Economic Insecurity and Well-being

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ABSTRACT

In Article 25 (1) of the Universal Declaration of Human Rights, the United Nations recognized in 1948 the basic human right to "security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond ... control." This paper examines how economic insecurity is related to, yet different from, poverty and inequality, why it matters for human well-being and how it has been changing in different countries around the world in recent years. The paper concludes with discussion of how economic insecurity has been and will be affected by the Covid-19 pandemic/recession.

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> "Everyone has the right to a standard of living adequate for the health and well-being of himself[1] and of his family, including food, clothing, housing and medical care and necessary social services and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control."
>
> *Article 25 (1), Universal Declaration of Human Rights, United Nations (1948)*

The United Nations has, from its inception, always recognized the fundamental importance of economic security to human well-being. And since Covid-19 crashed the world economy in March 2020, there has been a new urgency. The pandemic has been a massive economic insecurity shock around the world – a shock whose impacts have been layered on top of the increasing insecurities created by preceding decades of rapid economic, technological, social and demographic change, and by the decline in many nations of the institutional protections of the "welfare state". Even before the pandemic, an expanding literature had linked increasing economic insecurity to social problems like political instability and xenophobic nationalistic social movements, as well as to individual health outcomes like increasing obesity and mental illness – trends which the Covid-19 pandemic reinforces.

But what exactly is economic insecurity? How is economic insecurity related to, yet different from, poverty and inequality? Why might it matter for human well-being? To what extent has it been changing in different countries around the world and how will it be affected by the Covid-19 pandemic?

1 What is economic insecurity?

The term "economic insecurity" is frequently seen in both journalistic and academic discourse – often without an explicit definition. Many articles have also been published discussing the related issues of risk, economic vulnerability, social security, social insurance, social protection, loss aversion and income volatility/instability[2]. So what does a term like "economic insecurity" mean and what might that terminology add to the discussion?

The core idea underlying the economic insecurity literature is the importance, for both poor and more affluent households, of uninsurable, unavoidable downside economic risk. Although a variety of variables have been used in empirical work, available definitions of economic insecurity share a common perspective. Osberg (1998:1) initially argued that economic insecurity is "the anxiety produced by a lack of economic safety, i.e. by an inability to obtain protection against subjectively significant potential economic losses". Bossert and D'Ambrosio, (2013, p. 1018) put it slightly differently as: "the anxiety produced by the possible exposure to adverse economic events and by the anticipation of the difficulty to recover from them". The UN (2008:vii) similarly argued: "economic insecurity arises from the exposure of individuals, communities and countries to adverse events, and from their inability to cope with and recover from the costly consequences of those events."

In all these definitions[3] the issue is the impact on people of downside economic risk – i.e. the consequences of worrying about, and fearing, the hazards of economic life. Although there is a very large literature in economics on risk and volatility, that literature on the potential variability of future incomes is about the possibility of both positive and negative events. But uncertainties about positive and negative future events do not have symmetric impacts – although giving someone a lottery ticket does increase the riskiness, uncertainty and volatility of their future income prospects, it does not increase their insecurity. Economic insecurity is about possible future events whose prospect induces worry and anxiety – downside events only.

Future hazards always have the twin dimensions of (1) likely magnitude of potential future harm and (2) probability of the event occurring. "Significant potential economic losses" can, for example, be significant

in the sense of expectations about the size of the potential loss and/or in the probability sense of the expected likelihood of the event occurring. There is an ongoing discussion in the insecurity literature about whether these two dimensions of insecurity are better analyzed by econometric estimation of the objective size and probability of adverse events affecting different types of people or by examining survey data on the subjective perceptions of individuals[4]. Nonetheless, whatever the method chosen to measure an individual's exposure to hazards to income and well-being, the implications for them depend crucially on their capacity to avoid or prepare for shocks and/or cope with their consequences.

Of course, finding a bit of economic safety and security in an uncertain and often hazardous world is not exactly a new problem for humanity. In traditional agrarian societies, people have for millennia worried about their personal chances of an injury or illness that could prevent them from earning a living or the prospect of a drought or a flood or other natural disaster that could impoverish both them and their entire community. In most such societies, strong informal norms of reciprocal sharing within extended families and kinship groups evolved which reduced individual insecurity by pooling the risks of idiosyncratic events of personal misfortune. And although norms differ across societies, throughout the world sharing and mutual assistance within families remains crucial to economic security. However, when disasters befall the entire community and many people in the same kinship groups are more or less simultaneously affected, even the largest extended families can find that there is nothing much to share, just when sharing is needed most. The covariant nature of community level hazards (like crop failures or recessions) imply that the social institution of informal kinship sharing norms are often inadequate guarantors of economic safety.

Furthermore, as nations around the world have urbanized and industrialized, traditional norms have come under stress, families have shrunk in size and diminished in stability and the nature and frequency of economic hazards has changed. In rich countries today, citizens often can rely on formal entitlements established by the social protection programs of the "welfare state" to offset the costs of hazards like unemployment or illness or inability to earn income in old age. The origins of such programs are often traced to the reforms of Bismark, who remarked in 1885 that "The real grievance of the worker is the *insecurity of his existence*; he is not sure that he will always have work, he is not sure that he will always be healthy, and he foresees that he will one day be old and unfit to work"[5].

