71.2	61.3
14	Honduras	3	2190	13	74.3	58	18.4	6	88.5	60.4
15	Indonesia	3	3650	6	79.7	19	57.5	53	42.8	60.0
16	Finland	1	48910	20	62.5	15	59.9	34	55.9	59.4
17	Bangladesh	3	1080	17	67.1	44	36.4	13	72.3	58.6
18	Malaysia	2	10660	24	56.1	8	64.4	37	54.9	58.5
19	Latvia	1	15660	16	68.7	26	51.5	40	54.3	58.2
20	Mali	4	720	14	72.1	62	8.4	2	92.8	57.8
21	Australia	1	64680	44	34.8	2	78.1	27	60.1	57.7
22	Chile	1	14900	29	49.4	25	52.1	16	70.4	57.3
23	Peru	2	6410	21	61.6	37	43.3	23	65.3	56.8
24	China	2	7380	32	45.1	1	100.0	63	23.9	56.4
25	South Africa	2	6800	23	58.1	57	23.8	7	86.2	56.1
26	Israel	1	34990	30	48.0	21	55.7	26	60.6	54.8
27	Czech Republic	1	18970	26	50.9	10	63.7	48	46.9	53.8
28	Switzerland	1	90670	51	26.9	3	74.8	38	54.9	52.2
29	Colombia	2	7780	33	43.8	42	37.1	14	72.2	51.1
30	Mexico	2	9980	34	43.6	48	32.4	9	76.3	50.8
31	Ireland	1	44660	39	37.5	22	55.5	28	59.2	50.7
32	New Zealand	1	39300	52	26.0	11	62.6	25	61.1	49.9
33	Luxembourg	1	69880	37	39.7	16	58.5	44	50.9	49.7
34	Canada	1	51690	48	30.2	13	61.0	31	57.5	49.6
35	Pakistan	3	1410	11	75.8	63	3.4	20	69.0	49.4
36	Netherlands	1	51210	54	21.4	18	57.7	22	66.9	48.7
37	Germany	1	47640	38	38.6	24	53.6	41	53.6	48.6
38	Turkey	2	10850	47	31.6	47	32.9	11	73.7	46.1
39	Austria	1	50390	49	28.7	23	53.8	35	55.6	46.0
40	Lithuania	1	15380	28	49.5	41	37.4	45	50.9	45.9
41	France	1	43080	35	43.0	29	49.0	49	45.2	45.7
42	Slovakia	1	17810	43	34.8	31	47.6	39	54.5	45.7
43	Uruguay	1	16360	22	58.2	52	30.0	46	47.7	45.3
44	South Korea	1	27090	62	8.4	4	72.5	42	52.8	44.6
45	United Kingdom	1	42690	50	27.7	12	61.4	51	44.5	44.5
46	Argentina	1	14560	15	70.7	64	0.0	32	56.9	42.5
47	United States	1	55200	61	9.0	17	57.7	29	58.9	41.9
48	Poland	1	13730	40	36.8	36	43.6	52	44.2	41.5
49	Greece	1	22090	41	36.2	53	28.9	30	58.5	41.2
50	Hungary	1	13470	42	35.8	39	40.5	50	44.7	40.3
51	Egypt	3	3280	45	34.6	55	25.8	43	51.4	37.3
52	Belgium	1	47030	63	7.3	34	45.4	33	56.6	36.4
53	Spain	1	29940	57	17.4	30	48.7	55	41.3	35.8
54	Thailand	2	5410	53	25.7	28	49.7	61	30.7	35.4
55	Sri Lanka	3	3400	31	45.5	14	60.5	64	0.0	35.4
56	Slovenia	1	23220	58	14.0	35	44.5	47	47.0	35.2
57	Ukraine	3	3560	27	50.1	60	13.4	56	41.1	34.9
58	Italy	1	34280	46	32.4	49	31.9	58	38.2	34.2
59	Japan	1	42000	60	10.0	38	42.9	57	41.1	31.3
60	Portugal	1	21320	56	19.0	50	30.8	54	42.1	30.6
61	Russia	1	13210	36	41.4	61	11.2	59	37.8	30.1
62	Vietnam	3	1890	59	12.8	32	46.7	62	30.4	30.0
63	Brazil	2	11760	64	0.0	59	16.4	18	70.1	28.8
64	Croatia	1	13020	55	19.6	56	24.1	60	35.1	26.3

Youthtopia

Best practices from around the world



Youthtopia

Countries leading the way and potential best practices

This section highlights the countries that scored best in a selection of the Youthonomics sub-index components, along with, in some areas, information about the factors that may have positively influenced their performance on each key measure.

A large part of the ongoing work of Youthonomics will be to uncover, publicize, and advocate for broader adoption of policy positions that improve outcomes for youth. Successful initiatives and policies will be celebrated, so that other countries can replicate them.

The Youthonomics team is continuing to analyze the findings of the report and will be expanding on the potential best practices it suggests.

Pillar 1: Early education

Completion

1. Germany

2. Slovakia
3. Australia

Focus: Germany

Germany has a nearly universal secondary education system. It has one of the highest levels of secondary attainment – 95% of today’s young people are expected to graduate from upper-secondary education (OECD). This might have to do with educational paths that are tailored to student needs: half of upper-secondary students are enrolled in pre-vocational or vocational programs.

Potential best practice: Promote a wider array of educational paths that can better suit each student’s aspirations and capabilities, including a range of vocational training, internships, pre-college, and pre-professional options.

Quality

1. Finland

2. Estonia
3. Switzerland

Focus: Finland

Finland has chosen to favor quality over quantity of early education training, and it seems to work. It ranks first in our index of quality of early education.

— Compulsory school starts at age 7, one year after most OECD countries. The compulsory instruction time is 15% less than the OECD average. Each year, teachers in primary and secondary school teach on average a hundred hours less than the OECD average. They also spend more time teaching natural science and arts.

— The teacher to pupil ratio is one of the lowest in the OECD (9 vs 14 on average in OECD countries). Teachers are also better paid,

earning on average 13% more than their OECD counterparts. These factors might explain why 95% of secondary teachers feel satisfied with their job.

Potential best practice: Develop educational systems that are less time-intensive, allowing for lower teacher-pupil ratios and promoting higher teacher wellbeing.

Transition

Enrollment of students ages 15 to 19:

1. Ireland

2. Belgium
3. Poland

Focus: Ireland

Ireland’s percentage of youth expected to graduate from upper-secondary education is 93%, 9 points above the OECD average. Ireland in 2012 was characterized by high intergenerational educational mobility. Among students in tertiary education, 16% had parents who had not attained upper secondary education, compared to an OECD average of 9%.

Further study of the Irish system may provide more insight on which practices are proving to be more successful in keeping the current generation enrolled in education beyond the attainment levels of their parents.

Unemployment 15 to 19:

1. Kazakhstan

2. Uganda
3. Rwanda

The leaders share a low educational attainment averages and ample opportunities for work force participation from this age group because of growing economies.

Conditions

Life expectancy in 2000:

- 1. Japan
- 2. Italy
- 3. Switzerland

Mortality of 5 to 14 year olds:

- 1. Spain
- 2. Japan
- 3. Korea

Happy at school:

- 1. Indonesia
- 2. Thailand
- 3. Kazakhstan

Pillar 2: University and Skills

Completion

- 1. South Korea
- 2. Australia
- 3. Greece

Focus: Korea

In Korea, 66% of 25-34 year olds have attained tertiary education, putting them first among OECD countries and 27 points above OECD average. There is a huge educational gap between the younger and older generations. Korea spends heavily on higher education, but 73% of that spending comes from private sources (students and their family), compared to a 31% OECD average.

Quality

- 1. Switzerland
- 2. Finland
- 3. Sweden

Focus: Switzerland

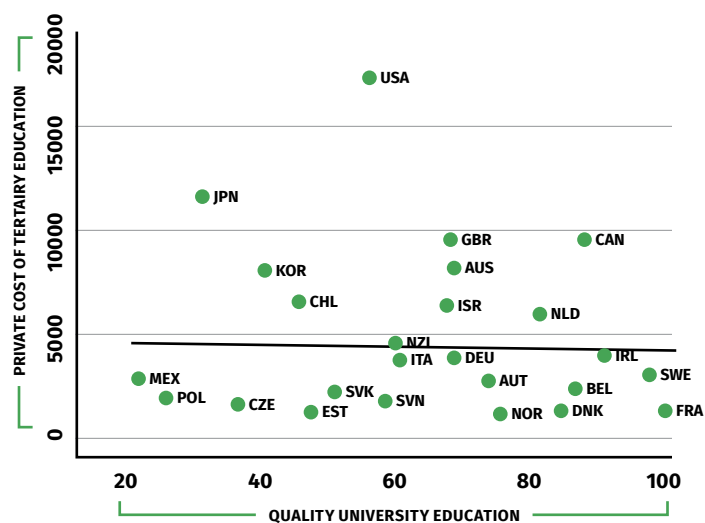
Switzerland’s universities have managed to attract quality international students. The latter make up 16% of tertiary students (4th highest share in the OECD), and half of advanced research program students. This success in attracting international students has effectively managed to put Swiss universities at the top of international rankings despite having one of the smallest youth populations (1 million young people 20-29 years old). These universities, in term, benefit the Swiss youth who attend them.

Potential best practice: Attract international students who self-fund their education to support improved quality of tertiary education.

Student debt

- 1. Brazil
- 2. Greece
- 3. Mali

Although this measure tells us which youth start active life without debt, it does not tell us which countries do more to reduce the cost of education. The graph below plots the private cost of tertiary education (non funded by the government), against the quality of universities. One thing seems clear: in Europe, the student does not pay much, regardless of the quality of universities (note: Switzerland’s data is not available).



Focus: United States

The United States has by far the highest level of expenditures per student, but also very high level of student indebtedness. Around 20% of 15 to 24 year olds report having obtained loans for educational purposes (53rd in our sample). What’s striking is the level of indebtedness: an estimated 29,000 USD per student. These trends favor social stratification, and can also explain why generational educational mobility in the US ranks in the bottom 3 countries of 23 surveyed OECD countries.

Potential best practice: Limit student loan obligations and link loan repayment obligations to post-educational income levels.

Vocational training

1. Czech Republic
2. Austria
3. Finland

Focus: Czech Republic

Czech Republic relies heavily on vocational training: more than half of students aged 15 to 19 are enrolled in pre-vocational or vocational programs, compared to an OECD average of 25%. Moreover, while at the upper secondary level vocational training is school-based in most countries, 22% of Czech students are enrolled in joint school/work programs. This support for vocational training does not seem to happen at the expense of other skills: Czech adults with a tertiary degree rank above OECD average in literacy and numeracy skills (PIAAC, OECD).

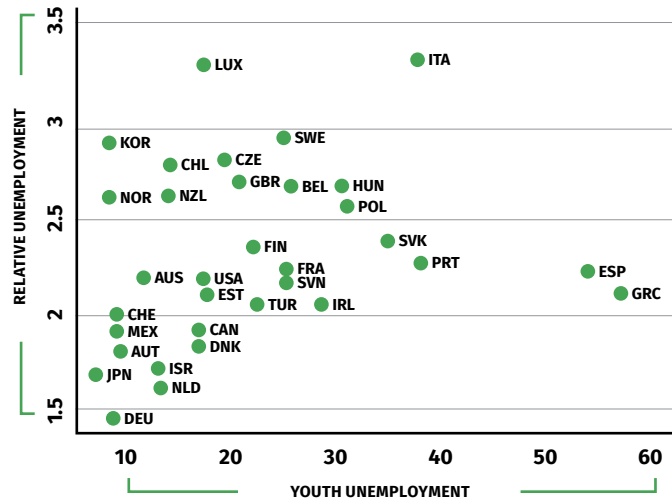
Potential best practice: Support employer-based, “on the job” tertiary vocational training programs.

Pillar 3: Access to Work

Unemployment

Youth unemployment:

1. Japan
2. Germany
3. Norway



To identify the best performers in youth unemployment policy one must look at relative unemployment rates (the youth unemployment rate divided by the overall unemployment rate). Relative unemployment rates tell us which countries have policies that favor youth, regardless of their current economic situation.

Youth relative unemployment:

1. Germany
2. Netherlands
3. Japan

Beyond the economic situation in each country, two main factors seem to explain low unemployment rates:

- The degree of labor market regulation, which protects older workers at the expense of younger workers
- The existence of a strong vocational educational system and, accordingly, the degree of collaboration between the educational sector and industry.

Time Underemployment

1. Ukraine
2. Estonia
3. Russia

Not in Education Employment and Training (NEET)

1. Netherlands
2. Luxembourg
3. Norway

Focus: Netherlands

The Netherlands has the lowest NEET rate of our sample, around 4% of the population aged 15 to 24. Beyond having a strong vocational training system which yields a smoother transition from education to employment, the country also has a separate welfare system, comprised of conditional financial support without providing “inactivity” benefits, which helps encourage youth to complete education and enter the workforce.

Entrepreneurship

1. USA
2. Canada
3. Australia

The United States has implemented policies that encourage new business formation, most visibly its relatively lenient bankruptcy provisions, as well as aspects of its tax code. In addition, its culture promotes entrepreneurship and celebrates business innovation.

Potential best practice: Adapt bankruptcy laws to encourage the formation of small businesses by young entrepreneurs.

Pillar 4: Work and Living Conditions

Wages

1. Luxembourg
2. Norway
3. Switzerland

Financial vulnerability

Ability of youth to save

1. Norway
2. Switzerland
3. Netherlands

Ability of youth to come up with emergency funds

1. Israel
2. Ukraine
3. Belgium

Skill development

1. Switzerland
2. Japan
3. Luxembourg

Entry wage

1. Norway
2. Luxembourg
3. Austria

Access to Housing

1. Luxembourg
2. Germany
3. Finland

Pillar 5: Wellbeing

Social Wellbeing

1. Norway
2. Denmark
3. China

Personal wellbeing

1. Egypt
2. Bangladesh
3. Spain

Individual Liberties

29 countries tied in first place!

