

# YOUTH BULGE: Demographic Dividend, Time Bomb, and other Futures

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## Abstract

*Taking a global view of the futures of youth, this article: (1) defines the youth bulge, (2) articulates four scenarios for the futures of youth (innovation and apps; unemployed and disempowered; virtual retreat; and transformed world), and (3) Short, medium, and long term implications for the MENA (Middle-East and North Africa) region are outlined.*

**Keywords:** Demography, migration, youth bulge, youth futures, MENA (Middle-East and North Africa)

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## From Demography to a Way of Seeing

Youth bulge refers to a demographic pattern where a large share of the population is comprised of children and young adults (Lin, 2012). It is a critical concept in thinking about the future as understanding age-cohorts can help us understand emerging patterns (Inayatullah, 2007). Age-cohorts experience a shared reality based on the economic and political conditions they have grown up in; for example, if they grow in the context of job or resource scarcity (Dator, 2009). With recent studies suggesting that a youth bulge can lead to civil conflict, creating social conditions to ensure that youth are employed or are linked to a purposeful national or global peace building or development agenda is crucial (Beehner, 2007). The youth bulge, however, is not just a demographic trend, but part of an alternative way of seeing the future – that of the view of young people (Gidley & Inayatullah, 2002), their changing needs, their use of new digital technologies as digital natives<sup>1</sup> and their views of the future. Moreover, we can ask is the youth bulge as constructed as a social problem defining, or are there other possible futures, trajectories.

## Demographic Dividend or Civil Conflict?

Among the best descriptions of the youth bulge phenomena from a demographic view is that of the former chief economist of the World Bank, Justin Lin (Lin, 2012). He writes:

*The youth bulge is a common phenomenon in many developing countries, and in particular, in the least developed countries. It is often due to a stage of development where a country achieves success in reducing infant mortality but mothers still have a high fertility rate. (Lin, 2012, np)*

It is a critical pattern and it is uneven. Continues Lin (2012):

Figures 1 (a)-(b) provide some illustrative examples. Dividing the world into more and less developed groupings (by UN definitions) reveals a large difference in the age distribution of the population. The share of the population in the 15 to 29 age bracket is about 7 percentage points higher in the less developed world than the more developed regions. In Africa (both Sub-Saharan and North Africa), we see that about 40 percent of the population is under 15, and nearly 70 percent is under 30 (Figure 1(a)). In a decade, Africa's share of the population between 15 and 29 years of age may reach 28 percent of its population. In some countries in "fragile situations" (by World Bank definitions), almost three-quarters of the population is under 30 (examples in Figure 1(b)), and a large share of 15-29 year olds will persist for decades to come (Figures 1(c) and (d)). (Lin, 2012, np)

