Millennials' Support for Liberal Democracy is Failing:
A Deep Uncertainty Perspective

Shaen Corbet

DCU Business School, Dublin City University, Glasnevin, Dublin 9, Ireland

Constantin Gurdgiev

Middlebury Institute for International Studies at Monterey, California, USA
Trinity Business School, Aras an Phiarsaigh, Trinity College, Dublin 2, Ireland

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Abstract

Recent data on electoral dynamics and sociopolitical preferences present evidence of declining popular support for the values and institutions of traditional liberal democracy across some western societies. This decrease is more pronounced within the younger cohort of voters, especially the Millennials. Key drivers for the younger generations' scepticism toward liberal democratic values are domestic intergenerational political and socioeconomic imbalances that engender the environment of deeper uncertainty. Policy and institutional responses to democratic volatility are inconsistent with those necessary to address rising deep uncertainty and may exacerbate and accelerate the negative fallout from the pressures on liberal democratic institutions.

Keywords: Knightian Uncertainty; Geopolitical Risks; Liberal Democracy; Demographics; Millennials; Generation X; Baby Boomers.

Introduction

The World Economic Forum (WEF) has published snapshots of recent global surveys indicating that the Millennials are the first generation over the last century that is turning increasingly negative in their attitudes and perception of democracy. Writing for the WEF, Breen (2017) captured this changing sentiment when stating that *"Not long ago, liberal democracy was regarded by many as not just the best form of government, but the inevitable form of government. At the end of the Cold War, Francis Fukuyama famously called the end of history: democracy had won, everything else had failed. In 2017, that view looks naive. New research warns that democracy's fan base is shrinking, especially among younger people".* Foa and Mounk (2017) present empirical evidence that the support for democracy is currently at its lowest amongst the cohort of voters born in the 1980s, compared to all cohorts born in previous decades going back to the 1930s. Figure 1 presents evidence to support the view that the Millennials generation has the lowest trust in democracy as a system of governance in the UK, New Zealand, the U.S., the Netherlands, Australia and Sweden.

[FIGURE 1 HERE]

In June 2017, it was estimated that only 60 percent of Australians agreed that democracy is preferable to any other kind of Government. The percentage is lower, at 52 percent, for the Australians of the Millennials age (Lowy Institute, 2017). Figure 2 presents the trend over time. While overall support for the democracy amongst the younger Australian voters improved from 39 percent in 2012 to 52 percent in 2017, younger voters remain more ambivalent about democratic values than the overall population.

[FIGURE 2 HERE]

In the U.S., this divide on liberal values also mirrors political affiliations that trace demographic patterns, supportive of the proposition that the younger U.S. voters are increasingly rejecting liberal paradigm (Pew, 2017a; Friedersdorf, 2017; Rampell, 2017). The trend toward simultaneous polarisation and decline of liberal values support appears to be coincident. According to Galston and Hendrickson (2016) analysis of voting patterns in the U.S. Presidential Election of 2016, the Millennials strongly supported Hillary Clinton candidacy (55 percent) as opposed to Donald Trump candidacy (37 percent). However, the Millennials simultaneously showed preferences for more coercive institutions of the State. With declining Millennials' engagement in party politics, the percentage of younger voters voting for the Republican Party candidate remained stable in 2016 compared to 2012 election, while the Democrats' share of younger voters fell five percentage points (Mosendz, 2016).

The same applies when we look at the shifting voter participation numbers. As measured for the population of 18-29 year-olds, a group that included some Generation-X voters in the 2008 election, support peaked at 52 percent in 2008 and slipped to 50 percent in 2016 (Galston and Hendrickson, 2016). The low willingness to participate in traditional institutions of liberal democracy is consistent with the Millennials' more self-centric ethical and moral values, as identified across a range of studies (Jones, Cox, and Banchoff, 2012; Rankin, 2013; Taylor, 2014). The decline in preferences for democracy is correlated with the decline in mutual trust across the civil society (Percilly and Cohen, 2016). However, the same decline is also potentially linked to the declining quality of institutions. Verma (2016) stated "*sounding the alarm over the rise of populism in Europe and the U.S., the credit agency (Standard and Poor's) said key historic drivers of the creditworthiness of advanced economies over their emerging-market counterparts — the strength of institutions and quality of policy making — can no longer be taken for granted*".

Consensus Views

While falling support for democracy and rising preferences for institutions of power amongst the Millennials are matters of fact, the potential causes for these twin-correlated phenomena are a subject of conjectures and debates (Thomson, 2000; Lust and Waldner, 2016; Gebelhoff, 2016). To some analysts, it is associated with a vaguely-defined rise of volatility surrounding the policies and electoral outcomes (Gebelhoff, 2016). This volatility view encompasses the extreme swings in the electorate from support for continued European integration, juxtaposed by the rising voices of nationalism. This is further complicated by the growing complexity of the Western geopolitical positioning and the rise of global challengers to the U.S. and NATO unipolar worldview, contrasted by the visibly weaker geopolitcal power of the U.S. to shape the world to its designs. Strategic and policy failures in Iraq, Afghanistan, Syria, Egypt, Libya, the Mediterranean, the Persian Gulf, Central Asia, China Sea, parts of Latin America, Iran, North Korea and elsewhere, all occurring during the lifetime of the Millennials, underpin the conjecture of volatility-driven de-democratization of the electorate (Raschke, 2015). The very emergence of the asymmetric warfare concept as a viable and often successful check on the U.S. hegemony signals the trend toward weakening ability of the West to project its institutions and strategies onto the rest of the world.

Failures in addressing the impact of the aftershocks of the Global Financial Crisis are adding domestic discontent to the above equation. In the highly interconnected world, the younger generations are acutely aware of the European Union's failures in managing the crises flashpoints in Greece, Cyprus, Spain, Portugal and even Ireland. The uncertainty and anxieties from the economic crises fallouts in these countries have a contagion effect on younger voters perceptions of democratic institutions across the advanced economies.

In some, less frequent, discussions, the adverse fallouts from globalisation can be included in the list of policy failures generating centrifugal forces within the younger electorate, although the proponents of such views rarely bother to explain how globalisation triggers a deterioration in ethical values of the younger workers.

The second prevailing theory of de-democratisation is the thesis of democratic and institutional deconsolidation. According to this theory, democratic values and institutions require concentration of voters into a small number of prevailing parties or ideologies. Such consolidation secures continuity of strong trust in democratic institutions, social cohesion around the prevailing democratic norms and direct consent from the voters for the system. The theory goes to claim that democratic consolidation provides the basis for sustainability of democratic governance and political regimes, and socio-economic institutions and values. Deconsolidation tears this institutional fabric apart, creating ambiguity, uncertainty and volatility while opening electoral space for populist and extremist rhetoric and leadership (Foa and Mounk, 2016 and 2017). The problem with this thesis is that consolidation can also result in significant over-concentration and ossification of power institutions, representing a challenge to the liberal democracy, or reducing the democratic systems' ability to adapt to change and counter shocks, as discussed in more detail below (Taub, 2016). A deeper problem is that this view does not explain the origins of deconsolidation or link them to fundamental drivers that can also explain the decline in public support for liberal democratic values.

The third, even less likely candidate for explaining the ongoing dramatic decline in the popularity of liberal democratic institutions, is the hypothesis that the causes of it are fully contained with the Global Financial Crisis and the Great Recession. This view is popular amongst the European officials, strongly vested in the notion that the European integration and its institutions have not contributed to the declining appeal of the traditional liberal democratic values to younger voters. The prevailing dogma within the EU that concentration or consolidation of power in various 'Union'-like structures is not the cause of the deeper crisis, but the solution to it. In reality, the Global Financial Crisis, the Great Recession, and in Europe's case, the Sovereign Debt Crisis all have contributed to the underlying drivers toward the emergence of illiberal populism as a major force in European and U.S. politics. However, they are hardly sufficient as a sole explanation for the deeply rooted and demographically polarised trend, outlined in the evidence summarised above. Not surprisingly, even the supporters of deconsolidation hypothesis, such as Mounk (2016b) agree with insufficiency of this hypothesis. If anything, the three crises can be viewed as the symptoms of the disease, rather than its causes. In addition, this proposition does not explain weakening support for democratic values and instituions in the countries that largely escaped the worst fallouts from the Global Financial Crisis and the Great Recession, e.g. Australia and New Zealand.