Pillar 6: Health

1. Israel
2. Spain
3. Italy

Pillar 7: Public Finance

1. Norway
2. Kazakhstan
3. Uganda

Potential best practice: Reporting explicit and implicit liabilities on an automatic basis. If we add up net debt, projected unfounded liabilities in pension payments, and projected health care costs over the next 35 years, the United States, Belgium and the Netherlands have the highest levels of public liabilities, at over 200% of their GDP.

Pillar 8: Economic Opportunities

Cumulative growth 2015-2020

1. India
2. Rwanda
3. Côte d'Ivoire

Total Investment rate

1. China
2. Indonesia
3. India

Innovation

1. Switzerland
2. Great Britain
3. Sweden

Environment protection

1. Switzerland
2. Luxembourg
3. Australia

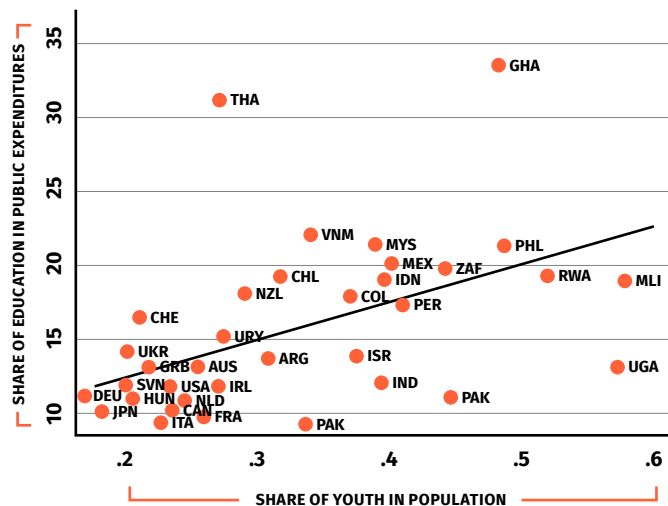
Pillar 8: Political Weight

Share of education expenditures in public expenditures

1. Ghana
2. Thailand
3. Vietnam

Focus: Ghana

Ghana spends approximately one third of its public expenditures on education. This is far above the



financial commitment of similar countries. Out of six countries with population under the age of 20 comprising more than 40% of the population, the second-ranked has only 20% of its expenditures devoted to education. This is in part thanks to a strong partnership on education with the World Bank, associated with a grant of over 75 million USD and accompanied with a comprehensive and monitored project for education inclusiveness.

Share of youth in electorate

1. Uganda
2. Mali
3. Kenya

Share of youth who say they would not vote if there were elections tomorrow

- 1. Belgium**
2. Denmark
3. Sweden

Share of deputies aged less than 40 years old

- 1. Sweden**
2. Denmark
3. Netherlands

PART B:



— The Youth Now —

PILLARS

- | | |
|-------------------|--|
| Chapter 5: | Early Education
The foundation |
| Chapter 6: | University and Skills
Acquiring expertise |
| Chapter 7: | Access to Employment
The transition to work |
| Chapter 8: | Work and Living Conditions
Essential needs for youth |
| Chapter 9: | Health and Wellbeing
Young life at its fullest potential |

Early Education

The foundation

It's impossible to examine the condition of young people ages 15 to 29 without reference to their past — their early education and how well it has equipped them for adulthood, allowed them to successfully enter more advanced studies or employment, as well as the circumstances in which they have done so.

The Early Education pillar focuses on primary school enrollment until the end of lower secondary education, which in all countries ends at around the age of 15. The pillar is intended to capture the quality of the upbringing with which youths will enter early adulthood.

Restricting the analysis to lower secondary education and purposely excluding the upper secondary education avoids arbitrating between continuing formal education, entering vocational training, or enter the labor market early.

The Early Education pillar looks at the baggage that youth bring into adulthood. It is made up of four metrics: (1) completion of schooling (2) quality of schooling (3) transition to an academic or professional opportunity around age 15 and (4) conditions in which they have done so.

Pillar scores are calculated using the following variables:

- The completion sub-pillar uses the average length of secondary education from the Barro-Lee database available from the World Bank
- Quality is composed of reported numbers from the World Economic Forum (WEF) report on quality of primary education, the WEF's assessment of Internet penetration in school, and the OECD's average score at PISA evaluation.

Because current youth went through early education on average more than four years ago, we use 2010 data, except for PISA data (2012).

- Transition blends the UNESCO enrollment rate in secondary education, and the unemployment rate and NEET rate of 15 to 19-year-olds.
- The Conditions sub-pillar is composed of the life expectancy in 2000, to proxy the general health environment, the WHO mortality rate of 5 to 14-year-olds, as well as the PISA survey of 15-year-olds' level of happiness at school.

Table 3 presents the results of the Early Education pillar.

Results

Slovenia leads the way in the Early Education pillar, followed by Australia, Switzerland, Japan, the Netherlands, Austria and New Zealand. Despite weaknesses in the conditions sub-pillar, Slovenia ranks well in quality (15th, in front of countries such as France, Britain and Germany), and extremely well in access and transition.

Income per capita determines, to a large extent, performance in the schooling pillar. Correlation between the two reaches 0.7, but income does not tell the whole story. Countries including Slovenia, Korea, New Zealand, Lithuania and Estonia largely over-perform. In contrast, countries such as Argentina, Brazil, Russia, Côte d'Ivoire and South Africa underperform.

Table 4 – Early Education pillar rankings



RANK	COUNTRY	INCOME		ACCESS		QUALITY		TRANSITION		CONDITION		EARLY EDUCATION Score
		Group	per Capita	Rank	Score	Rank	Score	Rank	Score	Rank	Score	
1	Slovenia	1	23220	4	93.6	15	75.6	6	93.3	31	84.5	100.0
2	Australia	1	64680	3	94.2	12	77.3	13	83.1	14	91.4	99.7
3	Switzerland	1	90670	14	74.1	3	91.1	15	80.4	2	98.2	99.0
4	Japan	1	42000	19	65.3	10	78.8	2	96.7	1	100.0	98.0
5	Netherlands	1	51210	26	60.9	6	85.7	4	94.5	11	91.9	95.5
6	Austria	1	50390	10	79.9	13	77.1	10	85.6	18	90.4	95.5
7	New Zealand	1	39300	13	74.5	8	83.5	12	83.4	17	90.5	95.1
8	South Korea	1	27090	16	71.1	4	87.9	3	96.3	49	71.7	93.6
9	United Kingdom	1	42690	12	75.3	16	74.1	11	84.2	13	91.7	93.0
10	Denmark	1	61310	30	57.1	9	82.6	8	89.6	15	91.1	91.4
11	Germany	1	47640	1	100.0	22	65.2	34	65.5	20	89.3	91.3
12	France	1	43080	11	77.3	20	70.3	17	79.5	16	91.0	90.6
13	Finland	1	48910	34	53.8	1	100.0	14	82.1	39	78.1	89.3
14	Sweden	1	61600	23	62.9	11	78.5	23	77.4	6	94.9	89.2
15	Belgium	1	47030	25	62.0	7	85.5	29	72.2	8	92.4	88.7
16	Norway	1	103050	33	54.0	21	68.9	5	93.6	5	95.4	88.7
17	United States	1	55200	17	70.2	18	73.1	20	78.8	26	86.6	87.6
18	Estonia	1	18530	21	64.2	2	92.2	18	79.1	51	67.6	85.8
19	Lithuania	1	15380	5	93.1	28	57.5	27	74.0	37	78.2	85.7
20	Luxembourg	1	69880	24	62.3	19	70.6	25	75.7	24	88.2	83.7
21	Canada	1	51690	20	65.1	5	87.6	46	50.1	9	92.3	83.2
22	Ireland	1	44660	35	53.5	17	73.3	21	78.4	19	89.8	83.2
23	Kazakhstan	2	11670	8	80.4	48	29.9	1	100.0	41	77.2	80.8
24	Latvia	1	15660	6	91.6	23	63.0	36	64.4	53	67.3	80.4
25	Slovakia	1	17810	2	95.8	29	54.7	38	60.0	50	68.6	78.0
26	Sri Lanka	3	3400	9	80.3	32	49.2	33	66.3	32	83.1	78.0
27	Ukraine	3	3560	18	66.8	34	47.8	9	86.1	40	77.8	77.8
28	Portugal	1	21320	36	49.0	27	58.6	26	74.1	7	92.5	76.5
29	Israel	1	34990	50	39.6	37	46.9	7	90.9	4	96.1	76.2
30	Italy	1	34280	7	82.5	35	47.4	49	48.0	21	89.1	74.2
31	Czech Republic	1	18970	48	41.3	14	76.7	28	73.8	48	72.1	73.2
32	Spain	1	29940	28	59.7	33	47.9	42	55.7	3	97.3	72.1
33	Chile	1	14900	27	60.7	49	28.6	22	77.8	10	92.1	71.6
34	Poland	1	13730	49	40.5	24	62.7	19	78.9	46	74.0	70.6
35	Hungary	1	13470	52	38.8	26	60.6	24	75.8	34	79.5	70.1
36	Malaysia	2	10660	15	72.9	39	42.0	47	48.4	23	88.2	69.1
37	Greece	1	22090	22	63.0	41	37.7	35	65.2	29	85.5	69.1
38	Thailand	2	5410	43	44.7	40	37.8	16	79.7	22	88.6	68.9
39	Croatia	1	13020	47	42.3	30	53.8	45	50.9	25	87.6	63.6
40	China	2	7380	46	42.8	25	62.5	53	36.9	30	84.7	61.1
41	Uruguay	1	16360	55	32.7	44	32.6	31	71.2	27	86.6	59.9
42	Vietnam	3	1890	41	45.6	31	49.4	54	36.8	28	86.0	58.2
43	Turkey	2	10850	40	45.9	42	35.6	41	57.1	45	75.9	57.1
44	Brazil	2	11760	29	59.6	56	11.8	32	66.4	44	75.9	56.9
45	Russia	1	13210	31	54.7	36	46.9	48	48.0	55	62.8	56.5
46	Colombia	2	7780	32	54.7	55	14.5	40	59.4	38	78.2	54.7
47	Philippines	3	3440	56	27.8	43	33.1	37	62.6	47	73.0	51.3
48	Mexico	2	9980	44	44.5	54	14.9	51	43.8	12	91.7	50.8
49	Argentina	1	14560	54	33.6	58	9.8	30	71.3	43	76.2	49.5
50	Peru	2	6410	45	43.4	64	0.0	39	59.9	35	79.5	46.9
51	Egypt	3	3280	39	46.8	61	2.5	44	54.2	42	76.9	46.1
52	Indonesia	3	3650	53	37.6	51	22.5	52	37.6	33	82.2	45.9
53	India	3	1610	42	45.3	45	32.6	58	23.9	57	59.8	40.0
54	Honduras	3	2190	58	21.3	57	10.7	55	36.4	36	78.8	35.4
55	Nepal	4	730	61	11.4	53	17.3	43	55.4	56	61.1	34.7
56	Ghana	3	1620	51	39.5	50	27.3	56	33.6	59	37.7	32.5
57	Kenya	3	1280	59	14.4	47	30.6	50	45.1	60	27.5	25.8
58	Pakistan	3	1410	57	26.4	52	21.2	63	5.9	54	63.4	25.6
59	Bangladesh	3	1080	37	47.5	63	0.4	64	0.0	52	67.4	25.1
60	South Africa	2	6800	38	47.3	62	0.5	60	13.9	58	45.4	22.4
61	Rwanda	4	650	63	1.0	38	42.4	59	23.8	62	21.2	16.4
62	Uganda	4	660	62	10.1	59	7.5	57	25.4	63	12.2	5.6
63	Côte d'Ivoire	3	1550	60	13.3	46	31.1	62	8.5	64	0.0	4.9
64	Mali	4	720	64	0.0	60	6.7	61	9.9	61	21.2	0.0

University and Skills

Acquiring expertise

Once reserved for the happy few, university education is now a crucial step toward employment. The University and Skills pillar aims to evaluate countries on the average level of skills youth acquire. University education provides a wide array of skills, job opportunities, tools to become an informed citizen and to build a large social and professional network.

Assessments of the quality of a tertiary education system often focus on the quality of universities, as relayed by large rankings (QS, Tokyo). From a country's youth perspective, however, these attributes are meaningless if access to these institutions is not widespread because of their cost or selectivity, if students will likely drop out because they don't find what they want in these programs, or if the opportunities after graduation don't justify the time and financial commitment of studying.

To take into account these different factors, the University and Skills pillar is divided into four components: (1) extent of vocational training, a key indicator of the relevance of the skills youth will bring into the labor market, (2) completion of university education, (3) quality of university education and (4) student debt. These sub-pillars are constructed in the following way:

- Vocational Training is solely assessed from the World Bank's share of upper secondary students enrolled in vocational training programs.
- Completion numbers derive from the UNESCO enrollment rate in tertiary education, its measure of the average length of tertiary education, and its gross graduation ratio, as well as an indicator of the mismatch between advanced education demand and supply, following an International Labour Organization (ILO) definition (see annex B for detail of its construction).
- Quality of University Education is calculated using the number of universities appearing in the QS top 500 ranking of universities, weighted by the size of youth population, as well as the WEF measure of the quality of management schools.
- Student debt information is pulled from the result of the World Bank's Findex survey, which presents the share of 15- to 24-year-olds who report having outstanding loans for educational purposes.

The results of the University and Skills pillar are presented below.