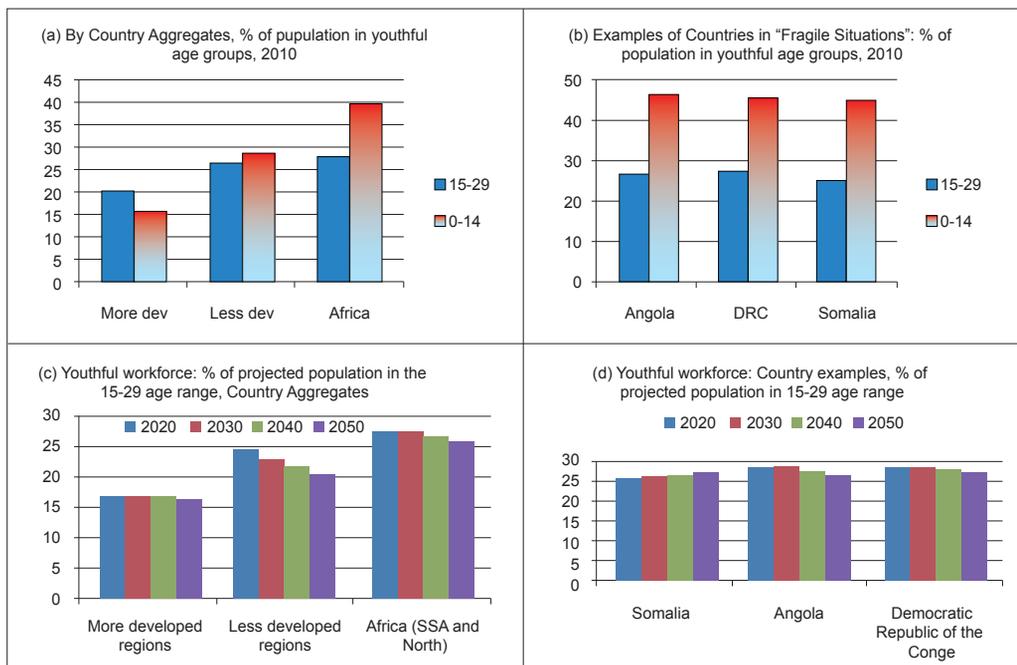


Figure 1(a)-(d). Age Distribution of the Population, Aggregate and Country Examples, %

What is crucial, however, is that demography is not destiny. Historically, there are alternatives. East Asian nations, for example, such as South Korea, and now China made the youth bulge into a demographic dividend. They flourished by creating regulatory environments where: 1. Small businesses could flourish, 2. The power of the landed elite was significantly diminished, allowing social mobility, 3. Foreign investment could lead initially to jobs and later to technology transfer and the development of state supported "national" multinational corporations; and 4. Where there was a clear national long term vision. Moreover, they have successfully made the transition from agricultural based economies to industrial and more recently to services. Indeed, within the service economy, they have begun to innovate, particularly in gaming<sup>2</sup>.

In other parts of the world, such as the MENA region, the youth bulge has led to civil unrest as young people have not found jobs, and thus have been a destabilizing influence, either joining radical groups or becoming part of the permanently unemployed or partly employed.

This is not new as many argue that armed conflict historically can be partially explained by a disproportionate number of young people, whether in Latin America in the 1980s or even earlier in Japan in the 1930s. Going further, Paul Kennedy has argued that revolutions occur more often in countries with large populations of “energetic, frustrated, young men” (Kennedy, 1993).

What is crucial to see is that when there are unmet expectations and a comparative erosion of opportunity, change is more likely. Write Edward Sayre and Samantha Constant with reference to the MENA region:

*Another way to measure the erosion of opportunity is to compare the unemployment rates among young and older people. This “relative deprivation” is evident in Egypt, Jordan, and Syria, where the youth unemployment rate is four times higher than the rate for people over 30. (In the U.S., the unemployment rate for workers under 30 is about double that for older workers.) In Egypt, young people make up 80 percent of the total unemployed, and 95 percent of the unemployed youth have at least a secondary degree.*

*Those who do find jobs are often faced with meager earnings, job instability, poor workplace conditions, and a lack of social protection. The result is politically incendiary: a generation of young people who are more educated than their parents but are worse off. (Sayre & Constant, 2011, np)*

However, this is crucial; the waves of change are not the same. Indeed, Sayre and Constant (2011) argue that:

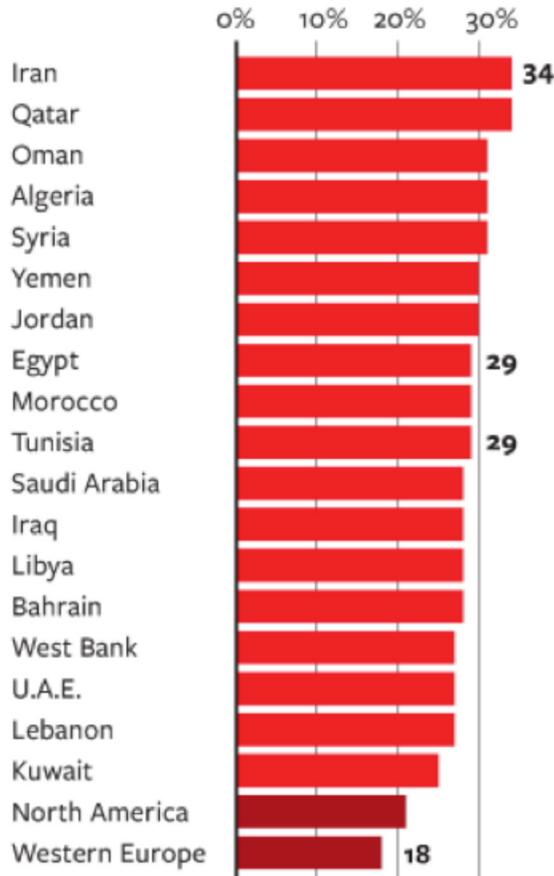
*In Bahrain and Jordan, the share of the population under 30 is projected to continue rising for several years. But in countries such as Egypt, Tunisia, and Iran, the youth bulge is either peaking now or will peak shortly. That means the generational demand for change could also be cresting. (Sayre & Constant, 2011, np)*