Historically, security in old age was the first objective of the welfare state, in the form of public pensions, first in Germany and soon after in Australia. By the 21st century, public expenditures on old age security had grown to more than 8% of GDP in most rich nations.[6] Aging is an inescapable problem of the human condition, and some form of intergenerational social contract has always been similarly inescapable. Traditionally, people depended on informal norms and obligations within families for their economic security in old age. However, as individuals move geographically and families shrink in size and the norms of sharing shift with economic development, the possibility that families can always be depended on to deliver old age security becomes increasingly tenuous. Public pensions for the elderly embody the intergenerational social contract in formal entitlements, delivered by the state, thereby socializing a solution to the ancient hazard of deprivation in old age by pooling risk over the entire polity. In affluent nations slowing growth and aging populations have produced debates about the future levels of state pension systems for the elderly. These debates are not about whether state pension systems should continue to exist – there is no political question that public pensions are viewed as socially essential – but uncertainty about the future level of public pensions nevertheless adds to present anxieties.

However, in many poor countries, old age pensions are, for most people, not available. Around the world, welfare state social programs are very uneven in benefits and in coverage – indeed, the majority of humanity live in countries without comprehensive social protection programs. Their citizens know that even though their societies are in the midst of unparalleled changes, they cannot now actually depend very much

on public social programs in times of need. And in the rich nations that have long histories of welfare state programs, there are new anxieties about whether these institutions can provide a satisfactory degree of economic safety in future years, given the changing nature of work and of family life and the financial pressures which slowing GDP growth places on public finances. Rising levels of economic insecurity are therefore a crucial social issue, around the world.

2 How is economic insecurity related to, yet different from, poverty and inequality?

We all live in the present, anticipating the future. The core issue in economic security and insecurity is fears about what might happen – the worries and the anxieties people have that are driven by the uncertainty of their expectations about possible future adverse events[7]. Security and insecurity are therefore inherently forward-looking concepts. In contrast, poverty and inequality are facts of the present determined by what has already happened – aspects of the here and now which concern the current actual distribution of command over economic resources.

In analysis of the distributions of income and wealth, discussions of "poverty" focus on what happens at the bottom of the income distribution – i.e. to those below a "Poverty Line" which distinguishes between people who are deprived or not deprived of a minimum social standard. Debates about "inequality" concern the entire distribution of command over economic resources – everyone from the homeless to the billionaires. Economic insecurity – i.e. anxiety about the possible hazards of an uncertain future – is distinct from poverty or inequality partly because it is an important issue for both poor households and the middle class, but not for the wealthy.

Indeed, Bossert and D'Ambrosio (2013) have emphasized that wealth is, in itself, a source of economic security. Wealth generates a financial rate of return which appears in income distribution statistics as current capital income, and it is also a stock of potential consumption, which is available when needed. Owning a stock of assets that could be sold, if necessary, means that owning wealth produces, as a by-product, the insurance benefit of a buffer against hazards and a degree of economic security.

Because economic security enables greater peace of mind, it is something people generally want to have. High income people therefore typically want to "buy" more of it, whenever they can. Conversely, economic insecurity is correlated with low income. Affluent people can afford to reduce both the probability and the cost of possible future adverse events by, for example, choosing less risky jobs or purchasing insurance or pension plans privately to protect themselves against the risks of costly health events and / or inadequate incomes in their old age. Low-income people cannot afford as many safe options and are therefore more exposed to risks of these and other adverse events. Wealth also enables the affluent to self-insure – the rich have enough assets to know that they can cope with possibilities like a sudden illness or joblessness. Economic security and insecurity are thus issues that are of little concern to the top of the income and wealth distribution. But because the not so affluent – i.e. the middle class and the poor – do not have these buffers, greater insecurity in a society is correlated with more poverty and higher inequality.

In particular, economic insecurity greatly concerns the middle class, who depend on their income from labour, want to avoid losing their place in life and may be quite conscious of the possibility of poverty. Historically, many in the middle class were able to get a sense of security from workplace institutions. In many workplaces in affluent nations there traditionally was a transition to permanent, secure status after an initial period of probationary job insecurity. The details of that attainment of job security often differed considerably by industrial sector, but a general theme of many workplaces in recent years is that institutional security provision has become rarer.

Many concrete examples can be cited, not least the university system, where fewer academic jobs are tenure track, and the transition to job security has become rarer, as the percentage of courses taught by sessional and short-term, non tenure-track contract lecturers has increased. Although their contracts may in the end be renewed from one year to the next, the fact that sessional lecturers have to sweat out, every term, the possibility of non-renewal is invisible in labour market statistics. Similarly in the public sector, increased use of temporary casuals and the contracting out of functions previously assigned to permanent employees has shrunk the coverage of civil service employment guarantees. In industrial workplaces, declining union density has implied that seniority provisions in collective agreements have likewise lost much of their protective power for older workers, in addition to the impact of greater sub-contracting and more hiring of "just-in-time" casual workers. Meanwhile, trade liberalization agreements have ended some of the protections against plant closures that regulated markets, tariff walls and industrial subsidies had erected in earlier times.