Results

The first three countries in the University pillar are Switzerland, Austria, and Finland, followed by the Netherlands, Belgium, Australia, Denmark and Ireland.

However, with the notable exceptions of Switzerland, Austria and Belgium, these countries leave their students with a lot of debt. These countries demonstrate there does not need to be a quality-indebtedness tradeoff.

A notable feature of the leading countries is that they give great importance to vocational training, equipping their youth with specific skills that will help them enter the labor market.

Table 5 - University and Skills pillar rankings



RANK	COUNTRY	INCOME		COMPLETION		QUALITY		COST		VOCATIONAL		SCORE
		Group	per Capita	Rank	Score	Rank	Score	Rank	Score	Rank	Score	
1	Switzerland	1	90670	22	77.5	1	100.0	12	89.8			100.0
2	Austria	1	50390	17	81.3	13	70.9	8	93.0	2	95.0	91.2
3	Finland	1	48910	14	84.7	2	99.7	60	13.0	3	94.9	87.8
4	Netherlands	1	51210	20	80.0	8	81.4	48	53.7	5	91.4	86.0
5	Belgium	1	47030	35	62.7	6	84.3	18	87.3	7	80.9	84.7
6	Australia	1	64680	2	96.6	11	74.1	50	50.4	10	67.0	84.0
7	Denmark	1	61310	8	91.1	7	82.6	47	53.9	21	57.0	83.9
8	Ireland	1	44660	18	81.1	5	87.0	55	37.6			81.8
9	Greece	1	22090	3	96.6	33	40.3	2	98.3			81.4
10	Sweden	1	61600	36	61.6	3	94.5	38	71.6	14	62.1	81.3
11	Slovenia	1	23220	5	92.9	21	57.6	49	53.2	6	88.9	80.6
12	Portugal	1	21320	13	85.4	16	66.8	32	77.4	17	60.6	80.5
13	United Kingdom	1	42690	29	70.6	10	74.7	25	84.2	20	57.7	78.4
14	Israel	1	34990	27	73.7	12	70.9	22	85.1	23	52.7	77.2
15	Norway	1	103050	15	84.5	9	77.4	56	29.7	9	69.1	76.3
16	United States	1	55200	9	89.7	18	62.5	53	45.8			75.8
17	Slovakia	1	17810	32	68.5	23	46.9	24	84.3	4	92.0	73.0
18	Czech Republic	1	18970	31	68.7	36	35.9	15	88.1	1	100.0	70.9
19	Germany	1	47640	37	61.2	14	67.1	33	76.1	13	63.0	70.5
20	Poland	1	13730	7	91.6	53	27.3	10	90.6	12	64.7	70.0
21	France	1	43080	33	66.4	15	67.0	42	63.2	22	56.6	68.6
22	Lithuania	1	15380	10	88.6	32	40.6	7	93.5	34	34.8	68.6
23	Chile	1	14900	19	81.1	24	46.1	9	91.6	33	39.6	68.4
24	Canada	1	51690	34	65.7	4	89.0	62	10.7			68.1
25	South Korea	1	27090	1	100.0	26	42.0	36	74.4	37	23.3	67.6
26	Argentina	1	14560	25	74.8	39	34.8	4	96.5			66.9
27	Russia	1	13210	11	88.2	60	21.7	19	86.3	8	69.4	66.2
28	New Zealand	1	39300	4	93.4	20	59.4	58	24.5	31	43.1	65.7
29	Kazakhstan	2	11670	12	87.5	42	31.9	14	88.5	26	45.0	65.5
30	Estonia	1	18530	21	79.0	27	41.9	31	79.4	27	44.5	64.2
31	Ukraine	3	3560	6	91.8	58	24.7	27	82.7	32	39.6	61.9
32	Japan	1	42000	30	70.1	37	35.6	23	84.4			61.9
33	Italy	1	34280	26	74.1	19	59.8	57	26.4			61.4
34	Latvia	1	15660	28	70.8	29	41.4	35	74.5	24	51.1	60.8
35	Croatia	1	13020	24	76.1	38	35.3	40	66.7			60.2
36	Spain	1	29940	16	82.2	17	66.0	63	6.7	30	43.2	60.0
37	Hungary	1	13470	38	60.3	34	40.1	28	82.0	35	33.3	53.5
38	Malaysia	2	10660	40	52.9	22	48.5	45	56.6			52.5
39	Uruguay	1	16360	39	53.3	48	29.8	16	88.0			51.2
40	Turkey	2	10850	23	76.3	59	22.5	54	45.5	18	60.0	50.8
41	Indonesia	3	3650	45	42.5	45	31.8	21	85.4	19	58.0	48.4
42	China	2	7380	51	28.5	55	26.8	26	83.7	15	60.8	40.6
43	Mexico	2	9980	41	49.2	52	27.8	52	49.4			38.2
44	Thailand	2	5410	44	44.8	56	26.6	46	56.3	29	43.8	38.0
45	Colombia	2	7780	42	45.1	50	28.4	43	62.7	36	32.1	37.7
46	South Africa	2	6800	47	37.2	30	41.1	39	70.3	38	12.8	37.3
47	Luxembourg	1	69880	50	33.1	28	41.6	51	50.1			37.2
48	Sri Lanka	3	3400	52	28.0	25	42.4	20	85.7	39	12.7	37.2
49	Peru	2	6410	43	45.1	51	28.1	11	90.3	44	0.0	36.6
50	Egypt	3	3280	46	37.3	64	0.0	13	89.1	11	64.9	34.9
51	Vietnam	3	1890	48	36.8	63	19.9	34	75.3			34.4
52	India	3	1610	53	23.5	49	29.7	37	72.5			31.9
53	Brazil	2	11760	54	19.4	46	31.6	1	100.0	40	7.4	30.8
54	Rwanda	4	650	62	3.0	44	31.8	6	94.3	28	44.5	30.6
55	Mali	4	720	61	4.1	57	24.8	3	97.7	25	50.6	30.1
56	Honduras	3	2190	55	17.9	62	21.1	44	62.0	16	60.6	28.9
57	Cote d'Ivoire	3	1550	60	5.6	35	39.6	5	94.9	43	1.9	26.1
58	Nepal	4	730	56	14.3	43	31.9	41	63.2			26.0
59	Philippines	3	3440	49	34.0	41	33.1	59	18.3			25.2
60	Bangladesh	3	1080	58	9.5	61	21.5	17	87.4			24.4
61	Ghana	3	1620	57	11.7	40	34.6	30	79.5	42	5.5	24.0
62	Pakistan	3	1410	59	6.4	47	30.0	29	80.1	41	7.2	20.3
63	Kenya	3	1280	64	0.0	31	40.8	61	12.8			10.3
64	Uganda	4	660	63	0.2	54	26.9	64	0.0			0.0

Access to Employment

The transition to work

Youth unemployment, although the tip of the iceberg when it comes to evaluating the youth condition globally, remains an important indicator of the difficulties of young people, regardless of the quality of their previous training, to find employment and start economic emancipation. It remains, however, a partial picture of youth's ability to find work.

Converting an educational background into a professional opportunity is without a doubt one of the greatest challenges facing young people. On the one hand, the educational training needs to match the needs of the labor market. On the other hand, the labor market needs enough openings to accommodate incoming young professionals. Access to work is a serious issue: research of several scholars, most notably Louis Chauvel, have shown that entering a weak labor market leads to a permanent loss of skills and revenue.

Many countries have started calculating the rate of young people that are neither in employment, education or training (NEET). Contrary to being unemployed, which does not imply being inactive — students can be unemployed if they want to work but cannot find work — NEETs are economically inactive and are excluded from the economically active life.

The Access to Employment pillar will therefore look at (1) youth unemployment, but also (2) time underemployment, (3) exclusion and (4) entrepreneurship as an alternative to finding existing jobs. Each sub-pillar is composed of a unique variable:

- Youth unemployment comes from the ILO and WB's unemployment rates for individuals ages 15 to 24.
- Partial unemployment is measured using the ILO's involuntary time-related underemployment for the 15 to 24-year-olds.

- Exclusion from the labor market is measured by the ILO and OECD rates of NEET in the 15 to 24-year-old population.

- The entrepreneurial environment is taken into account through the use of the Global Entrepreneurship Index, which blends social values toward entrepreneurship and institutional variables that enable successful entrepreneurship.

Table 6 presents the ranking of the Access to Employment pillar.

Results

Switzerland, Germany, Norway and the Netherlands top the Access to Work ranking. Although they have relatively low unemployment rates, the relative quality of their entrepreneurial environment and the low rate of exclusion (NEET rate), push those countries to the head of the ranking.

The lowest unemployment rates are to be found among the developing economies: Rwanda, Uganda, Thailand, Nepal or Côte d'Ivoire. These countries are, to a certain extent, dragged down by the underdeveloped entrepreneurial ecosystem.

The Access to Employment pillar is the least correlated with income per capita (0.35). It is more determined by the current economic tide and fluctuates more than the overall Youth Now Sub-Index. Hence, at the bottom of the ranking we find the developed economies hit hard by the aftermath of the 2008 economics crisis: Portugal (57th), Italy (59th), Greece (62nd) and Spain (64th).

Table 6 - Access to Employment pillar rankings

Note: When the underemployment or exclusion data was unavailable, their weight was transferred to unemployment



ACCESS TO
EMPLOYMENT

RANK	COUNTRY	UNEMPLOYMENT		ENTREPRENEURSHIP		UNDEREMPLOYMENT		EXCLUSION		Score
		Rank Score	Rank Score	Rank Score	Rank Score	Rank Score	Rank Score			
						48 countries		52 countries		
1	Switzerland	13	85.0	7	76.8	20	85.9	5	92.0	100.0
2	Germany	10	86.7	8	75.1	11	88.7	10	86.2	99.6
3	Norway	11	86.3	12	72.5	24	83.8	3	93.4	99.2
4	Netherlands	21	81.3	10	73.8	21	85.3	1	100.0	99.1
5	Canada	28	75.6	2	95.0	12	88.4	18	79.6	96.6
6	Austria	19	81.7	15	71.5	16	87.2	7	89.7	95.8
7	Rwanda	1	100.0	54	16.7			4	92.0	94.8
8	United States	27	75.8	1	100.0	23	83.8	30	72.1	94.4
9	Thailand	3	94.9	43	25.1	6	93.0			92.8
10	Denmark	25	77.3	6	80.7	31	73.7	11	86.2	90.4
11	Japan	7	89.5	28	49.7	28	77.4	8	88.8	90.2
12	Kazakhstan	4	93.9	51	19.8	7	91.4			89.6
13	Estonia	32	72.8	18	64.9	2	97.6	25	73.9	85.9
14	Australia	26	76.0	3	89.5	42	50.8	13	84.8	84.3
15	Cote d'Ivoire	6	90.5	58	13.7					83.9
16	Vietnam	8	89.5	49	20.4	10	89.0	12	85.9	83.4
17	Nepal	5	92.6	59	12.7			15	83.6	83.3
18	Uganda	2	96.4	63	1.0			16	82.8	83.0
19	Honduras	9	87.0	48	21.8					82.0
20	New Zealand	31	73.3	17	68.9	29	77.4	23	76.7	81.9
21	Malaysia	20	81.5	38	36.3	14	88.1			81.6
22	Czech Republic	35	71.0	29	48.9	5	94.8	17	81.3	81.0
23	South Korea	16	82.3	24	56.2			37	63.8	81.0
24	Luxembourg	51	58.3	20	60.6	9	89.9	2	97.1	80.1
25	China	17	82.1	41	31.2					78.6
26	Lithuania	43	64.6	22	56.9	8	90.5	21	77.9	76.9
27	Israel	22	81.1	19	64.4	15	87.5	48	38.5	76.3
28	Pakistan	12	85.1	62	8.1					75.0
29	India	18	81.9	56	15.4					73.1
30	Russia	29	75.0	44	24.5	3	95.1	28	73.0	73.0
31	Finland	49	62.3	11	72.7	37	61.2	14	83.9	72.9
32	Sweden	52	57.7	5	81.3	40	53.2	6	92.0	72.7
33	United Kingdom	38	69.1	4	82.6	46	46.8	27	73.3	72.4
34	Latvia	45	64.0	23	56.8	26	82.9	31	68.7	70.9
35	Ghana	24	80.0	57	14.7					70.4
36	Mali	23	81.0	60	11.5			19	79.0	69.9
37	Belgium	54	57.1	13	72.4	35	65.7	22	77.9	68.9
38	Slovenia	47	62.9	25	54.8	36	61.8	9	87.1	68.6
39	Chile	37	69.9	16	69.1			43	49.7	68.3
40	Ukraine	40	68.2	42	27.2	1	100.0	35	64.1	68.0
41	Colombia	33	71.4	30	47.5	38	58.4	20	78.2	67.8
42	France	53	57.1	9	74.9	41	52.6	24	74.7	64.4
43	Hungary	48	62.5	33	40.1	19	86.2	34	64.7	64.2
44	Mexico	15	83.2	47	23.1	30	76.8	45	48.3	63.7
45	Poland	55	55.8	31	46.7	25	82.9	29	72.7	63.5
46	Peru	30	74.7	46	23.4			32	66.4	63.4
47	Turkey	41	67.4	21	56.9	4	95.1	51	18.4	60.7
48	Sri Lanka	46	63.0	45	23.7	13	88.4			59.3
49	Kenya	39	68.8	50	20.0					57.3
50	Uruguay	42	64.8	35	38.2	32	70.9	42	51.7	55.8
51	Ireland	56	55.8	14	72.1	45	48.0	39	56.6	55.1
52	Argentina	44	64.4	40	32.3	39	58.1	33	65.2	53.8
53	Slovakia	57	44.8	32	43.9	22	85.0	38	62.9	52.8
54	Brazil	36	70.7	55	16.1			41	51.7	52.3
55	Philippines	34	71.4	53	18.8	34	68.2	47	45.4	50.8
56	Bangladesh	14	84.8	64	0.0			52	0.0	43.8
57	Portugal	59	35.0	26	51.6	43	49.8	26	73.9	40.9
58	Croatia	61	14.7	37	37.1	18	86.2	36	63.8	31.4
59	Italy	60	20.0	36	38.1	27	81.0	44	49.1	28.7
60	Egypt	58	36.2	52	19.4	33	69.4	50	34.5	24.5
61	Indonesia	50	60.2	61	9.3	48	0.0	49	36.8	14.9
62	Greece	63	1.5	34	39.1	44	48.6	40	55.2	8.1
63	South Africa	62	3.4	39	36.3	17	86.5			3.9
64	Spain	64	0.0	27	49.9	47	23.9	46	47.7	0.0

Work and Living Conditions

Essential needs for youth

Finding work is not the end of the story. Young workers are distinct from older workers — they need initial financial conditions that allow them to choose their preferred professional path, they need to be trained, and they need to be used up to their potential in order to fully develop their skills and be optimally prepared for the professional lives ahead. Young workers are also like any other worker: they aspire to good standards of living. And although they might pass through a phase of discrimination based on their lack of skills or experience, they eventually have to attain a standard of living that matches that of older workers. They aspire to gain a financial safety net and might want to buy a house, allowing them to gain social and financial independence.