The following chart is illustrative of the issues the MENA region will face.

## Youth Quake

In the Middle East and North Africa, young people make up a much greater share of countries' populations than in the West.

### Percentage of the population ages 15-29 (2010)

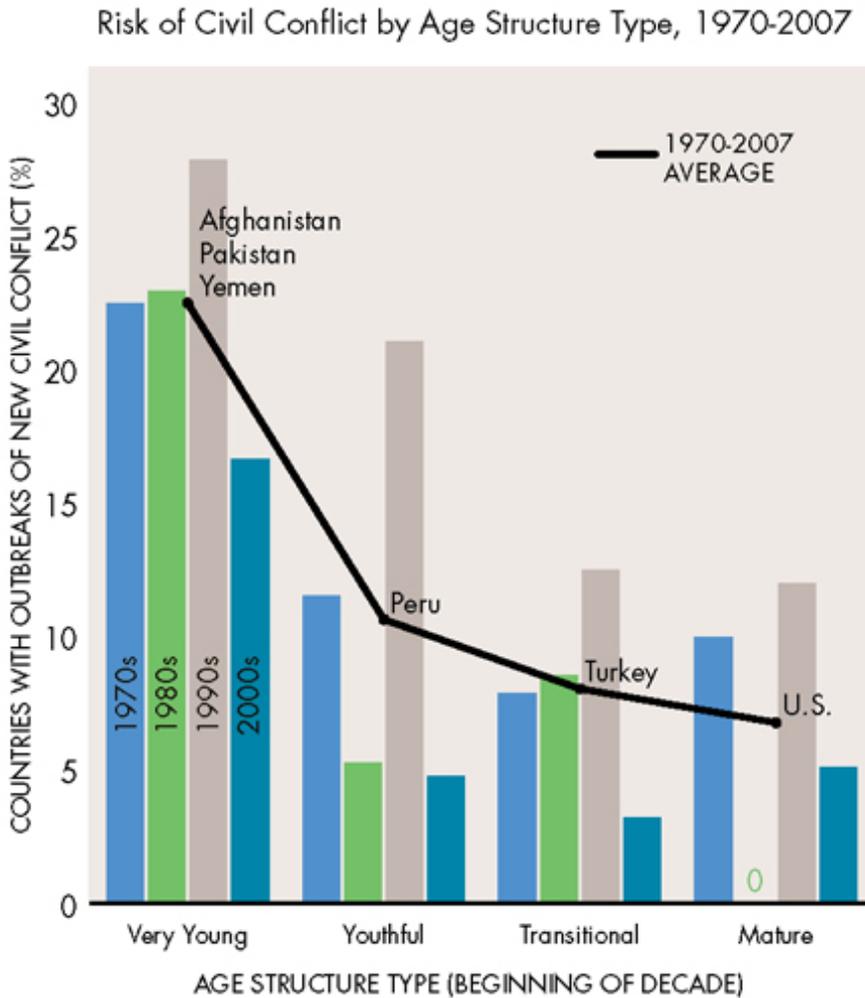


Sources: U.N. World Population Prospects;  
U.S. Census Bureau International Database

Figure 2. Youth Quake

The following table illustrates the correlation between demography and civil conflict (Madsen, Daumerie & Hardee, 2010). As it suggests, as a society ages the likelihood of conflict decreases (Cincotta & Leahy, 2011). However, youthful societies cannot be seen in isolation. In a global economy, they exist in the context of elder economies that often create the rules.