In the wide diversity of workplaces in complex modern economies, the job protections provided by the informal guarantees of employers, employment law[8], collective bargaining and the insulations from market forces of regulations, tariffs and subsidies were important to different degrees in different industries and different places. There historically were a range of institutional mechanisms providing some job protection and economic security to middle class workers – in addition to the income protection provided by social insurance programs like unemployment insurance or worker's compensation. The widespread weakening, and the decreased coverage, of such job guarantee institutions means that even the workers who do, in the end, remain employed now often have more reason to worry about their futures – a greater insecurity that is not recorded in the statistics on the money income of households that inform discussions of poverty and inequality.

Both conceptually and for practical policy purposes, economic insecurity, inequality and poverty are different issues. Some high-income people (e.g. soccer stars) have little or no employment security (and may not have yet had enough time in the major leagues to acquire a buffer stock of wealth). Some low-income people, on the other hand, can be fairly certain about their futures. And even if that certainty means they can be certain about having a low income, it is useful to be able to be sure that life will not get worse. Many poor people have good reason to worry all the time that the little that they have may disappear at any moment – the working poor in the gig economy of intermittent employment are an example. When replacement jobs are scarce, short term contracts mean that workers have to think continually about where the next contract will come from. Gig workers who face an ongoing risk of joblessness[9] are thus worse off than the working poor who have dependable low-income jobs and, even if they all end up with the same annual income, worse off than retirees on inflation indexed pensions.

3 Why might economic insecurity matter for human well-being?

Greater peace of mind is a direct benefit of greater economic security. Knowing what the future will bring also provides the stability that enables planning. Stability and predictability enable people to make and keep social commitments and thereby maintain the repeated interactions which reinforce social connections. Since much social life also depends on being able to reciprocate hospitality, income stability is an important precondition for the maintenance of the social relationships that are central to emotional well-being. Writing during the Depression of the 1930s. when income inequality and poverty were substantially greater than today in rich countries, R. H. Tawney therefore argued that: "Contrasts of economic security, involving, as they do, that, while some groups can organize their lives on a settled plan with a reasonable confidence that the plan will be carried out, others live from year to year, week to week, or even day to day, are even more fundamental than contrasts of income." (1964, p. 147)

As a United Nations report has also put it:

"Spaces in which individuals, households, firms and communities are able to pursue their day-to-day activities with a reasonable degree of predictability and stability, and with due regard for the aims and interests of others . . . [are] particularly vital in societies with an increasingly complex division of labour, where high levels of trust, long-term investments in physical, human and social capital and openness to innovation and change are key ingredients of long-term prosperity and stability. In this respect, providing economic security is a complementary component of any virtuous circle involving creative markets and inclusive political structures. (United Nations, 2008, p. vii)

Conversely, worrying about the future subtracts from enjoyment of the present, and because worrying is stressful, it is both unpleasant and bad for individual health. An expanding literature has documented the adverse causal impacts of greater economic insecurity on mental health and obesity (see Box A and Box B). Since poorer mental and physical health can subsequently adversely affect a person's job prospects, income

Box A

Unemployment Insurance Reform and The Weight Gain of Insecure Canadian Adults

As the colloquial term ''comfort food'' may suggest, foods high in sugar and/or fats can produce a feeling of temporary relaxation and contentment – a positive reinforcement that has evolutionary origins. Smith, Stoddard, and Barnes (2009, 1) argue that: ''viewed from the perspective of behavioral biology ... the reason humans and other animals evolved with the ability to store body fat is presumably because it was necessary to survive during periodic food shortages.'' (which were quite normal for most people). When future food scarcity was a reasonable anxiety, overeating when calories were available was not dysfunctional – stored calories would be burned off in subsequent lean times. Overeating when stressed was thus an initially adaptive response to insecurity which arguably became hard-wired into human psychology. Because overeating causes a biochemical reaction within the brain that helps relax the body, it can act as a ''self-medication'' for stress whose cumulative impact is maladaptive in an environment that is in fact continuously calorie-rich.

However, the rich nations of North America and Europe have, for a long time, been calorie-rich environments with commonly available fast-food technologies. Offer, Pechey and Ulijaszek (2010a,b) therefore asked why the obesity epidemic broke out where and when it did (the USA and UK in the 1980s) and why the prevalence of obesity remains so different in rich nations (in their data, ranging from a low of 5% of adults in Sweden to a high of 32% in the USA). Their "declining welfare state" hypothesis argued that just over half of the cross-national gap in obesity prevalence could be explained by differences in economic security.

In July 1996, Canada substantially revised its unemployment insurance system, reducing jobless benefits and availability and thereby increasing the economic insecurity of those Canadians most exposed to the risk of unemployment. Watson, Osberg and Phipps (2016) were able to use longitudinal National Population Health Survey (NPHS) data to compare the weight gain of individuals, before and after the policy change. In the post-policy change era, the onset of unemployment for poorly educated males caused an additional average increase in body mass index (BMI) of 3.2 points, confirming that greater economic insecurity causes increased weight gain, particularly for those individuals most at risk of unemployment.