To assess which countries offer the best work and living conditions, we look at five factors: (1) the wage level of the country (2) youth's financial vulnerability (3) youth's entry wage (4) access to housing (5) skill acquisition on the job.

- To assess wages levels, we use ILO wage estimates.
- Financial vulnerability is computed using two variables from the World Bank's Findex results: the share of youth who have been able to save in the past year, and the share of youth who say they could find funds in case of emergency, weighted one half. It is used to proxy youth's overall financial situation.
- Entry wage is determined by the World Bank's minimum wage for a 19-year-old worker or intern.
- Access to housing numbers are determined by the portion of youths aged 15 to 24 with a mortgage, as reported by the World Bank's Findex database, as well the Global Property guide estimate for the relative cost of housing.
- Skill acquisition numbers derive from the WEF's extent of staff training, as well as the ILO's estimate of overqualified young workers.

Results

The work and living conditions pillar shows the highest correlation with income per capita (0.87). The main drivers of the pillar are average wage and youth financial vulnerability. It is insufficient to have only high wages — youth must also have equal high wage-earning opportunities. In other words, relative incomes matter.

Indeed, the highest-ranked countries except for Luxembourg (2nd) — Norway, Germany, Switzerland, Finland and the Netherlands, Belgium or Denmark, score well on both average wages and youth financial vulnerability top the ranking.

The United States, Austria, France and the United Kingdom, to the contrary, are ranked in the top 15 for their high wages, but wage distribution is seemingly biased against younger people, so these countries score below 15 in the youth financial vulnerability sub-pillar.

In countries such as Malaysia, China, Thailand, Kenya, the Philippines and Uganda, the young enjoy low financial vulnerability, despite low average wages, which improves their ranking.

Figure 4 shows the relationship between average wages and youth financial vulnerability.

Figure 4 – Average Wages and Youth Financial Vulnerability

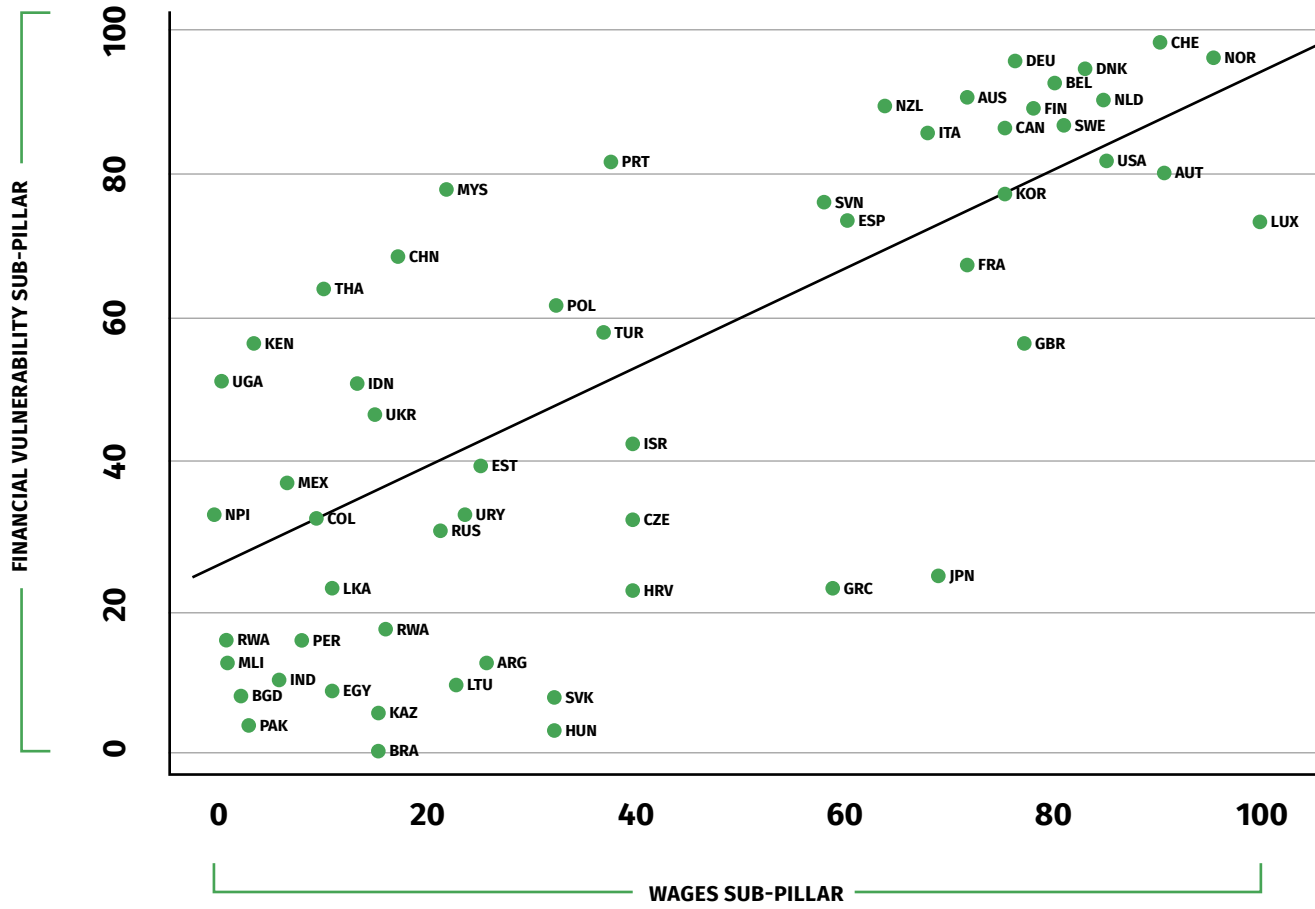


Table 7 - Work and Living Conditions pillar ranking



RANK	COUNTRY	INCOME		ENTRY WAGE		SKILL BUILDING		WAGES		FINANCIAL VULNERABILITY		ACCESS TO HOUSING		Score
		Group	per Capita	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	
1	Norway	1	103050	1	100.0	8	75.4	2	89.7	3	99.1	12	52.7	100.0
2	Luxembourg	1	69880	2	55.0	3	88.4	1	100.0	20	72.7	1	100.0	97.1
3	Germany	1	47640	14	25.9	5	80.6	16	65.7	2	99.4	2	78.8	84.2
4	Switzerland	1	90670	60	0.0	1	100.0	3	89.0	1	100.0	37	37.3	84.2
5	Finland	1	48910	4	44.6	6	79.9	12	70.9	8	89.6	3	66.5	83.6
6	Netherlands	1	51210	16	23.4	7	79.3	5	80.0	9	88.8	22	47.8	79.4
7	Belgium	1	47030	8	39.6	15	62.7	9	73.6	5	92.4	18	49.9	78.7
8	Denmark	1	61310	63	0.0	11	72.5	7	77.9	4	94.0	7	60.3	77.4
9	Australia	1	64680	3	47.8	16	61.6	17	63.0	6	91.8	11	55.4	77.0
10	New Zealand	1	39300	5	43.9	12	69.7	22	54.8	7	89.7	4	63.8	75.6
11	Ireland	1	44660	10	36.2	20	54.5	11	72.7	12	85.7	9	58.0	75.4
12	Canada	1	51690	9	39.4	17	60.6	15	65.8	10	88.1	16	50.8	74.3
13	United States	1	55200	12	28.3	10	72.7	6	79.3	16	77.6	34	39.4	73.5
14	Austria	1	50390	21	16.5	14	65.2	4	83.7	17	77.0	17	50.6	73.4
15	Sweden	1	61600	62	0.0	9	73.3	10	73.3	13	85.5	10	57.0	72.4
16	France	1	43080	18	17.7	23	51.4	14	69.9	23	65.4	14	52.6	62.6
17	United Kingdom	1	42690	11	30.8	32	42.9	8	74.4	29	56.8	29	43.0	60.3
18	Italy	1	34280	7	40.4	64	0.0	19	58.8	11	88.0	35	38.9	59.3
19	Portugal	1	21320	19	17.3	22	51.9	29	39.8	14	80.8	23	47.8	56.7
20	Spain	1	29940	17	22.9	43	34.1	20	56.5	21	71.1	30	41.3	55.9
21	South Korea	1	27090	20	16.5	36	41.3	13	70.3	18	75.9	61	3.0	55.8
22	Slovenia	1	23220	15	23.8	46	31.2	23	53.3	19	74.8	40	33.6	54.4
23	Malaysia	2	10660	44	4.5	4	86.4	40	21.7	15	78.8	13	52.6	54.3
24	Japan	1	42000	6	41.7	2	89.0	18	60.8	46	23.6	51	21.7	50.2
25	Poland	1	13730	32	9.3	33	42.5	30	36.1	24	64.5	36	37.7	44.9
26	Israel	1	34990	13	25.9	39	37.1	25	42.8	35	42.6	19	48.1	43.3
27	Turkey	2	10850	45	3.8	31	43.6	28	41.0	27	60.3	43	31.2	43.2
28	Czech Republic	1	18970	30	9.7	21	54.3	26	42.3	45	31.7	5	63.5	42.2
29	Latvia	1	15660	34	8.4	24	49.8	38	25.1	33	48.9	8	59.3	40.5
30	Estonia	1	18530	31	9.5	28	47.2	34	29.4	36	40.0	6	62.2	39.1
31	South Africa	2	6800	23	14.7	13	68.8	24	43.6	47	23.1	46	26.4	36.6
32	Greece	1	22090	22	15.2	52	25.9	21	55.2	48	22.9	26	43.8	36.2
33	China	2	7380	41	5.5	30	44.2	45	14.1	22	66.1	49	22.4	34.7
34	Thailand	2	5410	40	5.6	26	48.8	50	9.9	25	63.4	44	28.0	34.0
35	Croatia	1	13020	25	11.4	54	20.1	27	41.6	49	22.9	15	52.0	31.2
36	Uruguay	1	16360	35	8.3	49	28.9	33	29.4	40	34.2	32	40.2	29.8
37	Indonesia	3	3650	42	5.3	18	59.1	46	13.7	31	50.0	57	9.1	29.1
38	Philippines	3	3440	43	5.0	19	56.9	53	4.6	26	60.7	63	1.3	27.9
39	Russia	1	13210	36	8.0	55	17.1	35	28.1	41	33.5	31	41.2	27.1
40	Kenya	3	1280	49	2.7	25	49.8	60	2.1	30	55.6	52	21.2	27.0
41	Mexico	2	9980	47	2.9	47	30.8	48	12.9	37	39.3	24	47.6	26.5
42	Colombia	2	7780	38	7.0	50	28.1	43	15.0	38	35.0	28	43.0	25.1
43	Slovakia	1	17810	27	10.2	37	38.7	31	32.3	60	7.1	21	47.9	24.7
44	Vietnam	3	1890	52	1.7	51	27.7	51	6.2	28	60.1	55	11.0	24.3
45	Chile	1	14900	64	0.0	35	41.6	39	23.2	53	17.0	20	48.1	23.7
46	Hungary	1	13470	26	10.4	41	35.2	32	32.0	63	2.1	25	45.5	21.9
47	Ukraine	3	3560	46	3.0	58	10.1	44	14.8	34	46.8	48	22.8	21.8
48	Lithuania	1	15380	33	8.5	34	42.4	36	25.4	61	6.1	33	40.0	20.9
49	Argentina	1	14560	24	14.4	53	21.8	37	25.4	55	15.2	41	33.2	20.3
50	Honduras	3	2190	29	9.8	27	48.6	54	4.3	43	32.9	53	13.8	19.7
51	Uganda	4	660	58	0.1	56	16.0	63	0.2	32	49.2	45	27.3	18.9
52	Ghana	3	1620	56	0.6	40	35.9	57	3.9	44	32.7	42	32.2	18.8
53	Brazil	2	11760	28	10.0	29	44.8	41	17.1	64	0.0	38	35.7	15.8
54	Kazakhstan	2	11670	48	2.7	42	35.0	42	16.5	58	10.5	47	26.0	14.6
55	Sri Lanka	3	3400	54	0.9	38	38.0	47	13.6	50	21.7	60	3.8	13.8
56	Cote d'Ivoire	3	1550	61	0.0	45	32.6	58	2.9	42	33.0	62	2.1	12.6
57	Peru	2	6410	39	6.1	59	9.6	55	4.3	52	18.9	27	43.3	12.5
58	Nepal	4	730	51	1.7	61	6.0	61	1.2	39	34.7	50	22.3	11.8
59	Egypt	3	3280	50	2.5	57	10.8	49	11.4	56	11.5	39	34.7	10.4
60	Rwanda	4	650	59	0.0	44	33.9	64	0.0	51	19.5	58	9.0	8.3
61	India	3	1610	55	0.6	48	30.3	52	5.0	57	11.3	56	9.4	6.7
62	Pakistan	3	1410	53	0.9	60	7.6	56	4.0	62	4.5	54	13.0	0.7
63	Mali	4	720	57	0.3	62	4.5	62	0.3	54	15.7	64	0.0	0.4
64	Bangladesh	3	1080	37	7.6	63	0.8	59	2.4	59	8.2	59	4.8	0.0

Health and Wellbeing

Young life at its fullest potential

The ability to acquire skills and a stable job does not tell the whole story. In some countries where students perform the best, suicide rates are high. In others, where people work the most, they also report poor health. The Health and Wellbeing pillars go beyond the education-employment nexus to take into account an individual's ability to live well.