The problem with the three views outlined above is that they confuse the effects for the causes and ignore the elephant in the room, namely the correlated nature of several trends currently present in the younger electorate, which include: 1) Rapidly growing uncertainty in the political and socioeconomic environments unique to the younger cohorts that can be timed back to 2007, but starts rising as far back as the beginning of the 2000s (Backer et al., 2016; Gurdgiev, 2017a); 2) The tendency of the younger Millennials to shift preferences toward more authoritarian and, yet, more decentralized values systems, as exemplified by the dichotomy of individualist preferences for the web-based social networks, alternative news sources and cryptocurrencies on the one hand, juxtaposed by the preferences for more concentrated, more authoritarian and power-based policy formation and debates (Galston and Hendrickson, 2016); and 3) The failing support amongst the

Millennials for a broad range of liberal democratic values and rising support for more local and national identities, as opposed to the globalist view that dominated the early years of the preceding generations, as well as the greater willingness of the Millennials, compared to other generations, to set aside privacy concerns when engaging with new technologies (Fleming and Adkins, 2016).

The three points outlined above jointly contradict the original postulation of the Knightian uncertainty by Frank Knight (1921). We reflect this modification of the old Knightian paradigm by referencing deep or deeper uncertainty as opposed to pure Knightian uncertainty. In a way, deep insecurity, as used from now on, refers to the VUCA (*Volatile, Uncertain, Complex and Ambiguous*) environment, which is richer than the Knightian uncertainty environment and less easily transferable into quantifiable risk models. Thus, unlike the simplified frameworks that dominate the current state of thinking on the issue of de-democratization of the electorate, this diagnosis summary, presented in points one to three, offers a much stronger, more comprehensive connection between the economic and the social experiences if the Millennials, and the evolution of political and socio-economic volatility, uncertainty, complexity and ambiguity.

Uncertainty, Not Volatility

The idea of volatility in a political environment as a driver for declining fortunes of democratic institutions misdiagnoses the disease we face for two primary reasons. According to Mounk (2016b), "*Three causes are present in most of the countries where far-right populists have stormed the political stage. Those are economic anxiety. A lot of people now feel that they haven't experienced any real economic improvement over the course of their lives, or fear that their children may be worse off than they are; anger in rural areas, which have not performed as well* *economically as urban areas, feel more culturally isolated than they used to, and now find it easier to mobilize against the centre, in part because of the rise of social media; and rebellion against ethnic pluralism and equality—anger among people who are afraid that they might be asked to accept people who don't stem from their ethnic group as fellow citizens, or as equal citizens*".

All factors, identified by Mounk (2016b) and echoed in Foa and Mounk (2016 and 2017) are socioeconomic, and all apply across all demographic cohorts. For these factors to explain the significant decline in the liberal democratic values along the demographic division lines suggested by the evidence discussed earlier, these factors must be peculiar to the Millennials cohort as opposed to universal across all cohorts. Moreover, they must reflect something deeper than priceable and forecastable risks. Otherwise, market-based and public risk management systems, such as the labor markets and the social welfare nets would have little difficulty mitigating such traditional hazards, as they have done throughout the previous decades. Put simply, risk/volatility view of the current environment is not sufficient to explain the significant gap between the generational attitudes to democratic values, as exposed by numerous surveys and studies mentioned above. Neither are they sufficient in explaining the rise of the populist and extremist ideologies in countries with extremely advanced social security programs, such as Austria, the Netherlands, Sweden and Finland.

Instead of facing a risk challenge, the political environment we are facing today is more consistent with a rise of Knightian-like deep uncertainty. The former is much worse for analysis and public decision-making and opinion formation than the latter because the former does not yield itself to traditional statistical or actuarial modelling. As a corollary to this proposition, evidence from the financial markets also suggests that traditional risk view of the current environment is yielding itself to the deep uncertainty view. This exemplified by the evidence on the decline of VIX as a measure of risk or uncertainty in the financial markets, and the rise of broader policy-related uncertainty as a reflection of the general capital markets environment (Gurdgiev, 2017a). The extreme tail-events nature of deep uncertainty means that past outcomes of electoral choices and legislative decisions are at best a poor guide to the future preferences and incentives faced by the voters. Hence, the recent experiences of abject failures of complicated, usually accurate, probabilistic models based on risk framework to predict outcomes of elections in the U.S., the UK, and Holland, as well as referenda in Switzerland and the UK. We can go all the way back to the Lisbon Treaties referenda across some European states to trace the beginning of the end of the age of volatility and the rise of the age of uncertainty.

Secondly, the evidence presented in the Breene (2017) note suggests the emergence of different inter-generational perspectives on the ability of democratic institutions to represent increasingly different objectives of various demographic groups. In simplified terms, we are witnessing the polarisation of the electorate by demographic distribution of power across three broadly-defined generations: 1) the 'Baby Boomers' generation, are represented and empowered by the status quo political and government institutions. This generation enjoys economic returns consistent with their access to power, as reflected in higher wages, the history of past career progression, better jobs security, higher accumulated wealth, and so on. The Boomers are political, social and economic winners and the agents of the status quo; 2) The Generation X, or Gen-Xers, that traces back to mid-1960s and runs through late 1970s. GenXers enjoy lower gains in political and socioeconomic well-being compared to the Boomers, but their generation is smaller in size and as such cannot challenge the Boomers'-set status quo. The GenXers are feeling the economic and social pains post-crisis, but are yet to surrender their adherence to the values they inherited from the Boomers: the values anchored by the belief in social mobility, the American Dream and the general preferences for liberal democracy. The pain they feel is less acute, because past career tenures cushion it, and because they benefit from greater social transfers. For example, in a range of Western economies (e.g. Ireland and France) unemployment insurance and social welfare acess and payments are based on tenures in the labor markets and age, with younger and less tenured workers receiving substantially lower benefits and facing greater hurdles to accessing social supports; and 3) the Millennials, also known as the Generation Y, born after 1980, are witnessing a significant collapse of jobs security, higher unemployment, poorer jobs prospects over duration of their working careers, compression of income expectations, decline in real risk-adjusted incomes, and longer working tenures set against lower pension's savings capacity. By comparing their fortunes to those of their predecessors, and reflecting on the historical policies from the Global Financial Crisis, they are made aware of the fact that the current political systems' ideologies and institutions are designed to promote the interests of other generations against their own.

[NEED EVIDENCE ON THE GAP IN UNEMPLOYMENT BY GENERATION]

The deep uncertainty about their possible futures defines the anxieties of the Millennials (their VUCA environment) about the capacity of the democratic systems to deliver economic and social progression and break the pattern of the deficit of meaningful political representation of their generation. This uncertainty translates in the Millennials' generation increasingly embracing illiberal values, interpreting the gradualist evolutionary nature of liberal democracy as a symptom of systemic ossification, and feeling disempowered in the traditional socio-political setting. In contrast to these trends, the very same generation feels technologically and educationally superior to the previous generations. The result of these two divergent sets of beliefs is the drift of younger voters away from the institutions of the status quo, aka, the institutions of liberal democracy toward new institutions that are yet to be defined in any coherent way. However, these institutions appear to combine preferences for strong-man policy making, technological managerialism, locally-anchored individualism and the view of the state as an app platform for policy solutions, rather than a hierarchical bureaucracy with centralised core silos of power and decision-making.

The Canyon of Socio-Economic Divisions

Three factors, briefly mentioned above, combine to shape the deep uncertainty felt by the Millennials: demographics, growth dynamics and technological change. These factors also drive economic uncertainty, social impact ambiguity and political volatility. The interdependencies between these factors and the environments they influence defines the system complexity.