Offer, A., R. Pechey, and S. Ulijaszek. (2010b). "Obesity under affluence varies by welfare regimes: The effect of fast food, insecurity, and inequality." Economics of Human Biology 8:297{308. doi:10.1016/j.ehb.2010.07.002.

Smith, G., C. Stoddard, and M. G. Barnes. (2009). "Why the Poor Get Fat: Weight Gain and Economic Insecurity." Forum for Health Economics & Policy 12 (2): 1{29. doi:10.2139/ssrn.979189.

Watson, L. Osberg, S. Phipps (2016) "Economic Insecurity and the Weight Gain of Canadian Adults: A Natural Experiment Approach", Canadian Public Policy June 2016 Pp.115-131.

Box B

Are the Health Impacts of Economic Insecurity similar for the Middle Class? Does Economic Insecurity also increase Mental Illness? What are its impacts on Children?

Is it just a fear of poverty that creates insecurity or are middle class people also insecure about possible losses? Rohde, Tang, Osberg and Rao (2017) used HILDA (Household Income and Labour Dynamics in Australia) panel data to ask whether the mental and physical health impacts of economic insecurity are limited just to people at risk of future absolute material deprivation. Their estimates show that economic risks have consistently negative consequences for both mental and physical health, and that increasing incomes do little to mitigate the sensitivity of health to these risks. The impact of economic insecurity on mental health measures was around three times larger than its impact on physical health, and it is mostly the prospect of loss rather than the actual experience of deprivation that affects wellbeing.

Kopasker, Montagna and Bender (2018) replicated the finding that the negative effect of insecurity is constant throughout the income distribution using British Household Panel Survey data. Using a variety of measures of economic insecurity, their assessment of its causal impact on mental health in the UK similarly found that perceived future risks are more damaging to mental health than realised volatility and that insecurity is more damaging for men.

Kong, Osberg and Zhou (2019) examined the impact on children of an increase in the economic insecurity of their parents. Between 1995 and 2001 in China, after almost 50 years of unequivocal "Iron Rice Bowl" guarantees of job security, 34 million workers were laid off in the reform of State-Owned Enterprises (SOEs). The magnitude and speed of these changes massively heightened the insecurity of the 67 million continuing SOE employees. Their children experienced the greater anxiety of their parents directly and were also impacted by how greater stress affected their parents disciplinary and interaction patterns. In the Chinese context, job loss means the loss of pension rights, which implies likely future dependence in old age on the son's income, which may explain why parents increased insecurity particularly affected the weight gain of boys. As in other studies, anxiety about potential losses for boys whose SOE parents kept their jobs had larger impacts than realized losses. Boys who were initially heavier were also more likely to gain weight.

N. Kong, L. Osberg & W. Zhou (2019) "The shattered "Iron Rice Bowl": Intergenerational effects of Chinese State-Owned Enterprise reform" Journal of Health Economics Volume 67, September 2019.

D. Kopasker, C. Montagna, and K. Bender (2018). Economic Insecurity: A Socioeconomic Determinant of Mental Health. SSM-Population Health, 6:184–194.

Rohde, N., K.K. Tang, L. Osberg & P. Rao (2017)"Is It Vulnerability or Economic Insecurity that matters for Health?" Journal of Economic Behavior & Organization 2017, 134: 307-319.

and/or assets, a negative feedback loop can emerge. And since the stresses experienced by parents affect their children's environment, economic insecurity also has negative consequences for children, because parental economic insecurity influences both family dynamics (e.g. the probability of divorce) and parenting styles. Stressed out parents have less patience, less consistent parenting styles and fewer positive child interactions. More punitive and irrational parenting strategies are apparent when parents experience economic insecurity, with long term impacts on child well-being and educational attainment[10].

When public policy reforms, such as reductions in unemployment insurance coverage, decrease economic security, citizens have to worry more about their economic futures. Similarly, a change in employment standards legislation influences the probability that existing workers will be laid off or terminated. Changes in public pension eligibility and benefits may affect the prospects of poverty in old age. Because public policies

can make a major difference to economic security and because reforms that increase economic insecurity may cause increases in ill health – such as mental illness and obesity – the health impacts of greater insecurity should be considered as part of the cost / benefit analysis of social policy reforms.

Particularly in recession years, middle class households may worry about their economic futures even if it is unlikely that their incomes will fall below the poverty line. Concerns about incomes in old age, the possible costs of major illness or whether mortgage payments can be met are not limited to the poor and the near-poor. Economic insecurity is not an issue that only affects people at risk of poverty. In studies of the health implications of economic insecurity, the common finding is that the impacts of increased insecurity on mental and physical health are felt well up in the income distribution and by all those who experience greater adverse risk (e.g. by all those at greater risk of job loss and not just those who actually become unemployed).

3.1 Why is Government Involved?

During the 20th Century, the "welfare state" emerged as a response to the inadequacies of pre-industrial risk-pooling mechanisms when faced with economic development. Social insurance programs like unemployment insurance, worker's compensation and old age pensions aimed to provide a degree of economic security to a wide spectrum of the population by maintaining the income of beneficiaries throughout some of the widely experienced adverse contingencies of life. Such programs are now substantial fractions of the annual government budgets of most OECD nations[11], typically costing more than 20% of GDP.