Table 1. Risk of Civil Conflict by Age Structure Type, 1970-2007



## Drivers of Change

The crucial variable in creating the youth bulge is the success in reducing infant mortality in the context of mothers still having a high fertility rate. Thus, a youth bulge is created. Science and technology advance creating a healthier society – vaccinations, sanitation, early check-ups through the prevention model - however, social structure does not change and the number of children in families stays large. As the latter also catches up, meaning women stop having many children because the state provides for social security and there is more gender equity, the youth bulge begins to disappear.

The implications of the youth bulge are dependent on resistance to change by the older generation in power leading to a demographic bomb or marshalling youth resources to create a demographic dividend. The demographic bomb occurs because youth live in a globalized world of digital technologies which allow for cultural inter-penetration and a willingness to challenge the core assumptions of any nation. Reality is not considered given, but created, and thus they challenge tradition. The bomb leads to extremism and terrorism if there are three other sub-drivers present.

First, there are perceived injustices against others – a sense of alienation (Beehner, 2007). Thus, it is not just the number of young people that is important here, but their alienation from the current system. Second, if there are weapons that can be used to demonstrate against these perceived injustices. And, third, there are leaders who model the extremist behaviour and use texts from local traditions to make a case for violence.

For the youth bulge to become a demographic dividend, structural and worldview changes are required. These include regulatory changes to allow young people to become technological, social and economic entrepreneurs (i.e. green tape or one stop shops for learning and earning); a willingness by political leaders to give youth a voice at the decision-making table - deep democracy - ; leaders willing to model peaceful and productive behaviour; and access to new technologies.

## Scenarios 2050

How this trend will play out in the future is certainly dependent on the demographics, for example, the youth will age and be part of the global movement to an ageing society. But there are critical pathway uncertainties, for example, if youth are asked to join the table of responsibility. As society ages, more and more of senior positions will be maintained by those over 65. If young people do not believe they have any future they will likely look for alternative, sometimes more violent pathways.

The youth bulge is considered one of the main reasons for the Arab Spring. As social commentator Fareed Zakaria has written, “The central, underlying feature of the Middle East’s crisis is a massive youth bulge. About 60 per cent of the region’s population is under 30. These millions of young people have aspirations that need to be fulfilled and the regimes in place right now show little ability to do so” (Zakaria, 2011, np). Said one Egyptian student, Khaled Kamel: “I don’t care who ends up running the country, as long as I have the ability to change them if I don’t like them.” And while in the short to medium run, there are swings back and forth between conservative and progressive regimes, in the long run, argues Iranian futurist Vahid Motlagh, “the dam has burst. No amount of buttressing the old dam can stop the flow of water<sup>3</sup>”. And is it is not just youth but gender as well. Women played a pivotal role in the Arab spring. Unfortunately, writes Carla Power, women have now been told to “go home” (Power, 2011). However, in the long run, keeping gender inequity will only delay change, leading to what author Mai Yamani calls terminal buffoonery and decadent gerontocracy (Yamani, 2011).

However, as important as the earlier drivers are factors such as joblessness and climate change impacting food prices (Johnstone & Mazo, 2011). Equally crucial factor behind the Arab Spring has been the global financial crisis hurting the possibility of overseas jobs (and thus remittances sent home) and finally crony capitalism limiting the spread of wealth (except through state handouts).

In the medium term, by 2025, while the West has already aged, and the MENA region is undergoing the youth bulge now, it is in sub-Saharan Africa<sup>4</sup> where the next youth bulge will occur<sup>5</sup>.