Demographic shifts around us imply unravelling of traditional patterns of political change and reforms. Today, evolutionary change[1] that worked reasonably well for demographically and economically stable democracies in the past is restricted by the polarisation of political participation (Roche, 2017). However, the shortcomings of such evolutionary reforms are also overlaying the deeper foundation of demographically-defined socio-economic uncertainty. Over the span of recent generations, the West did not foster timely political evolution from the Boomers generation to the GenXers, preferring to stress continuity and preservation of the past into the future. This made it impossible for the Western institutions to transition from the politics of the Babyboomers to the politics of the Gen-Xers to the politics of the Millennials.

[1] As measured through the gradual reshaping of political leadership, ideologies and institutions through centrist approach to policy making and cautious, research-informed reforms.

Even in the countries where the notional shift to younger leadership did take place, as for example Italy, France and the UK, the new arrivals to the political elite are moulded on the Boomers' generation politicians and are constrained by the political machines and bureaucracies of the past. As the Millennials are rapidly coming into maturity in the Silicon Valleys and Corridors around the world, their power base in political capitals is not matching their progression in the digital/online power bases. Worse, the Millennials tend to confuse their aspirations (their drive toward entrepreneurship and their interconnectedness via social networks) for their actual power capacity (the rate of successful entrepreneurship and enterprise leadership, and the speed of the Millennials' penetration into political and social elites and institutions). Thus, while many Millennials aspire to start and run web-based businesses, the world of digital economy is still dominated by the executives and founders from the ranks of GenXers. The world of global economies is dominated by more traditional forms of enterprises, working in more traditional sectors. Moreover, the world of politics is dominated by power institutions that are increasingly divorced from the 'start up culture' or 'disruption values' of the Silicon Valley and its clones. Worse, the rate of entrepreneurship and the success rate/survival rate of new enterprises in the U.S. is falling both in time and across generational cohorts, with younger cohorts posting lower rates of new enterprise formation (Pethokoukis, 2017).

Geopolitical risks, or more significantly, geopolitical uncertainty, is already a key factor in pricing a range of assets, from cryptocurrencies to commodities, to gold and all the way to benchmark government bonds. Anecdotally, some data suggest that family offices and private equity funds are pushing significant cash flows into 'real' assets that are traditionally seen as long-term catastrophic risk hedges, e.g. agricultural land and forestry assets. A significant spike in deep uncertainty, if accompanied by a visible failure of the political establishment to defuse risk pressures in the major flash point regions around the globe or in key policy areas, such as social security, pensions and/or health can result not only in a large-scale conflict, but also in a severe and systemic contagion in the financial markets. The same applies to uncertainties that arise within highly networked and interconnected areas, e.g. cyber security (Corbet and Gurdgiev, 2017a and 2017b) and in the context of terrorist events (Corbet et al., 2017). Hedging such losses that may occur should, for example, geopolitical uncertainty erupts into a full-scale war in, say, the Middle East or the Arabian Peninsula, or the Korean Peninsula erupt, is virtually impossible without a long-term preparation (El-Baghdadi and Yazdi, 2017). Generally, these types of hedging strategies are not accessible to retail investors.

Even transmission of wealth across generations through inheritance is severely constrained by the fact that pension's gaps for the GenXers are likely to consume much of the wealth inheritable from the Boomers, leaving the Millennials with little to count on when it comes to transfers from the previous generations. An added evolving dimension to this is the value of the inheritable wealth. In countries with rapidly ageing population, property values outside the main cities are either stagnant or plummeting. Meanwhile, property price and rents in major urban centers are rising beyond the point of affordability for younger buyers. As we move toward higher interest rates environment, transitioning property from one generation to another will become harder and costlier for the generations currently acquiring wealth. Adding to this trend the dynamics of geographic mobility for higher human capital-endowed Millennials implies that inheritable properties may, in the future, command much lower returns than those, attained by the previous generations (De Long and Summers, 2012).

Life expectancy also plays a role. The longer the life expectancy of the Boomers and the GenXers, the more dramatic is the prospect of intergenerational wealth transfers collapse becomes. The first stage of this process is the extension of the retirement age in the advanced economies. Today's Millennials can expect the shorter duration of retirement than today's Boomers. These developments are taking place alongside a dramatic decline in the career prospects for the Millennials, leading them toward rising insecurity about their financial future (Nnajiofor, 2017).Beyond the rising age of retirement and falling security of post-retirement incomes, the Millennials are shouldering the growing costs of healthcare and the trends in rising healthcare costs are positively commoving with demographics of aging.

The twin secular stagnation theses complete the landscape of the deep uncertainty. For many decades, since the end of the World War II, Western societies relied on one engine for economic growth: debt-financed investment, primarily in the physical, human and technological capital. This model no longer works. Currently, long term real returns on public and private investment linger around 2 to 3 percent per annum, well below nearly double digits returns enjoyed in the 1950s and 60s, and 6 to 7 percent returns over the 1980s, 1990s, and 2000s. Risk-adjusted human capital investments are yielding returns that are barely above the cost of funding, and in some cases may be falling below that cost, especially considering the changes to bankruptcy legislation in the U.S. that made student loans non-defaultable for households seeking bankruptcy or insolvency protection. Moreover, inflation takes a disproportionately larger bite out of these returns for the younger generation, who face runaway costs of living increases in urban rents (Dettling and Hsu, 2014) and student loans (Looney and Yanenlis, 2015). Despite this, policy elites around the world are still clinging to the idea that economic growth requires ever-increasing levels of private and public sectors debt (IMF, 2016; Gurdgiev, 2016).

While the borrow-to-invest economic growth model is being strained close to its capacity, there is no alternative macro-level model to replace it. The tech revolution, while a powerful driver for innovation and value creation, is so far failing to trigger a new period of productivity growth, comparable to that of the 1990s. Over the last six years (2011-2016), U.S. productivity growth was lower than for any year since 1980, save four years. Moreover, the U.S. has never before experienced a six year period of consistently low productivity growth in line with the most current period (Fernald et al., 2017). The tech revolution is also failing to provide tangible goods and services innovations that the Millennials can treat as a measurable metric for an increase in their quality of life. Improved social networks, communications and information flows are the major benefits of recent technological developments. However, these improvements do not provide shelter or food or pensions or health care cover for the Millennials today or in the future, and they are not offering a material offset to the sky-high cost of these goods and services, or to the pain of college-related debt loads. Messaging-intensive, Uber-aided and Tinder-engaged, the Millennials are house-poor (Dickerson, 2016) and income-stuck (Nnajiofor, 2017), while carrying heavy burdens of student loans.

Meanwhile, robotisation and automation are directly and tangibly threaten the future prosperity of the middle class. The technological revolution is pushing up returns to physical and financial capital, while depressing risk-adjusted returns to labour. The Bank of England published estimates showing that 15 million jobs, predominantly in services sectors, could be replaced by automation (Haldane, 2015). While McKinsey Global Institute estimated that across 46 countries, almost one-third of tasks involved in 60 percent of occupations are at risk (Manyika et al., 2017). The data on jobs displacement by technology, as opposed to jobs enhancement, is open to debate, but the uncertainty about the last outrun of technological progress is a source of anxiety for today's workers (Gurdgiev, 2017b). The threat of robotisation and automation is now extending into the previously ‘secure’ careers, including coding, software engineering, core business support functions that used to offer good jobs prospects for the Millennials (Chui et al., 2016).

Even the proposition that tech-related employment and entrepreneurship are providing the Millennials with feasible alternatives to traditional conduits for career development now appears to be questionable. In a recent Brookings paper, Decker et al. (2016) noted that “*The evidence suggests that in High Tech, high-growth young firms play an especially critical role in job creation and productivity growth...However, since 2000 the High Tech sector and publicly traded firms have exhibited a decline in dynamism. The number of IPOs has fallen in the post-2000 period, and those that have entered have not exhibited the same rapid growth as earlier cohorts*”. Figure 3 illustrates the problem of placing too much faith for future career prospects and labour markets development with the startups ‘culture’ in the U.S.