Because social insurance programs pay benefits to the unemployed or injured or elderly and are funded, in any given year, by the taxes or premiums paid by the employed and the healthy and the young, in an annual income sense they typically redistribute income from those who are richer in that year to those who are poorer in that year. The lifetime income poor, in all the rich nations, have more hazardous economic lives and are relatively more likely to become ill or injured or unemployed or have inadequate income in their old age. As a result, they tend to benefit more often than the affluent from the social insurance programs of the modern welfare state. However, because social insurance redistributes income between the contingencies that most individuals may experience at different times over their life course, the impact of social insurance on inequality in the distribution of expected lifetime income is much smaller than its impact on the distribution of annual income[12]. Fundamentally, although social insurance programs do reduce poverty and inequality, their primary purpose is the reduction of economic insecurity.

But because national social insurance programs differ in design, their anti-poverty and inequality-reducing impacts also differ, depending on how eligibility is determined and benefits are calculated (e.g. in social insurance programs like unemployment insurance or old age pensions). In what is sometimes called the "Bismark" vision of the welfare state, the underlying purpose of a state system of social benefits is seen as maintaining social stability by enabling benefit recipients to maintain their habitual consumption and relative socio-economic status. To this end, benefits payable while jobless are calculated as a percentage of income while employed. Tying benefits to previous earnings consequently tends to reproduce[13] in the distribution of social benefits some of the inequality and poverty observed in the distribution of earnings.

In the "Beveridge" model[14], by contrast, benefits for those who qualify are set at a fixed amount on the argument that the purpose of a state system of social benefits should be limited to the prevention of absolute deprivation. (Implicit in this policy approach is an assumption that social policy design does not have to consider any possibility that the social system will become unstable.) Lower paid workers therefore find that a higher percentage of their earnings are replaced if they claim benefits. The benefits of social insurance programs influenced by the Beveridge perspective are thus more tightly targeted on low-income recipients, which increases their impact on poverty per dollar spent and decreases the insurance value of the program to middle class households. Because this program design means that less is done to reduce the economic insecurity of

middle-class households, the political economy question is whether such programs can attract wide enough support in the broader society to be funded at levels that make much of a difference to economic inequality and poverty.

Of course, in the model world of some economic theorists, social insurance is unnecessary because economic insecurity is not a problem. In a theoretical world in which it is assumed that complete markets for contingent commodities exist, all agents can purchase insurance in the private market (at actuarially fair prices) against the costs of any possible future adverse event[15]. In this sort of assumed world, the risk exposure of any agent is determined by their personal level of risk aversion and the income that they have available with which to purchase insurance. Any unwanted risk exposure to adverse events – a.k.a. insecurity – is then just a consequence of unequal money incomes.

In rich countries, private market insurance is available for some hazards[16]. For example, because owner-occupied housing is the primary asset of middle-class households, the possibility of their house burning down could be a major source of worry for homeowners, but such anxieties are reduced (for those who can afford the premiums) by private market insurance coverage for fire risk. However, private market insurance products do not in general exist which can provide "Security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control."[17].

Box C

Why does the market fail to provide all the insurance people need?

When the probability of a hazard for an individual is independent of the hazards facing other individuals, can be clearly specified, objectively assessed and is not manipulable, a competitive private insurance market may be able to cover the risk and provide peace of mind. Homeowner insurance for fire risk is, for example, a feasible financial product because although nobody knows which house will burn (making all homeowners potential insurance buyers) insurance companies can use data on many house fires in past years to calculate the probability of a house fire, knowing that the chance of any individual house burning is independent of whether other houses catch fire. Because firms that insure many houses can predict with some certainty their expected claims experience, a private insurance market can function.

However, although risk averse workers would like to have some peace of mind about the financial impact of being laid off, private insurance companies know that business cycle downturns produce many layoffs at the same time. The *covariant risks* of unemployment mean that a private company offering unemployment insurance would be unlikely to survive a recession. Knowing that, workers are unlikely to believe that private insurance contracts are credible. As well, private firms that tried to offer unemployment insurance would face the problem of *adverse selection* – that the individuals who have the greatest interest in purchasing insurance against job loss are the people who think, perhaps because of their privately available information, they have the highest probability of job loss. When insurance companies cannot reliably distinguish between low-risk and high-risk clients, they will have to charge a premium that reflects a pooled probability. If information is asymmetric and clients know their chances of layoff better than the insurance company, firms may then find that they lose money because they are deserted by low-risk clients do not find it worthwhile to buy insurance at the pooled premium. State operated social insurance programs can operate with universal coverage, pooling risks over all client types.

Adverse selection can also be important in health care insurance and pension plans. And since a larger risk pool means that the fixed costs of administration can be spread over more clients, public social insurance programs also have important cost and portability of coverage advantages.