The Wellbeing pillar. A number of problems arise when trying to measure wellbeing. The lack of complete data and the subjectivity of the concept render any combination of variables unsatisfactory. By construction our wellbeing pillar will reflect an incomplete definition of wellbeing.

The Wellbeing pillar looks at the social dimension of wellbeing, the personal dimension and the extent of individual liberties. The social component looks at social cohesion and trust, as well as social violence and safety. The personal component looks into the mental and behavioral state of the youth population.

Wellbeing is composed of (1) Social Cohesion (2) Safety (3) Suicide (4) Dangerous Behaviors (5) Political Liberties (6) Civil liberties.

- Social cohesion blends income inequality as measured by the World Bank's GINI index, and UNESCO's Gallup survey of trust people feel toward one another.
- Safety is evaluated using WHO's 15-to-29- year-old mortality data for cause of interpersonal violence, as well as UNESCO's Gallup survey on feeling safe.
- Suicide ratings correspond to the WHO'S mortality rate of 15 to 29-year-olds from self-harm.
- The Dangerous behavior measure incorporates the WHO's DALY measure of health damages from (1) sexually-transmitted diseases, (2) alcohol consumption, (3) drug use, for population aged 15 to 29.

— The political rights sub-pillar is composed of the Freedom Index for political rights.

— The civil liberties sub-pillar is composed of the Freedom Index for civil liberties.

The Health pillar. The Health pillar is determined by only three variables: WHO's total mortality rate for 15 to 29-year-olds, the World Bank's life expectancy at birth estimate and the survey of the perceived health status of 15 to 24-year-olds.

Results: Wellbeing Pillar

The Netherlands, Spain, Denmark and Italy top the wellbeing findings, followed by Germany, Portugal and Switzerland.

Norway, followed by Denmark and Norway and Switzerland display the highest level of social wellbeing, led by very low homicide rates. Egypt, Bangladesh and Spain score the best in personal wellbeing

While most developed economies achieve the high scores in personal wellbeing, Russia, Rwanda, Vietnam and China score the lowest.

Results: Health Pillar

In the Health pillar, Israel ranks first, followed by Spain, Italy, Switzerland, Greece and the Netherlands. Sub-Saharan African countries - Kenya, Mali, South Africa, Uganda and Cote d'Ivoire - constitute the bottom-five countries in the Health pillar.

Table 8a - Wellbeing pillar rankings



WELLBEING

RANK	COUNTRY	INCOME		SOCIAL		INDIVIDUAL		FREEDOM		SCORE
		Group	per Capita	Rank	Score	Rank	Score	Rank	Score	
1	Netherlands	1	51210	7	92.2	6	90.9	1	100	100.0
2	Spain	1	29940	17	87.5	3	95.0	1	100	99.7
3	Denmark	1	61310	2	96.6	10	83.7	1	100	98.7
4	Italy	1	34280	24	81.8	5	93.5	1	100	96.3
5	Germany	1	47640	13	89.9	16	80.1	1	100	93.8
6	Portugal	1	21320	27	80.9	8	88.6	1	100	93.5
7	Switzerland	1	90670	6	92.4	21	76.9	1	100	93.4
8	Norway	1	103050	1	100.0	46	64.0	1	100	90.9
9	France	1	43080	23	82.0	13	81.6	1	100	90.7
10	Australia	1	64680	11	90.1	27	72.7	1	100	90.3
11	New Zealand	1	39300	16	88.6	31	71.7	1	100	89.1
12	Sweden	1	61600	4	95.4	42	64.3	1	100	88.8
13	Israel	1	34990	28	80.8	9	87.5	32	90.9	88.5
14	Canada	1	51690	8	92.0	38	65.9	1	100	88.0
15	Luxembourg	1	69880	19	86.0	34	71.1	1	100	87.6
16	United Kingdom	1	42690	14	89.1	36	67.8	1	100	87.4
17	Belgium	1	47030	21	83.8	29	72.3	1	100	87.1
18	Austria	1	50390	10	90.8	47	63.9	1	100	86.4
19	Japan	1	42000	12	90.0	45	64.1	1	100	86.1
20	Slovenia	1	23220	15	88.7	44	64.1	1	100	85.5
21	Czech Republic	1	18970	29	80.0	33	71.4	1	100	84.8
22	Ireland	1	44660	18	86.9	48	62.9	1	100	84.1
23	Slovakia	1	17810	30	77.3	35	69.9	1	100	82.8
24	Finland	1	48910	5	94.0	54	51.7	1	100	82.1
25	Greece	1	22090	33	72.6	7	90.3	37	81.8	81.6
26	Poland	1	13730	22	82.8	51	58.1	1	100	79.8
27	United States	1	55200	26	81.3	52	55.9	1	100	78.0
28	Chile	1	14900	35	72.0	41	64.9	1	100	77.9
29	Ghana	3	1620	46	62.5	11	83.0	30	90.9	77.7
30	Indonesia	3	3650	9	91.0	17	79.9	43	63.6	76.7
31	Croatia	1	13020	37	67.2	24	74.9	31	90.9	76.0
32	Uruguay	1	16360	50	54.8	28	72.3	1	100	73.2
33	South Korea	1	27090	20	84.1	49	59.5	35	81.8	72.4
34	Bangladesh	3	1080	34	72.0	2	95.7	48	45.5	66.5
35	Hungary	1	13470	31	76.0	55	50.0	33	81.8	64.0
36	Estonia	1	18530	25	81.5	62	18.6	1	100	60.3
37	Turkey	2	10850	36	71.3	25	74.2	47	54.5	60.2
38	South Africa	2	6800	60	37.8	19	77.7	38	81.8	58.9
39	Peru	2	6410	55	48.2	23	75.1	41	72.7	58.3
40	Argentina	1	14560	56	47.7	39	65.5	39	81.8	57.8
41	Mexico	2	9980	54	48.5	14	80.5	45	63.6	56.7
42	Philippines	3	3440	53	50.5	20	77.6	42	63.6	56.2
43	Latvia	1	15660	48	61.3	56	43.6	34	81.8	53.8
44	India	3	1610	32	75.4	59	36.7	40	72.7	52.9
45	Pakistan	3	1410	51	53.8	4	93.6	53	36.4	52.4
46	Egypt	3	3280	43	64.9	1	100.0	59	18.2	52.1
47	Mali	4	720	39	66.2	15	80.4	54	36.4	52.0
48	Malaysia	2	10660	52	52.0	12	82.4	51	45.5	50.5
49	Brazil	2	11760	62	21.9	30	71.8	36	81.8	48.5
50	China	2	7380	3	96.6	18	78.4	64	0.0	48.2
51	Lithuania	1	15380	49	59.2	63	12.7	1	100	46.7
52	Nepal	4	730	44	63.7	50	58.8	49	45.5	44.8
53	Ukraine	3	3560	45	63.6	60	36.6	44	63.6	42.9
54	Vietnam	3	1890	38	66.9	22	76.4	62	9.1	37.4
55	Thailand	2	5410	40	65.9	37	65.9	60	18.2	36.2
56	Kenya	3	1280	57	46.6	53	54.3	50	45.5	34.5
57	Cote d'Ivoire	3	1550	59	38.6	43	64.3	55	36.4	31.0
58	Honduras	3	2190	63	13.6	32	71.5	52	45.5	26.9
59	Sri Lanka	3	3400	42	65.0	58	37.7	56	27.3	26.6
60	Colombia	2	7780	64	0.0	26	72.8	46	54.5	25.4
61	Rwanda	4	650	58	42.4	40	65.3	61	9.1	20.3
62	Kazakhstan	2	11670	47	61.4	61	27.1	58	18.2	15.5
63	Uganda	4	660	61	27.1	57	40.6	57	18.2	5.5
64	Russia	1	13210	41	65.3	64	0.0	63	9.1	0.0

Table 8b - Health pillar rankings



RANK	COUNTRY	INCOME		HEALTH Score
		Group	per Capita	
1	Israel	1	34990	100.0
2	Spain	1	29940	99.5
3	Italy	1	34280	98.1
4	Switzerland	1	90670	98.0
5	Greece	1	22090	97.4
6	Netherlands	1	51210	97.4
7	Luxembourg	1	69880	96.7
8	Ireland	1	44660	96.3
9	Canada	1	51690	95.8
10	Germany	1	47640	95.8
11	Austria	1	50390	95.8
12	France	1	43080	95.6
13	Sweden	1	61600	95.5
14	Belgium	1	47030	95.5
15	Australia	1	64680	95.2
16	Norway	1	103050	94.6
17	United Kingdom	1	42690	94.4
18	Slovenia	1	23220	94.2
19	Czech Republic	1	18970	94.2
20	New Zealand	1	39300	94.1
21	Croatia	1	13020	92.8
22	Chile	1	14900	92.7
23	Denmark	1	61310	92.7
24	United States	1	55200	91.5
25	Hungary	1	13470	91.2
26	Slovakia	1	17810	91.2
27	Finland	1	48910	90.7
28	Portugal	1	21320	90.5
29	Poland	1	13730	90.4
30	China	2	7380	89.0
31	Uruguay	1	16360	87.0
32	Argentina	1	14560	85.7
33	Latvia	1	15660	84.9
34	Malaysia	2	10660	84.7
35	Peru	2	6410	84.5
36	Vietnam	3	1890	83.2
37	Estonia	1	18530	82.9
38	Mexico	2	9980	82.8
39	Turkey	2	10850	82.7
40	Lithuania	1	15380	82.3
41	Sri Lanka	3	3400	81.4
42	Egypt	3	3280	81.3
43	Thailand	2	5410	80.8
44	Bangladesh	3	1080	78.2
45	Indonesia	3	3650	76.9
46	Ukraine	3	3560	76.4
47	Honduras	3	2190	76.1
48	South Korea	1	27090	76.0
49	Colombia	2	7780	75.6
50	Japan	1	42000	74.7
51	Brazil	2	11760	72.6
52	Philippines	3	3440	72.5
53	Kazakhstan	2	11670	71.3
54	Pakistan	3	1410	69.9
55	Nepal	4	730	69.6
56	Russia	1	13210	67.8
57	India	3	1610	63.1
58	Rwanda	4	650	46.3
59	Ghana	3	1620	39.6
60	Kenya	3	1280	28.2
61	Mali	4	720	27.3
62	South Africa	2	6800	24.2
63	Uganda	4	660	16.9
64	Cote d'Ivoire	3	1550	0.0

PART C:



— The Youth Outlook — PILLARS

After evaluating the present situation of youth, we now seek to add a dynamic element by looking at likely developments over the coming years. In what world will today's youth live in the foreseeable future?

Note on the treatment of environmental issues. Youthonomics is a depiction of the youth condition today and its short to medium-term possibilities of improvement. Therefore, environmental issues are only relevant to a certain extent, as their effects are realized in part over the long-term. The Youthonomics Global Index takes into consideration environmental effects on youth through health and resource management: its effects are accounted for (1) implicitly in the health pillar (2) explicitly as one of the two indicators of economic sustainability.

Note on the limits of the Youth Outlook Sub-Index. Some countries, and therefore those countries' youth, are vulnerable to unforeseeable external economic or political shocks, which can greatly affect the youth condition. However, modeling these risks is a complex, if not impossible venture. Accordingly, the Youth Outlook Sub-Index does not try to proxy those risks and only relies on current data and relatively conservative institutional economic and demographic projections. For this reason, neither can it take into account current events and their effect on the evolution of the youth condition.

Chapter 10:	Public Finance Intergenerational financial responsibility
Chapter 11:	Economic Opportunities Growth and investment in youth
Chapter 12:	Political Weight Young people's influence

Public Finance

Intergenerational financial responsibility

Public finance is one of two ways of transferring a country's financial wealth between generations. Private transfers, such as paying for one's child education, or inheritance, can also take place, but mostly between family members. Public finance is, however, an underpublicized means of transferring resources between generations. That is due in part to the technical nature of public finance and the lack of understanding of the implications of its large liabilities.

On the other hand, the lack of visibility of public finance issues stems from the fact that a large share of these liabilities are implicit: they have not yet been realized, although they have been pledged. In several countries the value of unfunded liabilities in pension payments or health care, for instance, is double the size of the public debt.

The first part of the Public Finance pillar examines explicit public finance liabilities — the debt left to pay back or rollover, the deficits left to curb, the remaining ability to borrow and the fiscal savings. The second part includes the fiscal gap, or implicit liabilities, and the long-term demographic trends that will jointly determine budgetary evolution.