[FIGURE 3 HERE]

Wealth distribution issues are also demographically charged. Since 2000, household and nonprofit financial institutions wealth in the U.S. rose from $44 trillion to $96 trillion and is now more than $20 trillion higher than at the pre-2008 peak. However, the real economic value added did nothing of the sorts. By the end of 2016, total value-added in the U.S. was only 12 percentage points higher than in pre-crisis years, and per capita, output was just 4 percent above its pre-crisis peak. Based on post-WW2 trend growth through 2007, real U.S. GDP today should be about one-third higher than current levels. Worse, over 1948-2000, the average rate of per capita GDP growth in the U.S. was close to 2.3 percent per annum. From 2000 through 2016, per capita growth was averaging below 1 percent per annum. As shown in Figure 4, real gross value added in the U.S. economy has been trending along the permanently lower and flatter trend line in the post-2009 environment of the economic recovery. However, closer analysis of the growth rates in value added reveal that the average annual rates of growth have declined persistently in every post-recessionary period since the start of the 1990s. More ominously, since the recovery period of 2002-2007, the average rates of growth in real value added in the U.S. are no longer statistically consistent with the historical average recovery rates for 1948-1999. This dynamic underpins decline in the labor share of value added and the deflation in real wages experienced in the U.S. economy outside the financial and technology sectors.

[FIGURE 4 HERE]

The Millennials' expectations, anchored on the traditional notion of improved progression from one generation to the next, the notion the Millennials received from the previous generations baked into their expectations, trace the impossible trajectory of the pre-2008 growth trends. Not surprisingly, faced with the reality of the unattainable dream, the younger generation is increasingly abandoning the socioeconomic beliefs in the core foundations of the liberal society and the basis for this trend were laid well ahead of the onset of the Global Financial Crisis (Smith, 2017).

As a young generation, the Millennials are poor in the physical and financial capital domains, and rely more heavily on labour income. This is problematic. Over 2000-2016 period, work rate for Americans age 20 and older fell from 64.6 percent in the 1990s to 59.7 percent. Today, for every officially unemployed person in the U.S., three more able bodied adults neither seek work nor working. Over 1985-1999 period, total paid hours of work rose, cumulatively, by 35 percent. In the subsequent 15 years period of 2000-2015, the cumulative gain was just 4 percent. Accounting for the changes in population size, 2000-2015 period saw a decline of paid hours of work per adult civilian of some 12 percent(Mason, 2017). Notably, unemployment duration in the U.S. remains sky high, as illustrated in Figure 5 below.

[FIGURE 5 HERE]

The Millennials are also facing distinct regime in wealth accumulation, compared to previous generations. Dettling and Hsu (2017) note: "*Millennials began to enter the workforce during the most severe global economic crisis since the Great Depression, and their present and future economic decisions will be shaped by the historic upheaval in housing, financial, and labour markets they faced at the onset of adulthood. Millennials must also contend with other emerging issues critical to their prospects of building wealth, such as the rapidly escalating cost of higher education and uncertain retirement income. These developments have presented millennials with economic circumstances very different from those of preceding generations*". Figure 6 below illustrates the differences in the current generation's starting position regarding income, while Figure 7 shows their starting position with regard to wealth accumulation.

[FIGURE 6 HERE]

[FIGURE 7 HERE]

In other words, due to technological progress, the Millennials are not only facing higher risks to their jobs and income from work but also hold a smaller share of the capital returns pie, the returns that are increasingly accruing to the financial capital owners. The costs of automation are falling disproportionately on the Millennials. It has been estimated that the odds of a today's 30-year-old are earning more than their parents at the same age were 51 percent, down from 86 percent in the 1970s (Chetty et al., 2016).

History as an Ominous Guide

We can continue drawing lines of evidence, but the view that emerges from the analysis of the inter-generational positioning of the Millennials will remain unchanged: we are living in the age of deep uncertainty, and this uncertainty is dramatically more pronounced for the younger cohorts of voters. Which makes today's environment similar to the environment that marked the end of the Age of Engineering or the *Belle Époque* in the early 1900s. The outrun of that episode of rising systemic uncertainty included the WW1, the Great Depression and, ultimately, the WW2, spanning almost 40 years of misery, alongside the death of the previous political status quo regimes, and the birth of two 'alternatives': fascism and communism.

Volatility and risk, two measurable, well-structured, and statistically and strategically manageable concepts, do not hold as the key descriptors of today's environment. Deep uncertainty does, heralding the time of revolutionary situations. Take the historically more apt definition of the latter, provided by Lenin (1915), as "*a crisis in the policy of the ruling class, leading to a fissure through which the discontent and indignation of the oppressed classes burst forth. For a revolution to take place, it is usually insufficient for the lower classes not to want to live in the old way; it is also necessary that the upper classes should be unable to live in the old way*". Lenin subsequently modified this definition also to include the middle classes shifting to support the lower classes as a necessary condition for a revolution.

For the Millennials, the West is inching toward this point of denouement, even though we are not there yet, today. The old ruling elites still have some capacity to introduce enough marginal improvements in the system to depressurize democratic institutions such as the latest Presidential election in France and the ongoing general election in Germany. However, the elites' ability to rule is becoming increasingly constrained by the populist extremism on the Left and the Right, as well as by their internal ossification (Goldin, 2012). Low impact nature of constrained reforms, the institutional gains from gradualist political change approach to policymaking are also deteriorating across liberal democracies (Gurdgiev, 2015a).

The lower- and mid-earners alongside the Millennials still receive significant financial transfers, from the State and older generations, to keep them from putting up the barricades. However, we are witnessing structural cracks in the edifice of the political and State institutions in the West today. This increasinlgy marginalised, albeit not marginal in scale, demographic cohort finds it impossible to live up to their expectations in the age of structurally slower growth or secular stagnation (Fernald et al., 2017). The key to this is the view of transfers. Older generations provide increasing subsidies to the Millennials in housing, mortgages supports and inheritance. The Millennials are also facing reverse transfers in the form of social security taxes and old age care provision. The positive transfers are likely to be vastly exceeded by the negative transfers shortly, as Boomers continue to age. Moreover, the Millennials are at least implicitly aware of this. Thus, the transfers sustaining the status quo cannot be deemed to last forever.

As transfers-linked uncertainty rises, income-linked uncertainty is already high. All in, between 1980 and 2014, pre-tax income growth in the U.S. was zero percent for the bottom 50 percent of earners and about 20 percent for the next 40 percent. Top 0.01 percent saw incomes growing by about 440 percent, and top 0.001 percent of earners saw their income expand 636 percent (Piketty et al., 2016; Danninger, 2016). The U.S. economy grew some 9 percent cumulatively since 2010. However, over the same period, real median income of the U.S. households has fallen 0.6 percent. Moreover, income distributions are no longer supporting the middle class 'American dream', with the more severe impact of income inequality being felt by younger workers starting their careers as identified in Figure 8.

[FIGURE 8 HERE]

Within the next 10 to 20 years, the Millennials are going to watch, powerless to change much, the ever-widening gaps between the Gen-Xers and their generation. With it, the likelihood of a violence-based (although this violence can be expressed in non-physical, such as technological or cyber forms) revolutionary change will be rising. Crucially, despite decades of progressive taxation measures failing to remove the income-wealth gaps that continue to grow between human capital and labour suppliers, and physical and financial capital owners, the current prevalent political ideology views progressive taxation as, well, progressive. That is despite the fact that taxation reduces disposable income available for investment for human capital-rich career-driven younger professionals and entrepreneurs (Gold, 2017).