3.2 Why does economic insecurity matter for political economy?

Many hazards, like workplace injury or layoff from informal employment, are more frequently experienced in poor countries[18] – where both private insurance markets and the public social insurance programs of the welfare state are much less available. The level of economic insecurity is thus higher both because the level of risk is higher and because there are fewer opportunities to mitigate the impacts of hazards. Standard statistics on material living standards, like GDP per capita or the Gini index of inequality of annual income, do not capture the more insecure lived reality of most of humanity. Current gaps in well-being within and between nations[19] are thereby understated and the benefits of greater security undiscussed.

However, by importing best practice technologies, deepening their capital/labour ratio, and improving the education and human capital of their relatively young populations, poorer nations now hope for economic growth rapid enough to enable living standards to converge to that of rich nations. If and when economic growth is strong, the gains from growth are available to distribute, which makes it easier to deal with the discontents that inequality and poverty create. Rapid economic growth, if it happens, also typically means that job insecurity and the lack of income security – e.g. through an unemployment insurance system – does not matter as much. When unemployment is low and job vacancies are plentiful the labour market can in itself be a source of security, in the sense that the loss of any particular job is not very consequential when replacement jobs are easily found. But if job creation slows, and if no welfare state social protection institutions have been put in place, the inadequacies of dependence on traditional norms of extended family sharing rapidly become apparent, putting new stresses on governments to find solutions, quickly.

The rich OECD nations have long had social protection mechanisms in place, even if the level of safety they provide has been eroded, in many countries, by financial cuts to transfer programs and erosion of the institutional protections of job security. But even before the Covid-19 recession, there were widespread worries about the prospect of slowing growth and secular stagnation. Slowing technological progress, declining rates of return to capital and aging populations together imply that the governments of rich nations have not in recent years been able to deliver robust and inclusive aggregate growth. If such trends continue, reallocation of the gains from growth will not be enough to buy off discontent with the distribution and insecurity of incomes.

The choice will then be whether to continue a policy emphasis on "freeing up market forces" and continuing to cut the protections of the welfare state. This policy agenda has been popular among policy elites in many countries, and it has successfully delivered robust top end income growth. However, in many affluent nations middle class incomes have tended to stagnate[20] and economic insecurity has risen in recent years. If the governments of rich countries double down on past austerity in the belief that welfare state cuts have just not been drastic enough, the costs in even greater insecurity will be immediate, even if the gains in more rapid GDP growth prove elusive.

An alternative policy emphasis would be to focus on what governments can deliver in greater economic well-being by reducing the insecurity of income flows. The UN Universal Declaration of Human Rights (1948) Article 25, clearly specifies security in the event of unemployment, sickness, disability, widowhood and old age as basic human rights.[21] A greater emphasis on delivering on these long stated promises would have direct impacts on subjective well-being and may also help to avoid the political economy implications of increasing economic insecurity.

Particularly in the last decade, economic insecurity has been linked to the rise of xenophobic, authoritarian nationalist movements threatening liberal democratic institutions. As Algan, et al (2017) put it: "Crisis-driven economic insecurity is a substantial driver of populism and political distrust. An important policy implication from the European economic crisis is that national governments and the EU should focus

Box D
Old age security in Tanzania

The availability of public old age pensions affects:

a. The current well-being of the elderly;

b. The current well-being of younger people who now live with the elderly;

c. The sense of security now of younger people who hope someday to be old; and

d. The decisions that younger people make now, expecting that someday they will be old.

The high birth rates of sub-Saharan Africa imply a relatively young population, and a small population percentage of elderly — which means that the current cost of implementing universal old age pensions would also be a relatively small fraction of GDP. But the prevalence of subsistence agriculture in rural areas and informal employment in cities now means that only a very small percentage of the elderly ever obtain entitlement to a pension. The elderly who cannot continue to work and who cannot live with their extended family therefore become particularly vulnerable to deprivation in old age. Old women in rural areas are especially at risk, even those who can live within an extended family — Osberg (2015b) found that chances of a woman over 60 in Tanzania being "always/often" without enough food to eat were twice as high as for a woman aged 25 to 45.

Since most of the elderly in Tanzania live with younger people in extended families, the benefits of an old age pension would be fairly widely shared. Mboghoina and Osberg (2010) estimated that half of the people raised out of poverty by a universal old age pension for all Tanzanians over 60 set at the food poverty line would in fact be under 18 years old and that overall poverty would be reduced by 7.7 percentage points, at a cost of roughly 1.3% of Tanzanian GDP in 2020. Khalfan et al (2020) calculate that paying a somewhat higher pension at a later age (25% of GDP per capita to those aged 70 and older) would cost 0.6% of GDP[55]. Both would be significant expenditures — but both are small fractions of the 36.9% increase in constant dollar per capita GDP in Tanzania over the 2009-2019 period[56].

Greater economic security has many positive social implications. Having dependable pension income as part of the extended family's overall income package would have benefits for long term development by improving, for example, the capacity of households to afford school fees or to take greater calculated risks in crop innovations or business decisions. Being able to look forward to a pension in old age would also change the expectations of the roughly 94% of the population who are too young today to get the pension now but who will someday be old enough. Risk-taking behaviour and "living for today" would become less attractive while planning for the future would make more sense. Fertility and savings decisions are also likely to be affected. Not least, if a universal old age pension demonstrates that government provides clear benefits which all citizens can expect, the political legitimacy of the state and the willingness of citizens to pay the taxes that development requires may well be enhanced.