The Explicit Liabilities sub-pillar is made up of four variables:

- The IMF's estimate of the cyclically adjusted budgetary deficit. Because no deficits are sustainable, a deficit today means a surplus to come. In other words, a deficit country will have to go through budgetary contraction sooner or later, and hence cut expenditures or raise taxes.
- The IMF's general government net debt. A large debt constitutes a weight on youth because: it has a cost in the form of interest and principal payments. Interest payments are reflected in the budgetary

balance, but debt also absorbs resources to rollover, resources that could be used for other purposes such as consumption or investment. This eviction effect is a consequence of spending by earlier generations, and will have consequences on spending for future generations.

- General government savings, which are proxied by the amount of negative net debt, and represent government savings that can be used for younger generations.
- The IMF's projected difference between interest rates and growth rates. The former is an indication of the cost of borrowing, while the latter is an indication of the ability to pay. The difference therefore constitutes a strong indicator of the ability of a country to keep on borrowing.

The Implicit Liabilities sub-pillar is composed of three variables:

- The IMF's Net Present Value (NPV) of expenses in health care in the next 35 years as a share of GDP.
- The IMF's NPV of unfunded pension expenditures in the next 35 years, as a share of GDP
- The change in the share of active population, which is used a proxy for the evolution of the share of net contributors to the state budget.

The average of both subsections yields the public finance pillar.

Do these measures tell us the whole story about the direction of public finance? Surely not.

A favorable economic cycle can help finance these liabilities, and alleviate the risks associated with them. Public finance liabilities can therefore be

useful if they are intended to ameliorate economic prospects. The Economic Environment Index presented in the next section will examine this. These public liabilities also can benefit youth, and in these cases the fact that they will bear the costs of these liabilities is defensible. The Political Weight Index completes the analysis by assessing whether or not public finance liabilities indeed target youth, and if youth interest will be represented in future policymaking.

Results

Norway, Kazakhstan, Uganda and Nepal top the public finance pillar ranking.

The top 10 is made up of “three groups”.

- The first is of developed countries, which have built implicit liabilities for pensioners and the eldest, but have low debt and/or deficit, which compensates for these liabilities. Norway, Kazakhstan, Sweden and Estonia are included in this list. Norway’s large advance on explicit liabilities is worth detailing. The large revenues the country generates from the oil industry is partly used to make a sovereign fund for future generations, which now has more than a million kroner (\$120,000) per Norwegian.
- The second is one of developing economies that have not yet built these safety nets, such as Uganda, Nepal, Côte d’Ivoire, and Rwanda, while their population is young and activity rates will increase.
- Third, Indonesia and the Philippines, ranked fourth and fifth, have a strong score in both kinds of liabilities.

Japan, the US, Korea, Belgium and Brazil are the bottom five countries in the Public Finance pillar. They have large liabilities, while their active populations are set decrease.

Table 9 - Public Finance pillar rankings



RANK	COUNTRY	INCOME		EXPLICIT LIABILITIES		IMPLICIT LIABILITIES		PUBLIC FINANCE
		Group	per Capita	Rank	Score	Rank	Score	Score
1	Norway	1	103050	1	100.0	47	34.5	100.0
2	Kazakhstan	2	11670	2	71.4	19	60.5	97.6
3	Uganda	4	660	36	27.8	1	100.0	93.5
4	Nepal	4	730	10	42.4	7	82.0	90.3
5	Philippines	3	3440	12	40.3	9	77.4	83.9
6	Indonesia	3	3650	8	47.0	16	66.4	79.7
7	Cote d'Ivoire	3	1550	37	26.9	3	86.3	79.5
8	Sweden	1	61600	7	48.8	18	62.0	77.1
9	Rwanda	4	650	33	30.2	8	80.5	77.1
10	Estonia	1	18530	4	52.9	22	56.7	76.0
11	Pakistan	3	1410	39	25.3	6	84.1	75.8
12	Ghana	3	1620	42	24.2	5	84.1	74.8
13	Honduras	3	2190	21	35.1	11	72.7	74.3
14	Mali	4	720	59	13.8	2	91.7	72.1
15	Argentina	1	14560	3	57.8	33	46.2	70.7
16	Latvia	1	15660	18	36.6	17	65.4	68.7
17	Bangladesh	3	1080	27	33.5	13	66.7	67.1
18	Kenya	3	1280	60	11.9	4	86.3	65.0
19	India	3	1610	45	21.7	10	73.9	62.5
20	Finland	1	48910	5	52.5	37	43.0	62.5
21	Peru	2	6410	16	38.1	23	56.5	61.6
22	Uruguay	1	16360	11	41.6	28	49.5	58.2
23	South Africa	2	6800	44	22.1	12	68.9	58.1
24	Malaysia	2	10660	32	30.2	20	58.6	56.1
25	Denmark	1	61310	22	34.9	27	51.7	53.9
26	Czech Republic	1	18970	19	36.1	32	47.3	50.9
27	Ukraine	3	3560	25	34.0	29	48.6	50.1
28	Lithuania	1	15380	28	33.4	30	48.6	49.5
29	Chile	1	14900	26	33.8	31	48.1	49.4
30	Israel	1	34990	58	13.9	15	66.5	48.0
31	Sri Lanka	3	3400	46	21.6	24	56.3	45.5
32	China	2	7380	6	52.2	57	25.2	45.1
33	Colombia	2	7780	53	18.5	21	57.6	43.8
34	Mexico	2	9980	50	20.4	25	55.5	43.6
35	France	1	43080	49	21.4	26	53.8	43.0
36	Russia	1	13210	29	32.9	39	40.7	41.4
37	Luxembourg	1	69880	9	44.5	54	27.4	39.7
38	Germany	1	47640	17	36.9	48	33.8	38.6
39	Ireland	1	44660	41	24.3	35	45.2	37.5
40	Poland	1	13730	35	28.2	40	40.6	36.8
41	Greece	1	22090	30	30.5	43	37.6	36.2
42	Hungary	1	13470	48	21.6	34	46.2	35.8
43	Slovakia	1	17810	24	34.2	51	32.6	34.8
44	Australia	1	64680	38	26.2	41	40.6	34.8
45	Egypt	3	3280	64	0.0	14	66.5	34.6
46	Italy	1	34280	51	20.0	36	44.3	32.4
47	Turkey	2	10850	31	30.5	50	32.9	31.6
48	Canada	1	51690	34	28.3	49	33.7	30.2
49	Austria	1	50390	40	25.2	46	35.1	28.7
50	United Kingdom	1	42690	54	17.2	38	42.1	27.7
51	Switzerland	1	90670	23	34.7	58	23.8	26.9
52	New Zealand	1	39300	20	35.6	59	21.9	26.0
53	Thailand	2	5410	13	40.2	61	17.1	25.7
54	Netherlands	1	51210	15	38.6	63	14.1	21.4
55	Croatia	1	13020	61	11.8	42	39.1	19.6
56	Portugal	1	21320	56	14.6	45	35.7	19.0
57	Spain	1	29940	47	21.6	56	27.1	17.4
58	Slovenia	1	23220	55	16.7	53	28.4	14.0
59	Vietnam	3	1890	57	14.5	52	29.4	12.8
60	Japan	1	42000	62	4.5	44	36.4	10.0
61	United States	1	55200	52	19.9	60	20.0	9.0
62	South Korea	1	27090	14	39.3	64	0.0	8.4
63	Belgium	1	47030	43	22.3	62	15.8	7.3
64	Brazil	2	11760	63	3.2	55	27.3	0.0

Economic Opportunities

Growth and investment in youth

The best remedy for underinvestment in education and training, for unemployment and low wages, as well as for health conditions arguably remains economic growth and investment. They will help the state finance new endeavors, allow businesses to hire and indeed the correlation between the Youth Now Sub-Index and income per capita is over 0.8. Therefore, economic opportunity will be a key driver of youth conditions in the future. Moreover, growth will ease the constraint brought about by public finance developments.

The Economic Opportunities pillar looks at these issues in two ways: (1) Economic Cycle and (2) Sustainability.

The economic cycle sub-pillar is derived from the IMF's projected cumulative growth rate through 2020, and the 2015 estimate of the total investment rate (total investment weighted by GDP), a key driver of growth and employment. The next five years is when most of current youth will be entering the labor market and acquiring skills. By 2020 the youngest will be 20 years old, the oldest 34 years old. Investment rates have been identified by scholars as the prime driver of job creation, and therefore of youth unemployment rates in the medium term. Moreover, investment adds to the stock of existing capital and increases (or slows down the decrease of) capital per worker, the main driver of wage levels. This variable also serves to dampen the gravity of the Public Finance pillar: if deficits are run in a context or in order to foster public or private investment, youth benefit from current deficits.

Sustainability comprises a mix of the Global Innovation Index and the Environment Protection Index. It tells us on one hand about long-term growth potential and on the other hand about the constraints this growth will encounter. The Global Innovation Index serves as an indicator of economic sustainability. It tells us if a country can create new economic opportunities for itself, as it focuses on productive activities as opposed, say, to resource-led growth. The GII focuses on the portions of the economic environment—institutions, human capital, infrastructures, market sophistication, business

sophistication, knowledge & technology outputs and creative inputs — that will be key in generating sustainable growth. The Environmental Protection Index is used as a proxy for the ability of a country to keep on benefiting from its existing natural resources, the extent of future constraints on growth from environmental concerns, and the maintaining of current health levels. Indeed, the current protection of the environment will weigh on upcoming youth economic opportunities.

Results

The top three in Economic Opportunities include China, Australia and Switzerland. China has great growth prospects and enormous investment levels (47% of GDP in 2015), and the two followers have a great record in sustainability.

This is a tendency that repeats itself; countries with fast growth have low sustainability prospects and countries with sustainable growth have low levels of growth. The correlation between the projected five-year growth and sustainability is -0.6. Countries grow fast at first, and gradually develop the human capital, technology, and infrastructure. They tackle environmental issues to make their growth, although lower, sustainable. Countries that rank well in the Economic Opportunity pillar are therefore fast-growing countries, which quickly build up the capacity for sustainable growth (such as China or Malaysia), or countries that already have better conditions for sustainable growth but nonetheless still reach high growth rates. Examples of this are Australia or, one could argue, Switzerland or Sweden when the European growth crisis abates.

The bottom four countries are Russia, Mali, Pakistan and Argentina. Russia and Argentina have very low growth, as well as poor sustainability prospects, while Mali and Pakistan, although they have some growth, cannot hope for it to be sustainable at this point. The same could be said of Nepal, Côte d'Ivoire, Ghana, Bangladesh or Kenya: these countries need to use their growth to invest in sustainability: human capital, infrastructure, innovation, and resource protection.

Table 10 - Economic Opportunities pillar rankings



ECONOMIC OPPORTUNITIES

RANK	COUNTRY	INCOME		CYCLE		SUSTAINABILITY		SCORE
		Group	per Capita	Rank	Score	Rank	Score	
1	China	2	7380	1	100.0	36	43.9	100.0
2	Australia	1	64680	22	36.2	7	83.8	78.1
3	Switzerland	1	90670	43	16.3	1	100.0	74.8
4	South Korea	1	27090	18	43.5	22	70.3	72.5
5	Sweden	1	61600	37	23.7	2	89.7	72.2
6	Estonia	1	18530	21	37.0	18	73.6	69.7
7	Norway	1	103050	30	27.7	10	81.3	68.1
8	Malaysia	2	10660	14	50.1	33	54.8	64.4
9	India	3	1610	2	85.9	57	18.9	64.3
10	Czech Republic	1	18970	31	27.1	16	77.0	63.7
11	New Zealand	1	39300	36	24.2	14	78.7	62.6
12	United Kingdom	1	42690	54	12.3	3	89.3	61.4
13	Canada	1	51690	39	22.9	15	78.3	61.0
14	Sri Lanka	3	3400	6	70.8	50	29.9	60.5
15	Finland	1	48910	48	14.0	6	86.0	59.9
16	Luxembourg	1	69880	55	11.6	5	86.8	58.5
17	United States	1	55200	41	18.5	12	79.1	57.7
18	Netherlands	1	51210	56	10.2	4	87.3	57.7
19	Indonesia	3	3650	5	71.0	51	26.3	57.5
20	Denmark	1	61310	50	13.7	9	82.8	56.8
21	Israel	1	34990	38	23.4	20	72.0	55.7
22	Ireland	1	44660	46	14.9	11	80.2	55.5
23	Austria	1	50390	47	14.5	13	78.7	53.8
24	Germany	1	47640	58	9.4	8	83.6	53.6
25	Chile	1	14900	23	35.0	31	56.4	52.1
26	Latvia	1	15660	24	33.4	29	57.3	51.5
27	Rwanda	4	650	3	72.9	59	16.5	50.3
28	Thailand	2	5410	16	46.8	39	42.0	49.7
29	France	1	43080	44	16.2	21	71.8	49.0
30	Spain	1	29940	53	13.0	17	74.7	48.7
31	Slovakia	1	17810	34	25.1	28	61.4	47.6
32	Vietnam	3	1890	8	59.9	52	25.6	46.7
33	Uganda	4	660	7	63.9	55	21.6	46.6
34	Belgium	1	47030	45	16.2	24	67.9	45.4
35	Slovenia	1	23220	51	13.6	23	69.5	44.5
36	Poland	1	13730	33	26.0	32	56.1	43.6
37	Peru	2	6410	13	51.3	49	30.5	43.3
38	Japan	1	42000	60	8.3	19	73.0	42.9
39	Hungary	1	13470	42	17.0	27	61.7	40.5
40	Kenya	3	1280	9	57.6	56	21.0	40.4
41	Lithuania	1	15380	35	24.9	35	50.5	37.4
42	Colombia	2	7780	20	39.3	45	35.7	37.1
43	Kazakhstan	2	11670	19	42.4	48	32.6	37.1
44	Bangladesh	3	1080	4	71.2	63	3.1	36.4
45	Philippines	3	3440	15	49.9	53	23.7	35.8
46	Cote d'Ivoire	3	1550	11	53.7	58	16.8	33.0
47	Turkey	2	10850	29	28.1	38	42.2	32.9
48	Mexico	2	9980	26	30.3	41	39.5	32.4
49	Italy	1	34280	62	3.2	26	66.1	31.9
50	Portugal	1	21320	63	1.0	25	67.0	30.8
51	Ghana	3	1620	12	52.3	60	15.3	30.3
52	Uruguay	1	16360	27	30.2	43	37.0	30.0
53	Greece	1	22090	59	9.3	30	56.8	28.9
54	Nepal	4	730	10	54.1	61	10.8	27.9
55	Egypt	3	3280	32	26.1	44	36.5	25.8
56	Croatia	1	13020	57	9.9	34	50.8	24.1
57	South Africa	2	6800	40	19.2	40	41.2	23.8
58	Honduras	3	2190	25	31.2	54	23.3	18.4
59	Brazil	2	11760	49	13.9	42	38.4	16.4
60	Ukraine	3	3560	52	13.5	46	35.4	13.4
61	Russia	1	13210	61	4.3	37	42.3	11.2
62	Mali	4	720	17	43.5	64	0.0	8.4
63	Pakistan	3	1410	28	28.8	62	9.3	3.4
64	Argentina	1	14560	64	0.0	47	34.3	0.0

Political Weight

Young people's influence

The Political Weight pillar asks if youth have been listened to, if they are listened to now, and if it is likely that they will be able to voice their interests and shape public policy in the coming years.