Deeper Uncertainty: Prevalent Paradigm

In this context, it is worth revisiting the very notion of the Knightian uncertainty to modify it to more current version of deep uncertainty. Frank Knight was the first economist in 1921 to extended Nietzsche's *Genealogy of Morals* principles of Pragmatism to formally identify the distinction between measurable risk and unmeasurable uncertainty. Knight also discussed systemic and institutional methods for addressing uncertainty. Those methods, per Knight, are mostly limited to two sets of institutions, those of 1) Scientific knowledge and advice (in the modern governance setting, increasing data-intensity, analytics reliance of technocratic systems); and 2) Institutions of consolidation and specialisation (institutions increasing the scale of policy organisations).

Per Knight's reasoning, consolidation of decision making in larger organisations and corporations creates tiers of control and risk management, reducing uncertainty. Meanwhile, pricing uncertainty is outsourced to specialists such as insurance and reinsurance companies, and this outsourcing is made more efficient via consolidation channel.

In the traditional Knightian setting, institutional and system-wide resilience can be driven by the vertical and horizontal integration of decision-making nodes. As integration reduces the complexity of probabilistic structures and lowers the degree of perceived uncertainty about the range of possible policy responses, it creates at least an illusion of transparency: data is easier to collect within a limited number of probabilistic trees than across a much larger set of channels consistent with greater complexity.

The problem with this view is that consolidation can undermine the effectiveness of data intensive scientific approach by reducing the process of development and adoption of new ideas, models and tools. In a setting where decisions are being made on the basis of subjective or conditional probabilities or scenarios analysis, consolidation can lead to a compression of the decision-making space, leaving out of consideration tail events and a range of possible alternative scenarios. In other words, consolidation can result in ossification or excessive concentration of the system. Consolidation can also induce adverse behavioural biases: consolidated institutions can generate echo chambers of consensus-driven expert advice in which the system's ability to meet uncertainty and manage it can fall victim to silos and hierarchical structures of corporate and organisational bureaucracies. Overconfidence bias, confirmation bias, status quo bias and other biases can further weaken a consolidated system. Finally, the interaction between consolidation and scientism can result in growing complexity of the overall organisational and institutional environment, making it more susceptible to uncertainty (Gurdgiev, 2015).

In the current environment of deep systemic uncertainty, it would be naïve and dangerous to assume that a centralised, data-focused system of governance and risk management can efficiently and accurately price risks (Taleb, 2014). In simple terms, unlike envisioned by Knight back in 1921, today's deep uncertainty environment may no longer support the twin solutions to uncertainty represented by scientism and consolidation. In a way, this reasoning is consistent with the distinction in modern economics between the theory of decision making under risk (the expected utility theory), and theories of decision making under uncertainty (for example the cumulative prospect theory). The latter emphasises that individuals strongly prefer risk over uncertainty so that voters prefer simple prospects over complex and compound prospects, leading to the potential rise of the 'strong leader' politics of populism and the decline in preferences for 'chaotic' or more volatile, uncertain, complex and ambiguous (VUCA) democratic values and environment.

In a technocratic policy framework – the one developed during the tenure of the Boomers and inherited by the GenXers – there is a limited number of decision making nodes because the tendency of policy elites to converge toward the centre of ideological and policies distribution reduces the exposure of the analytical system to the tails. This is especially apparent in the Basel II accords precedent to the Global Financial Crisis and in the euro area monetary institutions. In both of these cases, prescriptive risk analysis nodes and scenarios prevented policymakers and private sector decision makers from considering the possibility of 'extreme' events and shocks[2].

So the very same factors offered by Knight as tools for resolving the uncertainty-risk paradox: consolidation and data-intensification of decision making, taken jointly may be inappropriate as tools for addressing the current period of rising systemic uncertainty. These tools also form the foundation of the liberal democracy, as evidenced by the concentration or consolidation theory

[2] The systemic avoidance by decision makers to consider possible extreme outcomes can be exemplified by the Robert Lucas' illustration of the Fed forecasting models failure to predict 2008 Financial Crisis.

cited earlier. As such, the over-reliance on these institutional frameworks can potentially be at the crux of simultaneous ossification of the liberal democratic regimes and the evolution of Knightian uncertainty into deep uncertainty when it comes to the younger electoral cohorts.

Conclusions

Recent data on electoral dynamics and sociopolitical preferences present a worrying and strengthening trend of declining popular support for the values and institutions of traditional liberal democracy across a range of Western societies. This decrease is more pronounced within the younger cohort of voters, and especially the Millennials where some studies link this phenomenon to a rise in volatility of political and electoral outcomes either induced by the challenges from outside and the aftermath of the recent Global Financial Crises. These views confuse causes and effects and, as a result, miss a major point: the key drivers for the younger generations' scepticism toward the liberal democratic values are domestic intergenerational political and socioeconomic imbalances that engender the environment of deeper uncertainty. This distinction between political volatility and the deep uncertainty is non-trivial.

Policy and institutional responses to political volatility are inconsistent with those necessary to address rising deep uncertainty and may even exacerbate and accelerate the negative fallout from the ongoing pressures on liberal democratic institutions. Traditionally, in modern liberal democracy, these political and institutional responses include academic and professional experts and business leaders, politicians, senior civil servants and the mainstream media. For the Millennials, however, these authorities hold no ex-ante license, particularly since their record of past predictions and forecasts is well-known and widely available. The Millennials are raised in a much more diversified world when it comes to the decision makers. Thus, the Millennials do not see all of the officially-sanctioned or identified academic and professional experts as the source of deep authority a priori. Even more strikingly – for intergenerational comparatives – the Millennials do not perceive traditional politicians, senior civil servants and the mainstream media as the common or dominant channels for decision making and authority. Instead, this cohort views the world through a more horizontally distributed lens, with pockets of authority present not by a state-granted license, but by delivered expertise. In such a setting, enlargement of the already consolidated and ossified institutions of traditional democratic governance and highly-siloed systems of licensed authority, in the eyes of the Millennials, is equivalent to grafting Rockefeller-era industrial management systems onto the web based economy.

One way of dealing with this paradox is by actively recruiting the Millennials into the decision making nodes and co-opting them into the governance systems. However, the decades-long process of consolidation of these institutions has resulted in an effectively closed shop culture vis-à-vis younger generations and selection mechanism for hiring and selection that are based on candidate's ability to converge to the ex-ante consensus views. Adding to this, demographics of aging imply lack of new opportunities for younger cohorts to enter institutional bureaucracies (where tenure determines promotions and career progression is prioritized over new entries and lateral movements across private and public sectors. As older decision makers hold onto their jobs for longer periods, in part due to adverse long term impacts of the recent crises on their own retirement prospects, the integration process for younger voters is delayed. Further complication arises from the career and educational choices of the Millennials. Focusing on technical expertise and specific career paths has meant lesser likelihood of developing a political or policy leadership career.

Another solution, or a part of the suit of solutions, is decentralization of decision making and delegation of more authority to better distributed local and regional governance institutions and to the systems of direct democracy, e.g. referenda. Yet, established status quo has shown, repeatedly, its inability to operate within the constraints of direct democracy and local governance. To see this, one needs to go no further than the examples of the European Treaties referenda in the 1990s and 2000s, as well as the Brexit referendum in the UK.

The third, currently pursued alternative, is to shift economic growth – and with it the incentives for younger voters to participate in the social-democratic systems of governance and values – toward immigration-driven model. This model is currently being pursued or has been pursued until the very recent times, in rapidly aging societies, e.g. Germany, Italy, the UK, Australia, Canada and elsewhere. Unfortunately, economic trends imply that immigration simply shifts the burden of economic stagnation onto the shoulders of the newcomers. If native-born workers cannot afford rising rents and are prevented by the anaemic wage growth from accumulating new wealth, the newcomers will experience the same pressures as well. However, unlike the native born workers, these new employees will have no inheritance or familial supports and transfers to supplement their current incomes and retirement savings. In other words, the problems currently impacting the native-born voters will only be magnified for the new arrivals to the Western shores.