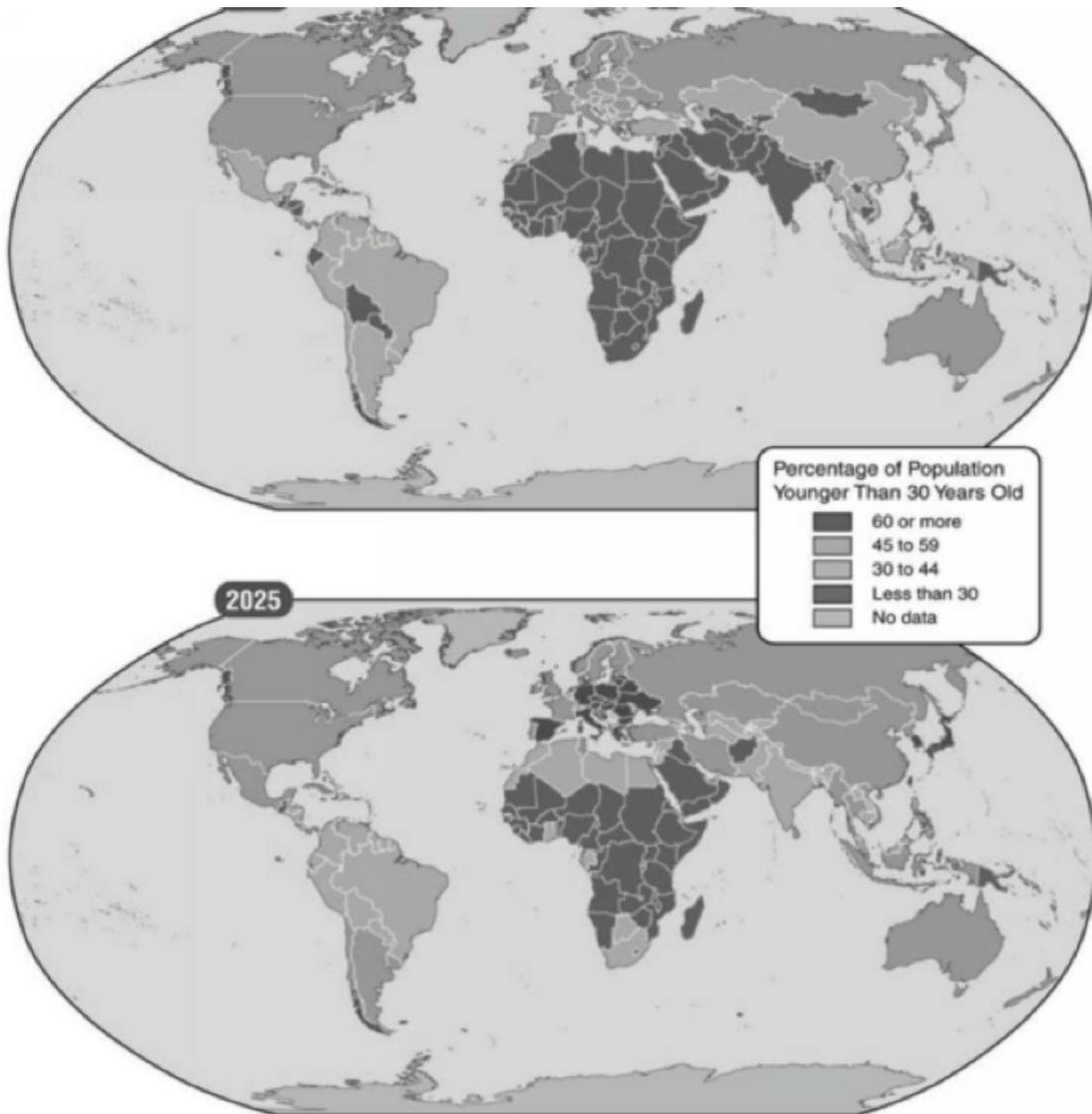


Figure 3. World Age Structure, 2005 and Projected 2025

Four scenarios are offered as to the future of the youth bulge. In all projections, significant change is expected. The main uncertainties are the social capacity and the extent of technological breakthroughs. The Causal Layered Analysis (CLA) model - litany, system, worldview, and myth/metaphor - is used to incast (Inayatullah & Milojevic, 2015).