An improvement in the public finance burden left by previous policymakers or a just repartition of the gains of economic growth both require one thing: that youth are heard and cared about by national policymakers. Political weight will translate into age-based improvements in education, health policies and in the institutional determinants of labor opportunities.

Political Weight is measured through (1) the current economic and political bias against youth, which can be seen as a consequence of previous political weight (2) implicit political weight, measured by the share of youth in the voting population and (3) explicit political weight, or potential for direct impact on policymaking. They are constructed as follows:

- The current bias against youth is measured through an “institutional bias” and a “budgetary bias”. The former is the ratio of the unemployment rate of the 15 to 24-year-old group to the unemployment rate of the population over 25. Although a certain level of discrimination against youth can be seen as emanating from their lower level of experience, relative unemployment has very different magnitudes across countries. The “budgetary bias” measure is the share of education expenditures in the budget — the only expenditures category that almost entirely benefits youth.
- Implicit political weight is measured by taking the share of the 20 to 30-year-olds in the population divided by the population aged 20 and over. It is a measure of implicit political weight, both in democratic countries where policymakers have to anticipate voter's demands, and in less democratic

countries where the youth have the potential to generate social and political instability if mistreated. Demographics to a large extent determine political weight.

- Explicit political weight is a measure of young people's direct impact on policymaking. It is calculated using (1) the Economist Intelligence Unit Democracy Index, which tells us about the openness of policymaking to new actors, (2) the share of parliamentarians aged younger than 40 years old and (3) the surveyed share of youth who say they would not vote if there were general elections tomorrow.

Results

Five sub-Saharan African countries top the political weight ranking: Ghana, Mali, Rwanda, Kenya, and Uganda. Along with Honduras, ranked sixth, they share similar features.

First, they represent a large share of the population. As such, policymakers have no choice but to put them on top of the agenda if they seek re-election or social stability.

Second, they are not marginalized: they don't suffer discrimination in employment, and the government devotes a large share of the budget to them. Ghana has the largest share of government expenditures devoted to education in the entire sample.

Third, they are not the countries with the worst access to policymaking, although there is much progress to be made on this level.

Would that mean that aging countries couldn't fare well in the political weight pillar? No.

Countries such as Denmark, Norway, Sweden or the Netherlands rank no lower than the 22nd place and that is because, despite a shrinking share of youth in society and varying levels of marginalization, young people have a direct say in policymaking. These four countries take the four top spots in the policymaking ranking. They are democratic countries have some of the highest ratios of young citizens in parliament, and their young people are interested in politics.

On the other side of the spectrum, developed countries such as France, Great Britain, Portugal, Spain or Italy rank in the bottom 20 countries in youth political weight.

Also, does this mean all developing economies score well in political weight? No. The bottom four countries are Thailand, Vietnam, China and Sri Lanka, which all have in common a young population but high levels of youth discrimination and extremely limited access for youth in policymaking.

The conclusion is that youth political weight is not a deterministic variable that follows the average age of population. It can and needs to be encouraged — by companies, by voters, and by policymakers.

Table 11 - Political Weight pillar rankings



POLITICAL WEIGHT

RANK	COUNTRY	INCOME		BIAS AGAINST YOUTH		IMPLICIT WEIGHT		EXPLICIT WEIGHT		POLITICAL WEIGHT Score
		Goup	per Capita	Rank	Score	Rank	Score	Rank	Score	
1	Ghana	3	1620	5	83.1	7	78.2	44	53.4	100.0
2	Mali	4	720	10	75.1	2	88.5	51	40.1	92.8
3	Rwanda	4	650	9	75.8	4	85.2	53	37.8	89.6
4	Kenya	3	1280	12	71.9	3	87.0	52	39.3	89.2
5	Uganda	4	660	17	66.6	1	100.0	55	31.3	89.0
6	Honduras	3	2190	7	77.7	6	78.5	50	40.9	88.5
7	South Africa	2	6800	16	67.6	12	63.7	32	62.4	86.2
8	Philippines	3	3440	28	61.0	9	68.3	37	57.6	81.8
9	Mexico	2	9980	15	68.2	18	50.8	34	59.6	76.3
10	Denmark	1	61310	21	63.9	49	14.2	2	96.6	73.8
11	Turkey	2	10850	4	83.8	22	43.5	48	47.4	73.7
12	Kazakhstan	2	11670	1	100.0	20	47.9	58	24.6	72.3
13	Bangladesh	3	1080	6	78.2	11	64.8	57	29.5	72.3
14	Colombia	2	7780	18	66.0	19	49.4	39	56.9	72.2
15	Cote d'Ivoire	3	1550	2	84.1	5	81.3	63	5.4	71.2
16	Chile	1	14900	27	61.5	25	37.4	15	70.7	70.4
17	Norway	1	103050	32	59.6	40	18.2	3	91.8	70.4
18	Brazil	2	11760	14	70.0	23	41.0	36	58.2	70.1
19	Nepal	4	730	8	76.3	10	67.8	59	24.4	69.7
20	Pakistan	3	1410	44	55.1	8	78.0	54	34.4	69.0
21	Sweden	1	61600	56	48.2	39	18.3	1	100.0	68.4
22	Netherlands	1	51210	22	63.9	56	12.0	4	88.4	66.9
23	Peru	2	6410	50	52.6	16	55.8	43	53.5	65.3
24	India	3	1610	60	39.6	15	56.6	30	63.4	63.8
25	New Zealand	1	39300	38	58.0	30	24.5	13	72.9	61.1
26	Israel	1	34990	24	62.9	27	34.3	38	57.5	60.6
27	Australia	1	64680	41	57.1	33	22.8	11	73.9	60.1
28	Ireland	1	44660	30	60.3	46	15.9	8	76.3	59.2
29	United States	1	55200	37	58.1	34	22.6	14	71.3	58.9
30	Greece	1	22090	3	84.0	61	2.7	27	64.6	58.5
31	Canada	1	51690	35	58.3	41	17.8	12	73.8	57.5
32	Argentina	1	14560	57	46.4	24	38.6	29	64.1	56.9
33	Belgium	1	47030	48	52.9	54	12.1	5	83.6	56.6
34	Finland	1	48910	43	55.2	55	12.1	6	80.2	55.9
35	Austria	1	50390	29	60.3	53	12.2	10	74.4	55.6
36	Estonia	1	18530	25	62.3	47	15.3	19	68.8	55.2
37	Malaysia	2	10660	61	39.6	14	59.0	47	47.4	54.9
38	Switzerland	1	90670	19	65.5	50	13.1	22	67.4	54.9
39	Slovakia	1	17810	42	55.9	36	20.3	18	69.2	54.5
40	Latvia	1	15660	36	58.1	42	17.7	17	69.3	54.3
41	Germany	1	47640	23	63.3	59	5.8	9	74.8	53.6
42	South Korea	1	27090	13	71.4	44	16.4	41	55.0	52.8
43	Egypt	3	3280	33	59.5	13	61.5	61	19.7	51.4
44	Luxembourg	1	69880	45	54.5	45	15.9	16	69.4	50.9
45	Lithuania	1	15380	20	64.3	32	23.6	45	51.9	50.9
46	Uruguay	1	16360	58	44.5	29	29.6	33	61.0	47.7
47	Slovenia	1	23220	31	59.9	58	7.2	24	66.9	47.0
48	Czech Republic	1	18970	49	52.6	52	12.9	20	68.3	46.9
49	France	1	43080	47	53.5	48	14.4	31	63.2	45.2
50	Hungary	1	13470	53	50.5	51	13.0	23	67.0	44.7
51	United Kingdom	1	42690	55	49.3	43	16.6	28	64.2	44.5
52	Poland	1	13730	51	52.4	38	18.7	35	58.6	44.2
53	Indonesia	3	3650	63	28.5	21	44.1	42	54.9	42.8
54	Portugal	1	21320	46	53.8	60	4.6	21	68.0	42.1
55	Spain	1	29940	39	57.5	62	2.1	25	65.6	41.3
56	Ukraine	3	3560	40	57.2	35	20.7	49	47.0	41.1
57	Japan	1	42000	34	59.5	64	0.0	26	65.5	41.1
58	Italy	1	34280	59	41.2	63	1.7	7	77.6	38.2
59	Russia	1	13210	11	73.3	31	24.2	60	22.5	37.8
60	Croatia	1	13020	52	50.8	57	8.7	40	56.4	35.1
61	Thailand	2	5410	62	38.1	37	20.0	46	51.0	30.7
62	Vietnam	3	1890	54	50.3	17	52.0	62	6.3	30.4
63	China	2	7380	26	62.3	26	36.5	64	0.0	23.9
64	Sri Lanka	3	3400	64	0.0	28	32.0	56	30.4	0.0

— ANNEXES —

- Annex A:** **Where Does Your Country Rank?**
Country profile
- Annex B:** **The Data**
Data sources, availability and
methodology
- Annex C:** **Once a winner, always a winner?**
Pillar correlation analysis

ANNEX 1

Where Does Your Country Rank?

Extensive country profiles for the 64 countries ranked in the Youthonomics Index will soon be added to this report. Please sign up to receive an updated copy when released at www.youthonomics.com.

ANNEX 2

The Data

Data sources, availability and methodology

Normalization. In order to facilitate the comparison between performances in the different facets of each sub-index, and to be able to construct averages, data series were normalized to vary within the same range and reflect the relative position of different countries.

Every data series is normalized with the following standard transformation, where “var” refers to the value taken by the variable:

For “goods”, i.e. data for which a higher value is considered a good thing:

$$I = (\text{var} - \min(\text{var})) / (\max(\text{var}) - \min(\text{var})) * 100$$

For “bads”, i.e. data for which a lower value is considered a good thing:

$$I = (\max(\text{var}) - \text{var}) / (\max(\text{var}) - \min(\text{var})) * 100$$

In this manner, every series is comprised between 0 and 100. It follows that the best performing country in a given variable has a normalized value of 100, the worst performing country of 0. The normalized value of each variable is entirely dependent on the sample used to normalize. A specific country might be doing relatively well on the world stage, and yet have a poor normalized value because the chosen sample of countries performs better.

Normalization was undertaken at the variable level, at the sub-pillar level and at the pillar level. In the Youth Now Sub-Index, normalization was done on the average of each of the following pair of pillars: Early Education and University and Skills; Access to Employment and Work and Living Conditions; Wellbeing and Health. In that manner, the normalization process does not bias the averaging of the two sub-indexes, one of which contains double the number of the second.

Weighting. All variables and pillars are weighted equally, except where a variable was evidently less relevant or if there were missing values. In those instances, weight was automatically cut in half. These cases are detailed in Table 12, with the rationale (availability or relevance).

Weight transfer. Different variables can capture similar tendencies, whereas a missing value can distort the balance of variables. Therefore, in two instances missing values in a variable led to a transfer of its weight to another. That is the case for the three indicators of completion sub-pillar of the University and Skills pillar, – with enrolment rates in tertiary education, average length of tertiary education and graduation ratios, as well as in the Access to Employment pillar with the NEET rate and underemployment rates, whose weights were transferred to unemployment when they were unavailable.

Abbreviations.