Absent radical enfranchisement of new Millennial (and Generation Z) voters into the system of political and socio-economic decision making and leadership, and barring a dramatic shift toward more direct democracy, the historical trends so far suggest that the Western liberal societies are heading for a major political and socioeconomic crisis that is likely to be systemic. Current evidence shows that this crisis is unlikely to be resolved by the status quo elites. The Millennial voters, as a younger cohort with less established political representation and growing socioeconomic distance to previous generations of voters, are facing ever decreasing incentives to play a willing part in the status quo systems. This is a growth-rich environment for deep uncertainty to thrive. The revolutionary situation may not be upon us, yet, but the trajectory of the current trends suggests we are heading there.

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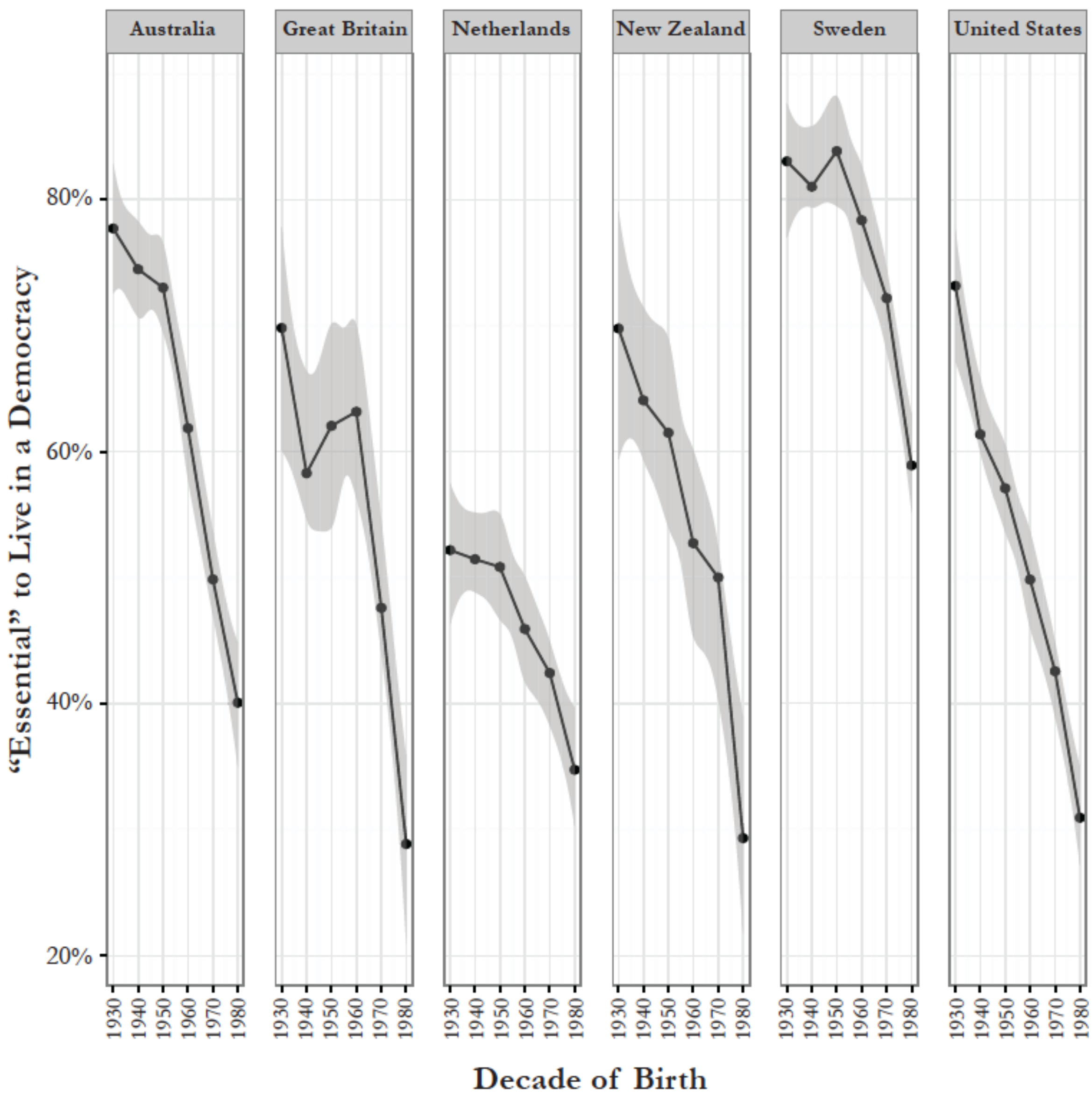
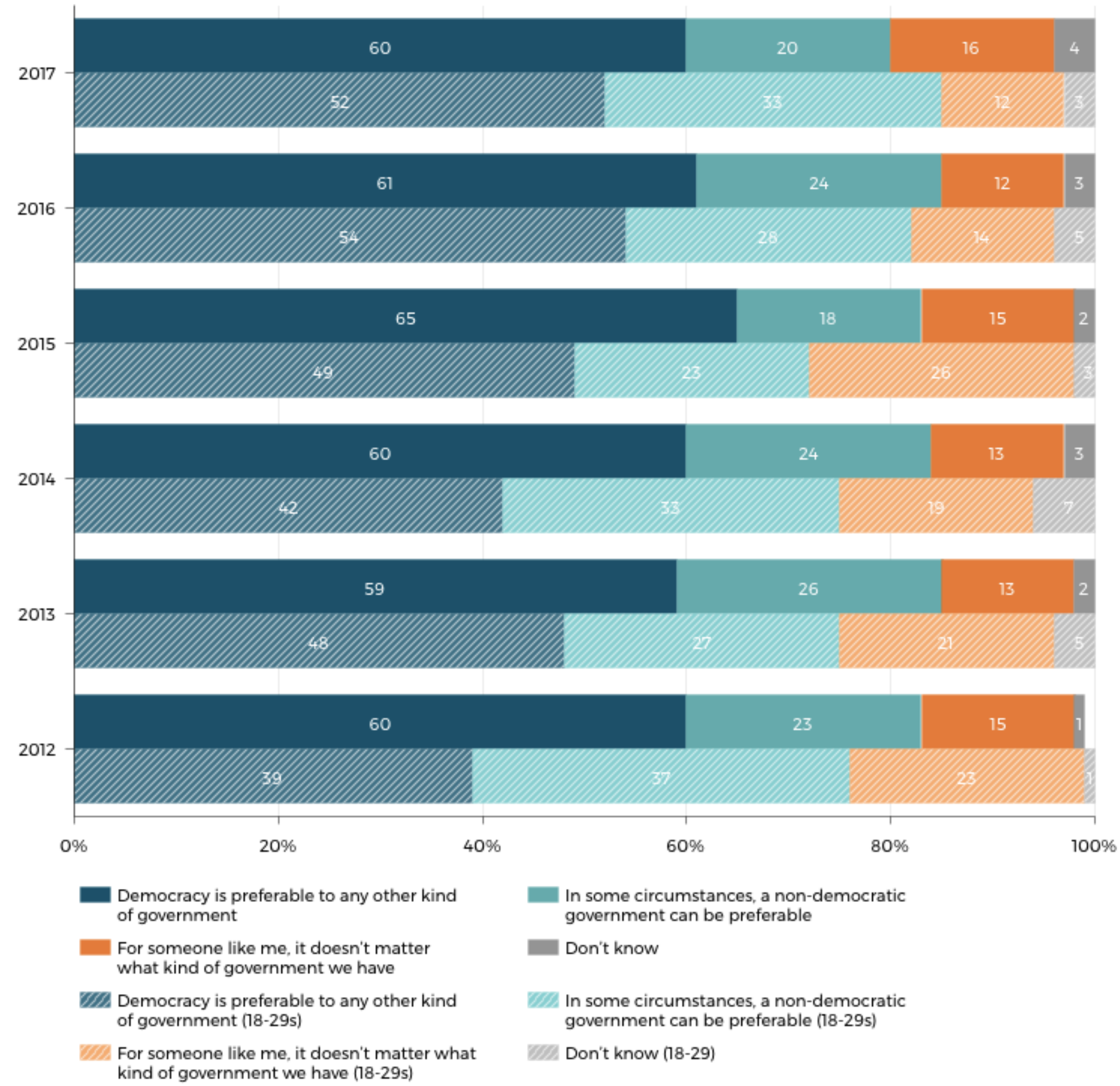
Figure 1: The young are less invested in democracy in the West