### Scenario one – innovation and apps

In the first trajectory, the youth bulge becomes a demographic dividend. New technologies which are youth friendly and new social structures are created by the peer to peer sharing economy (economic democracy, cyber cooperatives) leading to youth contributing in ensuring a more equitable, peaceful and prosperous world. Educational institutions adapt, teach and train for tomorrow's new jobs. Women play an equal role with men. Digital technologies ensure that they are not structurally disadvantaged. The youth bulge leads to technological innovation as we see

currently in places like southern California (or silicon savanna in Kenya<sup>6</sup>) – the youth create the new “apps” for genomic, robot, big data and peer to peer transformed worlds. Youth mentor the elderly and the elderly mentor youth. Educational institutions from the university to the primary school create pathways for this mentoring to occur. Innovations are set into place, such as direct democracy via online referendums –as already occurring in Finland today<sup>7</sup> - so that the elderly do not dominate politics. The main assumption behind this prediction is that government and culture act now to create this future. Strategy and cultural change work hand in hand.

Table 2. *CLA on innovation and apps*

Litany	Youth bulge is the demographic dividend
System	Economic democracy, peer-to-peer, innovation and wealth generation, gender equity
Worldview	Technology-led
Myth/metaphor	Youth create the future

Given the falling costs of smart phones and other personalized technologies and the flattening of the world - the possibilities of poorer regions leap-frogging the West remains possible.

At the same time, as corporations grow larger - Amazon, Google, Facebook, Apple - as profits move toward zero, size and those who control the technology landscape differentiates. Most likely, parts of the world and the youth who inhabit there will be content and design developers. Other parts of the world will be mere consumers. Thus, far more nuance in understanding not “youth” as a singular but “youths” as plural is required. Moreover, the aged and ageing are unlikely to give up power.

### **Scenario two – unemployed and disempowered**

In the second future, youth are not only unemployed, but they feel disempowered. Expectations of a better world are not met. The changing or indeed end of traditional jobs due to automation is a significant factor. The World Economic Forum forecasts in its report, *The Future of Jobs* that forecasts that five million jobs will disappear because of automation<sup>8</sup>. Not just factory jobs, but office workers as well as professionals in law and accounting will also be hit. McKinsey and Co assert that 45% of “today’s workplace activities could be done by robots”(Wright, 2016, np). In Australia, The Committee for Economic Development in Australia argues that 60% of all jobs in rural and regional Australia are at risk by 2030<sup>9</sup>. The International Labour Organization predicts that as Adidas shifts shoe production back to Germany (robots are far more cost competitive than labour) that up to 90% of Southeast Asian workers could face unemployment due to automation<sup>10</sup>.

If current institutions continue to teach and train for jobs that no longer exist, and cannot exist, it is likely that youth take to arms or more seriously cyber arms. As society becomes far more technologically sophisticated – the internet of things, persons, and data – cyber warfare becomes the foundational pathway for rebellion. Youth are fed up with baby boomers in Western nations and the post-colonial generation in non-western nations not retiring, continuing to stay in power well into their 90s. Youth become increasingly disruptive. Instead of the mantra of “respect the aged,” youth prefer, “the only good old person is a dead old person.” This shift occurs as the elderly use up health resources on themselves to live longer and longer, thus not only reducing the political and economic options of the youth (bulge) but as well their health options.

Table 3. *CLA on unemployed and disempowered*

Litany	Demography is destiny
System	Lack of systemic change leading to rebellion and violence
Worldview	Unmet expectations-led
Myth/metaphor	The only good old person is a dead old person

The main assumption behind this future is that changes in governance are too little, too late. Demography becomes destiny. To ameliorate this future, a dramatic counter-narrative is required. Currently, terrorism and other conflicts are framed within litany terms ie the evil of a particular ideology. Instead the deeper causative factors - climate change, inequity, the youth bulge - must become defining. Once the problem is reshaped and alternative causes explored then new solutions can emerge.