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not only on structural reforms, but also at protecting their citizens from economic insecurity." If they and other political scientists are correct, economic insecurity is important for well-being partly because political liberty is important for well-being – but is imperilled by the political dynamics set in motion when economic insecurity is widespread.

The founders of the United Nations, and the authors of the Universal Declaration of Human Rights, had in their own adult lifetimes witnessed two World Wars and the Holocaust. The historical context of their inclusion of economic security as a human right was the desire to win a lasting peace, at a time when the recent development of the Atomic Bomb seemed to guarantee that any future World War III would be even more catastrophic than the first two. The audacity of the United Nations vision was to imagine what is necessary to have a world without war, and to try to set it in place. The Security Council and General Assembly were put in place as UN mechanisms to manage potential conflicts between states but there was also a perception that the root causes of conflicts had to be addressed. As Roosevelt put it in 1944: "We have come to a clear realization of the fact that true individual freedom cannot exist without economic security and independence. "Necessitous men are not free men." People who are hungry and out of a job are the stuff of which dictatorships are made."[22] Dictatorships were seen as dangerous for peace because they are driven externally by expansionist egotism and unconstrained internally by the checks of democracy. An international system dominated by authoritarian nationalism was therefore seen as inevitably leading to inter-state conflicts and wars and the great ambition of the framers of the United Nations was to build a world order in which peace could last. Their perception was that such a system required a foundation of interdependent basic civil, political and social rights and laws based on the consent of the governed because increasing economic insecurity creates dynamics of political instability and the emergence of dictatorships which lead to wars – and that this had to be stopped. The importance of this perception remains.

4 Why and where have concerns about insecurity grown in the last decade? What changes in recent years were driving increasing insecurity, even before the pandemic?

For some people, in some parts of the world, the economic insecurity impacts of climate change have already started arriving. Increased volatility of local weather and increased probability of extreme weather events, like heat waves or cyclones, are inescapable aspects of climate change. Although such increased weather hazards may not much affect the affluent or the urbanized, they are of crucial importance to agriculture – and particularly to the well-being and security of the subsistence farmers who are the world's poorest people and who often have very limited buffer stocks to accommodate crop failures. On the semi-arid fringes of agriculture (e.g. in Sub-Saharan Africa) where ethnic conflicts are often magnified by the competition of pastoralists and small farmers for grazing land and water, communal violence sometimes adds to the increase in insecurities.

However, most of humanity now lives in cities, where increased awareness of the long term impacts of global warming has injected greater uncertainty about the long run future of the planet but the immediate impacts of climate change are often harder to perceive. Because the impacts of climate change accumulate gradually, the likelihood of events like "unemployment, sickness, disability, widowhood, old age or other lack of livelihood" are more immediate hazards affecting current day to day lives. Short run changes in economic insecurity have therefore been driven by the trends determining the probability and severity of these economic hazards and the factors influencing the ability of individuals to avoid those risks and/or mitigate their costs. Since these trends originate in demographic, social, political and economic change which starts from different realities in different countries and proceeds at different rates, economic insecurities have followed different

paths in different places. And although broad generalizations often have to be qualified, trends in economic insecurity have had sharply different drivers in rapidly growing, newly industrializing economies and in the more affluent, but slower growth, developed nations. Nevertheless, a common issue around the world is how the political dynamics set in motion by trends in economic insecurity can affect the ability of societies to implement policies with long run payoffs – in both rich and poor nations, part of the "populist" political reaction to greater economic insecurity has often been unwillingness to bear the short run costs of decarbonisation and adaptation to climate change.

In recent decades, in poor and middle income countries, economic growth, urbanization and declining fertility have fundamentally reshaped the economic hazards to which people are exposed and the protections that are potentially available. Declining fertility implies fewer children will be available as possible supports in old age. Industrialization exchanges the risk of crop failure for the hazard of unemployment. Urbanization replaces the community ties, and informal risk pooling, of traditional rural life with the anonymity of cities. When most of the population lived on the farm and had many children, they could share in traditional ways with their extended families when misfortune struck – and such sharing was often strongly supported (almost enforced) by social norms. Premature mortality was then a larger risk for both men and women but the shared fortunes of marital stability could be depended on. It was then often reasonable to see large families as an important route to economic security, particularly in old age. And although low incomes meant, in many countries, that precautionary savings were difficult to accumulate, economic insecurity was driven by the likelihood of hazards that had been familiar for many generations – like personal illnesses and accidents or natural disasters like droughts and crop failures. In these contexts, informal social supports were the norm and the formal risk-pooling entitlements of the welfare state were unknown.