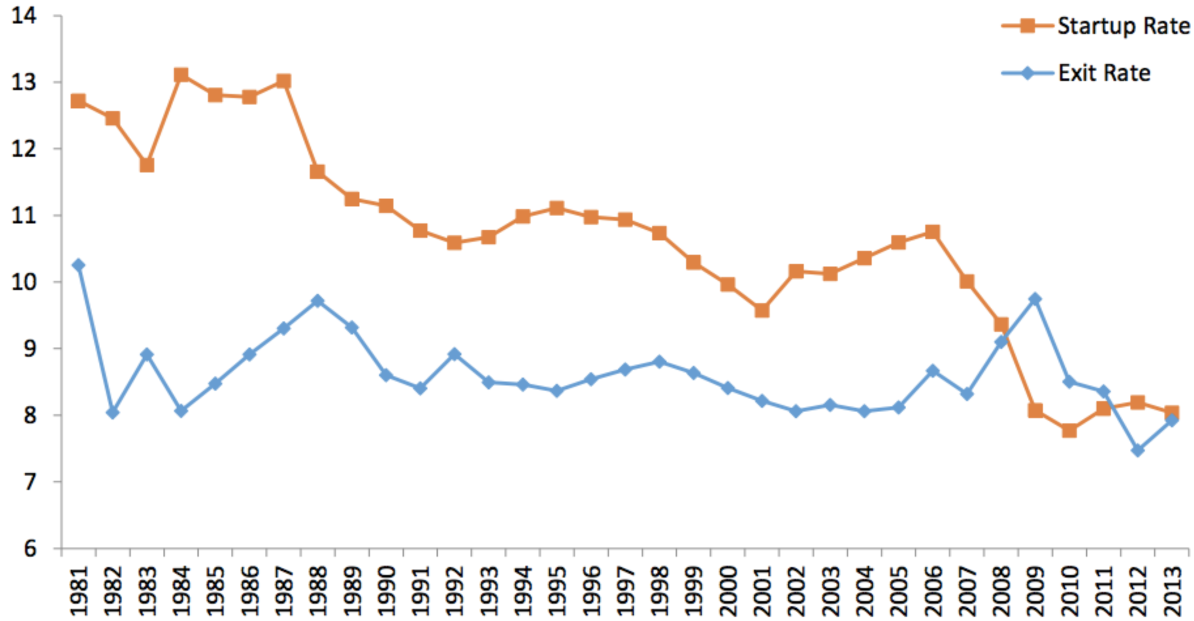
Source: Foa and Mounk (2017)

Figure 2: Between 2012 and 2017, younger Australians have consistently indicated a surprising ambivalence about democracy



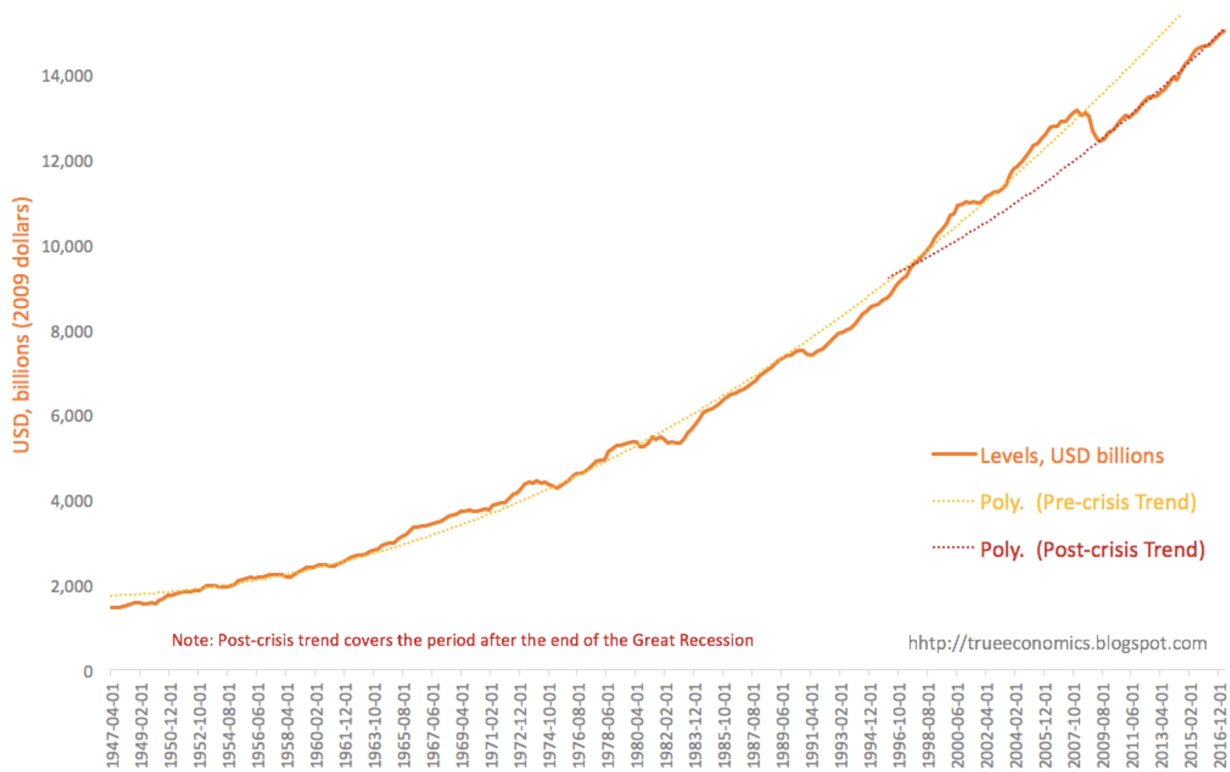
Source: Lowy Institute Poll (2017)

Figure 3: Annual Firm Start-up and Exit Rates, U.S. Private Non-Farm Sector, 1981-2013



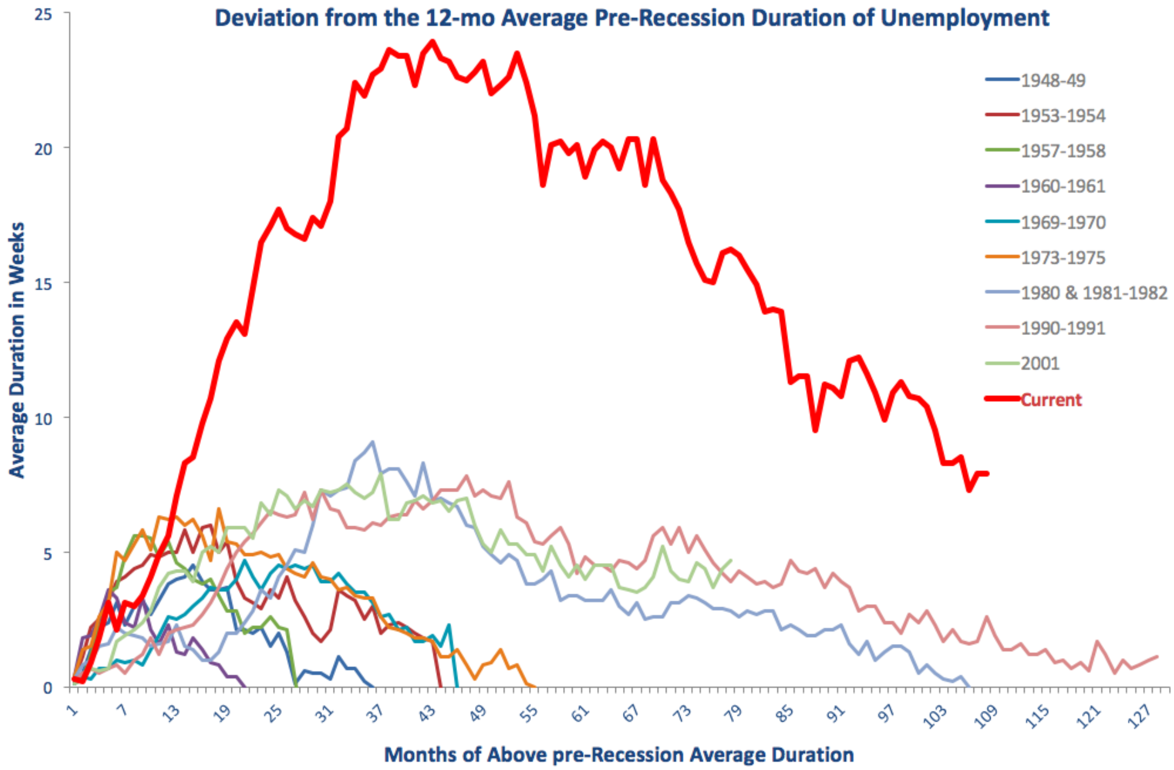
Source: Decker et al. (2016).