### Scenario three – virtual retreat

In the third prediction, youth are unable to gain their perceived fair share of political power create their own artificial worlds, retreating to this altered reality. Within this world, they create their own forms of currency – bitcoin today, for example – and forms of identity – avatars, for example. In a way this is similar to the reality of many developing nations where some youth live in traditional agrarian society, others live in growing middle class urban environment and others in westernized enclaves in capital and commercial cities with direct links to youth from all over the world. In this fragmented future, inter-generational links become broken with extended families in developing nations disappearing and coming together, if at all, only for economic reasons. Digital natives are not in conflict with the elderly, they live in different worlds.

The main assumption behind this future is that the new technologies allow the creation of alternative worlds. Education and training is focused on digital spaces detached from other parts of the economy. Groups can be in similar physical spaces but different techno-mental spaces – strangers in the virtual night some chasing Pokemon Go, others ...

Table 4. *CLA on virtual retreat*

Litany	Retreat to virtual realities
System	New technologies in contradiction with culture create techno-cultural enclaves
Worldview	Disruptive technology-led
Myth/metaphor	Strangers in a virtual night

The deeper issue in this scenario is how different the brains of young people will be decades from now. Will game playing change attention span, sleep patterns, views on reality (where the virtual and physical are permanently blurred) so that it is not just strangers in a virtual night, but some strangers, some as hungry ghosts, many mentally disturbed - at heart, this is not just an issue of new technologies but of well-being, and a potential shift to a new type of knowing.

### Scenario four – transformed world

In the fourth long term 2050 prediction, a shift in the nature of the world economy makes issues of youth and ageing far less important. As reported recently by the OECD, capitalism is likely

to end by 2060<sup>11</sup>. Whether this occurs because of new sharing technologies or by developments in 3D printing and other low cost manufacturing revolutions or through Big Data and the full transparent information society is not certain. With a strong likelihood of a regional and eventual global guaranteed income, work and income will be delinked, thus allowing youth to follow their passion, instead of conform to the rules of the elderly. How this will develop is far from clear from the vantage point of the present. But what is clear is that in this future, the youth bulge becomes far less of an incendiary issue as jobs are far less tied to wealth. In a post-capitalist society where technology allows for survival for all, fighting over scarce resources becomes a non-issue. Finding meaning, engaging in politics, creating new sources of wealth and exploration become far more important. With jobs and identity and jobs and survival delinked, the real issue will become which societies can create harmony and identity.

The assumption behind this future is that technological and social change foundationally disrupt the five-hundred-year world capitalist economy. Education and training is for people, planet, prosperity, and purpose.

Table 5. *CLA on transformed world*

Litany	Demography not relevant
System	Meaning, politics, identity, exploration define
Worldview	End of capitalism
Myth/metaphor	A world after jobs

However, irrespective of the causal pathway, of the scenario that develops, the youth bulge will continue to dramatically influence the future, creating a demographic dividend if the policy prescriptions are correct and a demographic bomb if they are incorrect. However, to create appropriate policy prescriptions such as those outlines above the current narrative of youth as the problem needs to be transformed to youth as an asset. This is especially so in youth bulge areas. If this transition does not occur, then violence is highly likely, as we have seen in the aftermath of the Arab spring.

## Global Implications with a Focus on the MENA Region

Globally, given the different directions of the trajectories associated with the youth bulge – demographic dividend or civil conflict - it is critical that global financial, security, trade and donor organizations develop employment and entrepreneurial opportunities in youth bulge areas. It is equally important to realize that the youth bulge, while national, has no national borders. Civil conflict can lead to trans-border and then to global conflict. As well, a demographic dividend can lead to global economic growth, with youth in one region, creating innovation that spurs innovation in another region. The youth bulge can be seen as either a positive virus of opportunity or a negative virus of conflict.

With the youth bulge a demographic reality for the MENA region, in the short term even with youth having jobs, we can expect as globalization and digital technologization continue that youth will have different expectations than their parents. Thus, not only jobs, but more democracy is required, more transparent governance, more rights including access to new technologies from web 2.0 to beyond, including 3D developments. As well, new generations will have a far different view than the elderly with respect to the environment – climate change will remain crucial and a rallying cry in the short and particularly the middle run.