EUI	Economist Intelligence Unit
EVS	European Value Survey
GEM	Global Entrepreneurship Monitor
GES	Global Executive Survey
GPG	Global Property Guide
GVS	Global Value Survey
ILO	International Labour Organization
IMF	International Monetary Fund
IPU	International Parliamentary Union
OECD	Organization for Economic Cooperation and Development
PISA	Programme for International Student Assessment
WB	World Bank
WEF	World Economic Forum
WHO	World Health Organization

Table 12 - Variable sources, weighting rationale (R) and data availability

Pillar	Sub-pillar	Weight	R	Variable	Source	Weight 1	R	Avail.
Early Education	Access	1		Average length of secondary education	WB	1		64
				Quality of primary education	WEF, GES	1		64
	Quality	1		Average of PISA scores	OECD,PISA	1		64
				Internet in school	WEF, GES	1		64
	Transition	1		Upper secondary enrolment	UNESCO	1		64
				Unemployment 15-19 years old	ILO	0.5	R	64
				NEET, 15-19 years old	ILO/OECD	0.5	A	43
				Life expectancy at birth, 2000	WB	1		64
	Conditions	1		Mortality (DALY), 5-14 years old	WHO	0.5	R	64
				Happiness at school	OECD,PISA	0.5	A	48
University and Skills	Completion	1		Enrollment rates	WB			59
				Average length of tertiary education	U N ESCO	3		62
				Gross graduation ratio	U N ESCO			56
				Educational mismatch	ILO	1		42
	Quality	1		Weighted universities in the QS-500	QS/WB	1		64
				Quality of management schools	WEF, GES	1		64
				Outbound mobility	UNESCO	0.5	R	61
				Share of 15 to 24-year-olds indebted for education	Findex	1		64
Cost	0.5	R						
Vocational	0.5	A					42	
Access to Work	Unemployment	1		Unemployment rate, 15 to 24 years old	ILO/WB			64
	Underemployment	0.5	A	Time-related involuntary unemployment 15to 24	I LO	3		48
	Exclusion	0.5	A	N EET, 15 to 24 years old	ILO/WB			52
	Entrepreneurship	0.5	R	Entrepreneurship index	GEM			64
Work and Living Conditions	Entry wages	0.5	R	Minimum wa2e for a 19-year-old worker or intern	WB			64
	Skill acquisition	0.5	R	Extent of firm train in!	WEF, GES	1		64
	Over qualification				ILO	0.5	A	28
	Wages	1		Average wage PPP	ILO/OECD	1		64
	Financial vulnerability	1		Ability to save in the past year, 15-24 years old	Findex	1		64
				Ability to come up with emergency funds	Findex	0.5	R	64
Access to housing	0.5	R	Hold a mortgage	Findex	1		64	
			Housing cost	GPG	0.5	A	48	
Wellbeing	Social Cohesion	0.5	R	GINI index	OECD/WB	1		64
				Satisfaction of trust in other people	U NESCO	0.5	A	61
	Safety	1		Mortality (DALY) by interpersonal violence, 15-29	WHO	1		64
				Satisfaction of level of safety	UNESCO	0.5	R	64
	Suicide	1		Mo1tality (DALY), by self harm, 15-29	WHO	1		64
				Mortality (DALY), STD, 15-29	WHO	1		64
	Dangerous behaviors	1		Mortality (DALY) by drug use, 15-29	WHO	1		64
				Mortality (DALY) by alcohol use, 15-29	WHO	1		64
	Political Rights	1		Political rights index	Freedom House	1		64
	Civil liberties	1		Civil Rights Index	Freedom House	1		64
Health				Life expectancy, 2015	WB	0.5	R	64
				Mortality (DALY), 15-29 years old	WHO	1		64
				Self-reported health status, 15-24 years old	Gallup	0.5	A	31
Public Finance	Explicit liabilities	1		Cyclically adjusted budget balance	IMF	1		64
				Net public debt	IMF	1		64
				Net public savings	IMF	1		64
	Implicit liabilities	1		Interest rate - growth differential	IMF	1		64
				Change in share of active population	WB	1		64
				NPV Pension payments 20 15-2050	IMF	0.5		64
				NPV health care expenses	IMF	0.5		64
Economic Opportunities	Cycle	1		Cumulative Growth 2015-2020	IMF	1		64
				Total Investment rate	IMF	1		64
	Sustainability	1		Global Innovation Index	Corneli	1		64
				Environment Protection Index	Yale	1		64
Political Weight	Actual policy bias	1		Relative unemployment rate, 15-24 /25 and over	ILO/WB	1		64
				Share of education in public expenditures	WB	0.5	A	50
	Implicit weight	1		Share of the 20 to 30-year-olds in population	WB	1		64
				Democracy Index	EU!	1		64
	Explicit Weight	1			Share of parliamentarians aged 40 and below	IPU	0.5	A
				Youth electoral participation	EVS/GVS	0.5	A	53

Table 13 - Variables sources and years available

Schooling	Average length of secondary education	WB	2010
	Quality of primary education	WEF, GES	2010
	Average of PISA scores	OECD,PISA	2012
	Internet in school	WEF, GES	2010
	Upper secondary enrolment	UNESCO	2013(31), 2012 (18), 2011(1), 2010(2)
	Unemployment, 15-19 years old	ILO	2014 (33), 2013(17), 2012(3), 2010(7)
	NEET, 15-19 years old	ILO/OECD	2013 (40), 2012(3), 2011(2), 2010(1)
	Mortality, 15-29 years old	WHO	2012
	Happiness at school	OECD,PISA	2012
University	Enrollment rates	UNESCO	2014 (1), 2013(43), 2012 (14), 2011(1)
	Average length of tertiary education	UNESCO	2014(1), 2013 (43), 2012(14), 2009-11 (4)
	Gross graduation ratio	UNESCO	2013 (20), 2012 (26), 2009-11(5)
	Educational mismatch	ILO	2013 (40), 2009-12 (8)
	Weighted universities in the QS-500	QS/WB	2015
	Quality of management schools	WEF, GES	2014-15
	Outbound mobility	UNESCO	20 13 (46), 2012 (12), 2010-11(6)
	Share of 15 to 24-year-olds indebted for education	Findex	2014
	Students in upper-secondary vocational training	WB	2013
Access to Work	Unemployment rate, 15 to 24 years old	ILO/WB	2014 (46), 2013 (13), 2010-12(5)
	Time-related involuntary unemployment 15 to 24 years old	ILO	2013(42), 2012(4), 2011(1)
	NEET rate, 15 to 24 years old	ILO/WB	2013 (40), 2012(3), 2011(2), 2010(1)
	Entrepreneurship index	GEM	2014
Work and Life	Minimum wage for a 19-year-old worker or intern	WB	2011
	Extent of firm training	WEF, GES	2014-15
	Over qualification	ILO	2013
	GDP per capita/wage	WB/ILO	2014 (60), 2013(3), 2010(1)
	Ability to save in the past year, 15-24 years old	Findex	2014
	Ability to come up with emergency funds	Findex	2014
	Hold a mortgage	Findex	2014
Housing cost	GPG	2015	
Wellbeing	GINI index	OECD/WB	2012(8), 2011(17), 2010(30), 2008-09(7)
	Satisfaction of trust in other people	UNESCO	2009-2011
	Mortality by interpersonal violence, 15-29 years old	WHO	2012
	Satisfaction of level of safety	UNESCO	2007-12
	Mortality (DALY) by self harm, 15-29 years old	WHO	2012
	Mortality (DALY), STD, 15-29 years old	WHO	2012
	Mortality (DALY) by drug use, 15-29 years old	WHO	2012
	Mortality (DALY) by alcohol use, 15-29 years old	WHO	2012
	Political rights index	Freedom House	2015
	Civil Rights Index	Freedom House	2015
Health	Life expectancy	WB	2013
	Mortality, 15-29 years old	WHO	2012
	Self-reported health status, 15-24-years old	Gallup	2014 (1), 2013(27), 2011-12 (4-)
Public Finance	Cyclically adjusted budget balance	IMF	2015
	Net public debt	IMF	2015
	Net public savings	IMF	2015
	Interest rate - growth differential	IMF	2015
	Change in share of active population	WB	2015
	NPV Pension payment_2015-2050	IMF	2015
	NPV health care expenses 2015-2050	IMF	2015
Economic Opportunities	Cumulative growth 2015-2020	IMF	2015
	Total investment rate	IMF	2015
	Global Innovation Index	Cornell	2014
	Environment Protection Index	Yale	2014
Political Weight	Relative unemployment rate, 15-24 /25 and over	ILO/WB	2014 (46), 2013 (13), 2010-12(5)
	Share of education in public expenditures	WB	2013(6), 2012(11), 2011(33)
	Share of the 20 to 30-year-olds in population	WB	2015
	Democracy Index	EUI	2014
	Share of parliamentarians aged 40 and below	IPU	2014
Youth electoral participation	EVS/GVS	2010-14	

Information on sources

PISA scores refer to the Programme for International Student Assessment (PISA). It is a triennial international survey evaluating education systems worldwide by testing the skills and knowledge of 15-year-old students. Sixty-five economies took part in the 2012 assessment of reading, mathematics and science representing about 28 million 15-year-olds. Beside the PISA score, average of the math, science and literacy exams, we used the share of students reporting being happy at school. The PISA questionnaire asked “are you happy at school?” and we summed up the percentage of those who answered “I agree” and “I strongly agree”.

The WEF’s Global Executive Survey captures the opinions of business leaders around the world on a broad range of topics for which data sources are scarce or, frequently, nonexistent on a global scale. The 2014 edition of the survey captured the opinions of over 14,000 business leaders in 148 economies between February and June 2014.

The 2014 Global Findex database is survey data covering almost 150,000 people in more than 140 economies — more than 97% of the world’s population. The Gallup World Poll has been using randomly selected, nationally representative samples since 2005, and completed this survey in 2014. The target population is the entire civilian, non-institutionalized population aged 15 to 24. **The ability to come up with emergency funds** (15 to 24 years old) is obtained by summing up the percentage of respondents who answered “not really possible” and “not at all possible” to the question of whether or not they could come up with emergency funds. **The share of youth able to save money in the past year** and the **share of youth with an outstanding mortgage** is also from the Global Findex 2014.

The population-weighted QS ranking is available for all countries. Since 2004, the QS World Universities Rankings evaluate world universities based on six criteria: academic reputation (40%, by a survey of academics), employer reputation (10%, by a survey of employers), faculty to student ratio (20%), citations per faculty (20%), international student ratio (5%) and international staff ratio (5%). Population aged 15 to 24, used to weight the result, is from the World Bank.

The Global Entrepreneurship Index is from the Global Entrepreneurship Development Institute. It uses survey data from the Global Entrepreneurship Monitor and institutional variables, and is structured into three pillars: entrepreneurial attitudes, entrepreneurial abilities, and entrepreneurial aspirations.

The degree of overqualification is obtained by comparing the education (secondary, tertiary) of young workers as a proxy for their skill level and these workers’ occupation average education level. The International Labour Organization computed the share of workers aged 15 to 29 years old that are overqualified for their job.

The cost of housing, as computed by the Global Property Guide, is calculated by dividing the estimated price of a square meter by GDP per capita.

Satisfaction of the level of safety is from the United Nations Human Development Report, using results from Gallup’s World Poll, a worldwide survey.

The auto-reported health status is from Gallup, mandated by the OECD, and is obtained by summing up the share of the population aged 15 to 24 who are reporting “good” or “very good” health.

The Global Innovation Index is published every year by Cornell University, the INSEAD and the World Intellectual Property Organization.

The Environmental Protection Index is jointly published by the Yale Center for Environmental Law & Policy (YCELP) and the Center for International Earth Science Information Network (CIESIN) at Columbia University, in collaboration with the World Economic Forum. Data is available for all 40 countries.

The share of parliamentarians aged less than 40 is obtained from the Inter-Parliamentary Union who surveyed national parliaments. Through our own research and contact with national parliaments we obtained the age of deputies for additional countries.

The Democracy Index of the Economist Intelligence Unit ranks countries according to the democratic character of decision-making.

The Freedom index, published by Freedom House, measures (1) the extent of political rights in a country (2) the extent of civil liberties.

Technical notes

PISA scores: when PISA scores were unavailable, their normalized value was replaced by the normalized value of the WEF’s score for math and science education (correlation of 0.71).

Upper-secondary enrollment: we used adjusted net enrollment rates. When unavailable, their normalized values were replaced by the normalized value of gross adjustment rate, then by the normalized value of university enrollment (1 case, correlation 0.83).

Unemployment 15 to 19: when unavailable (six cases), they were estimated through a linear combination of unemployment rates for ages 15 to 24 and upper secondary enrollment rates (R² of 0.96).

Gross graduation rate: for Canada, it was estimated by a linear transformation of the variable “share of youth expected to graduate from tertiary education” from the OECD (R²=0.96). For four countries, normalized gross graduation ratios were replaced by the number of tertiary graduates divided by the 15 to 24-year-old population. The correlation with the UIS gross graduation ratio was 0.91.

Skill mismatch: is calculated using the ILO method and data. It uses educational level as a proxy for skills and calculates the difference between the share of employed people with level of education and the share of unemployed people with level of education *i*. It then sums up these differences for each level of education to create a dissimilarity index. Intuitively, if there is no mismatch between skill supply and demand, individuals with a given level of education should represent an equal share of employment and of unemployment.

Entrepreneurship: in two cases when it was unavailable, it was replaced by a linear combination of our completion and quality sub-pillars from the University and Skills pillar (R2 of 0.96).

Wages: when wages were unavailable, they were linearly estimated using GDP per capita (R2 of 0.95) Budgetary balance: when the cyclically adjusted balance was not available, we used the unadjusted balance.

Debt: When net debt was unavailable we regrouped countries according to IMF groups (developed, emerging, low-income developing), and computed the average gap between gross and net debt after eliminating outliers (more than two units of standard deviation over the mean). That allowed us to estimate net debt for the missing countries (19 countries out of 64).

Electoral participation: The share of youth ages 15 to 24 who said they would not vote in the next election is taken from the European Value Survey (EVS). The Global Value Survey (GVS) has asked youth the same age about their voting behavior. Regressing the EVS “would not vote” variable on the GVS variables of “always votes” and “never votes” yields an R2 of 0.87. Therefore we use the coefficients to construct a linear estimate of “would not vote” for the GVS sample.

ANNEX 3

Once a winner, always a winner?

Correlation between pillar scores

Expectedly, some pillar scores correlate with each other, but overall the different pillars show limited correlation, as only two pillars have correlations above 0.8.

Indeed, it is no surprise that early education and university education pillar scores follow each other closely. Nor is it a surprise that early education and health – both determined to a large extent by the level of economic development – highly correlate. Beyond these two pillar-pairs, the highest correlation between pillars is 0.7. What this shows is that all these nine pillars have independent analytical value.

The nature and extent of correlation between these pillars represent a precious basis for further analysis into youth issues.

Figure 5 - Pair by pair correlation between pillar scores