Figure 4: Real Gross Value Added in the U.S. Economy, 1948-2017



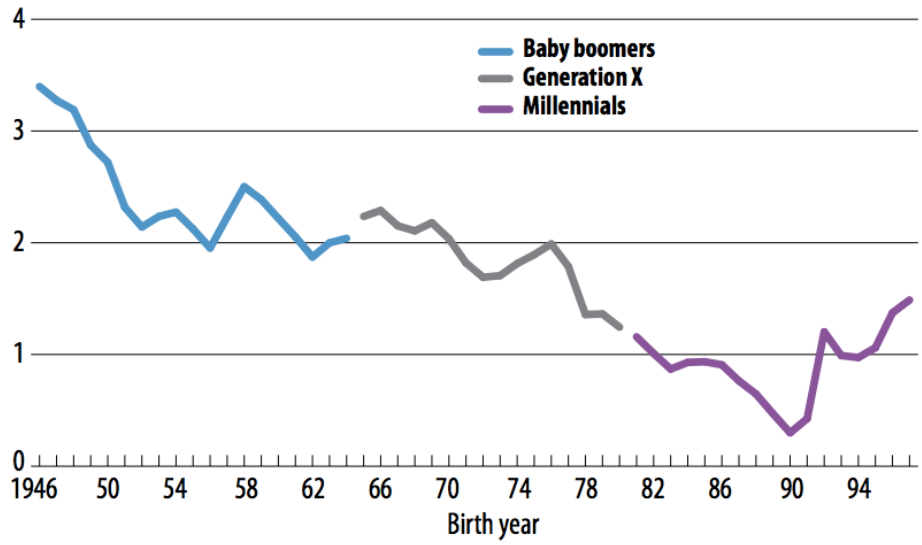
Source: Data from the US Federal Reserve FRED database, analysis by the authors

Figure 5: Duration of Unemployment: From Recession through Recovery, 1948-2017



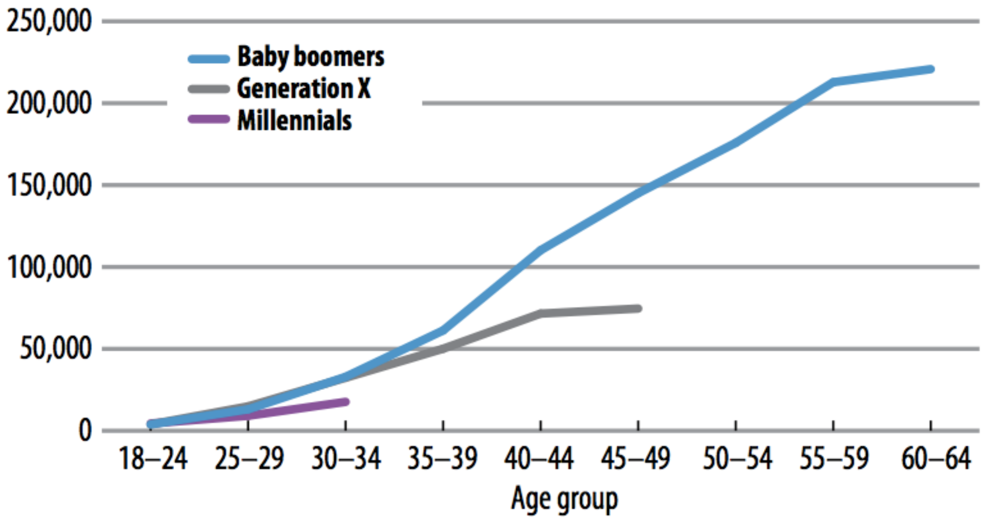
Source: Gurdgiev (2017c).

Figure 6: Inter-Generational Differences in Income Growth (average GDP growth rates, %)



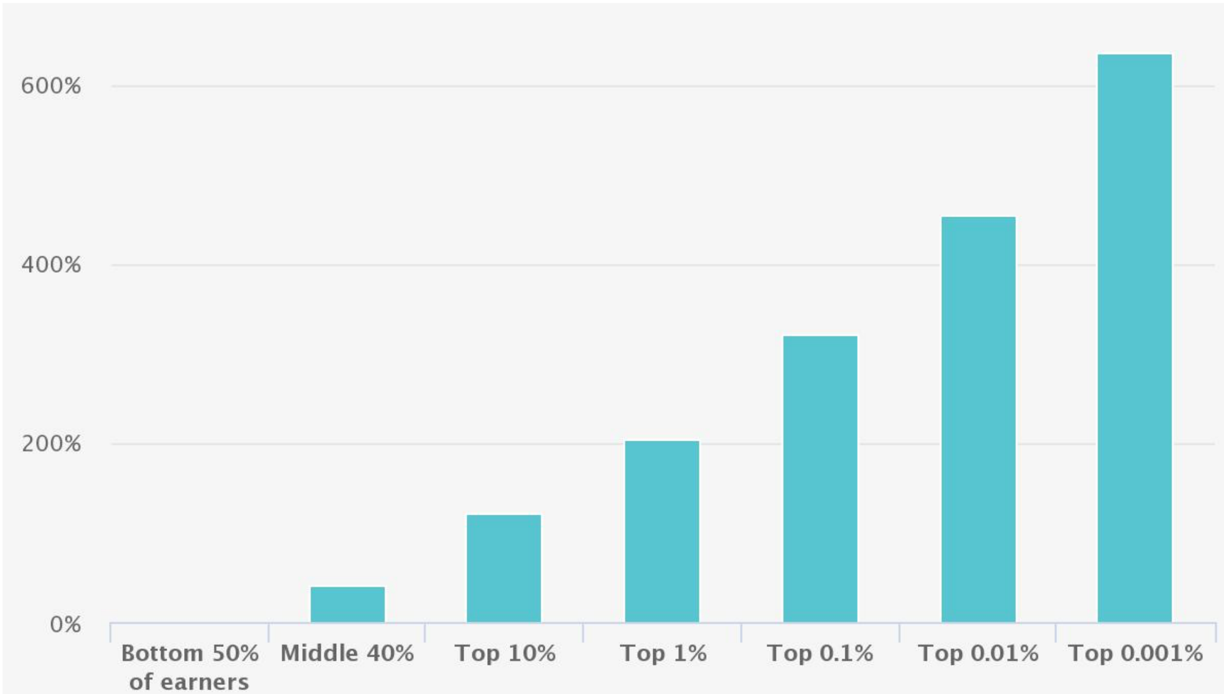
Source: Dettling and Hsu (2017)

Figure 7: Wealth accumulation trajectory of Millennials (median net worth, 2013 dollars)



Source: Dettling and Hsu (2017)

Figure 8: Pre-tax income growth in the U.S. 1980-2014



Source: Gold (2017).