Current and future youth will also want a seat on the table. Consulting with youth, using their experience, finding positions of responsibility are all crucial for the transition to a more middle aged society. The example of the West in the 1960s comes to mind. In a way the MENA region are undergoing a similar process – an explosion of idealism tempered by the reality of power politics. It would be valuable to channel the energy of the youth into programs that were successful in the USA in the 1960s, for example, the Peace Corps. Ensuring youth can express any martial qualities through peacekeeping; peacebuilding and peace transformation would be crucial. Having educational programs for youth to explore peer-to-peer mediation and social alternative to conflict would be an important step in mitigating future conflict.

### **Short, Medium, and Long run possibilities**

However, this plays out differently in different horizons- the short, middle and long. In the short run the above analysis holds true. In the middle run, we can expect, if the Western experience, a pendulum shift back as the “youth bulge” generation age and the youth that follow become more socially conservative focused on keeping jobs and their status as the MENA matures demographically and economically. In the example above, Peace Corps type institutions would become more mainstreamed, as would programs on conflict management. Pressures will come from sub-Saharan Africa which in 10-15 years from now be in the middle of its own youth bulge. The middle run thus assumes a return to the past, with youth focused on employment (even in a dramatically changing digital world where the “job” will become problematic), national prestige, material possession and traditional conservative values. Having watched their elders live through dramatic change, they will wish for more stability.

In the long run, we can expect dramatic transformations, as the youth bulge in thirty years move to positions of economic, political, social and environmental responsibility and as the full implications of the major technological revolutions – digital, genomic, manufacturing, energy – are realized.

What might this mean? First, it would mean a progressive global politics far less focused on nationalism and more on global values and identities. Most likely, this will take the form of the former youth leaders – from the Arab Spring in the 2010s – working together to create an Arab Union forged in association with the European Union and the emerging East Asian China-led Union. Second, having grown up in digital culture, we should anticipate that the economy will be fully digitalized – the internet of things, persons and data – with information on energy, supply/demand, health, markets available in real time to every citizen. Third, we should expect a move to peer-to-peer cooperative and sharing economies challenging traditional capitalism, what Jeremy Rifkin (2011) has called the Third Industrial Revolution and what Indian philosopher P.R. Sarkar calls the Age of Neohumanism (Inayatullah, 2002). For Rifkin, this means societies transforming from “unsustainable, mechanistically designed and constructed entities, to an environmentally sustainable, economically distributed and socially networked ecology” (McAllum, 2016, p.12). For Sarkar, along with a shift to a peer to peer cooperative economy is a shift to a new worldview in which identity shifts from being nation-state, clan and religion based (my nation, my tribe, my religion) to neohumanism, in which identity is gaia-based (planetary citizens) (Sarkar, 1982). Indeed, social inclusion can dramatically enhance productivity, as engagement and purpose are enhanced (Dugaroca, 2015). Fourth, youth will likely play a major role in creating the end of capitalism. While the earlier factors identified for the end of capitalism suggest a peaceful transition, Sarkar has argued that with weak democratic institutions and strong command and control rule of the military-police i.e. with youth strongly subjugated, violent upheavals are just as likely (Sarkar, 1982). Either they will help create a peaceful transition to a post-capitalist society, or as we are

seeing in the shift from the Arab spring to the Arab winter, violent backlashes will occur, leading in the long run to increased instability.

While there are certainly uncertainties ahead, we can say with confidence that the youth bulge will dramatically influence the future of the globe and the MENA region, in particular. Demographic dividend or bomb, inclusion or exclusion, economic vitality or despair, which will it be?

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## Notes

1. Mark Prensky has coined this term. See: [www.marcprensky.com](http://www.marcprensky.com). Accessed 24 July 2014.
2. The South Korean gaming economy is already worth 9 billion US\$. <https://www.statista.com/statistics/248666/game-sales-in-south-korea/>. Accessed 6 October 2016.
3. Personal communication on Facebook. April 2011.
4. For a case study on the youth bulge and Uganda, see: [http://populationaction.org/wp-content/uploads/2011/12/SOTC\\_Uganda\\_CCS.pdf](http://populationaction.org/wp-content/uploads/2011/12/SOTC_Uganda_CCS.pdf). Accessed 24 July 2014.
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