Those days are long ago in rich nations. The U.S., Canada, Australia and Western Europe, for example, began their urbanization, industrialization and demographic transitions in the mid to late 19th century. Declining birth rates have meant fewer children, higher divorce rates have produced more single person households and longer life spans have meant more years spent in retirement. The extended family has lost much of its role in elder care – retirement and an old age supported by public pensions has been the norm in those countries since at least the mid 20th century. The unemployment insurance, social assistance and health care systems which have socialized many of the risks of modern economic life for working age adults were created and modified, in most cases, at various dates throughout the early 20th century. Like all market economies, these countries have always had to deal with the unemployment periodically created by the macro-economic business cycle and the job displacements of technological and industrial change. These challenges have increased in the past decade. However, industrialization, urbanization and the demographic transition happened long ago and the institutional structures of the welfare state have been in place for decades. The many implications of rural/urban migration, changing family size, disappearing occupations, shifting industrial structures and evolving social roles have thus been spread over multiple generations.

In many of the developing nations, these changes have been much more abrupt. For example, in Mexico the total fertility rate per woman dropped between 1970 and 2010 (roughly two generations) from 6.83 to 2.34 while in Brazil it went from 5.02 to 1.81.[23] Although by 2017 the total fertility rates in Mexico (2.15), the UK (1.87), Brazil (1.71) and Germany (1.47) were roughly comparable, birth rate decline in Germany and the UK started in the 1870s[24] and was largely complete by the 1930s. A demographic transition that happened much more slowly and a long while ago in rich nations has elsewhere occurred very recently, and with remarkable rapidity. That rapidity has implied that the inadequacies of the traditional old age security and risk-pooling mechanisms of the extended family have become more visible much faster than was the case in rich nations.

Low birth rates imply that people of working age have fewer children that they can hope will provide support in their future old age and it also means that throughout life there are fewer siblings or cousins to borrow from (or potentially stay with) during emergencies. Meanwhile, increasing rates of divorce, separation and remarriage have also produced a new range of family patterns. And although ideas about appropriate male and female roles within the household and in the paid labour market have long histories, in recent years these social and demographic shifts have been happening while changes in social norms have been turbo-charged by instant global internet availability of international cultural influences and social media. The extended family has thus lost some of its predictable qualities and, consequently, its insurance capability – in a context in which both private sector insurance markets and public sector social insurance institutions have not yet evolved replacement protections to anything like the level available in rich nations. It is not therefore surprising that many people feel a mix of increasing and interacting cultural, social and economic insecurities.

Because Low- and Middle-Income countries often have large informal employment sectors, fewer legislated employment protections and more hazardous workplaces, their working age citizens are more exposed to risks of job loss and injury than are workers in rich nations. When economic growth is strong and unemployment is low, some workers may find their sense of security in a belief that even if a particular job ends, replacement jobs can easily be found. But the limited coverage of social insurance and social protection institutions also means that income declines due to job loss are much less often mitigated by transfer payments.

More rapid technical change also often heightens insecurities. Although new technologies (like the latest cell phone capabilities) now diffuse very quickly around the globe, and thus in an absolute sense can be said to be changing at a similar rate internationally, today's new technologies are layered on top of very different histories of past technical change. Because the rate of change is faster in a relative sense, technological innovations can have more dramatically rapid social and economic impacts in poorer countries. For example, because landline telephone technology has been widely in place for over a century in North America or Europe, and the associated infrastructure continues in service, the introduction of cell phones has been layered onto long familiar uses of telecommunications. But partly because many parts of the world (e.g. most of Sub-Saharan Africa) never did get landlines, cell phone penetration in poor countries in the past twenty years has been much more transformative. Very suddenly, the functionalities already long available in rich countries become possible everywhere – and in addition innovations in poor countries have sometimes leapfrogged slower changes elsewhere (as in the early development in Kenya of the MPESA electronic payments system for cell-phone money transfers). Along with its many benefits, the ubiquity, rapidity and novelty of technical change also brings the displacement of pre-existing structures – and heightened insecurities.

Empirical research on economic insecurity in poor countries is rare. Because rich countries have had, for many years, more available sources of both objective data on income volatility and subjective data on beliefs and expectations, they have been the focus of most published analyses of economic insecurity. Osberg and Sharpe (2014) is an exception, but the data available to them in poor countries did not enable the comparisons of time series trends in economic insecurity that are possible in rich countries. In their study, only a cross-sectional comparison in a single year (2007-2008) was possible, and only for a limited number of countries. Nevertheless, the data are clear – economic insecurity is considerably greater in poor countries than in rich countries. This paper argues that in recent years economic insecurity has also increased more rapidly in poor countries.

Nevertheless, the increase of economic insecurity in affluent nations has been very keenly felt. Fluctuations in money income matter less for the well-being of households, the greater is the "Social Wage" of universally available public services. To the extent that health care, housing, public transportation, childcare and other essentials are largely paid for out of tax revenue and are delivered to families free or at reduced prices, individuals can be secure in the knowledge that these services will be available to them, regardless of what

happens to their jobs. The expanding domain of privatisation of these services has thus tied well-being ever more closely to changing labour market fortunes. Over recent decades, the world of work in rich countries became more insecure[25] as deregulation eroded employment protection legislation, non-standard employment and the "gig economy" expanded and the pressures of globalization and technical change on traditional manufacturing changed job security, duties and pay. Because new technologies – in particular, the combination of robotization, big data and artificial intelligence / machine learning – have already displaced many jobs, there is also a new level of anxiety about future job availability[26]. In a future in which robots can potentially make the robots that make all the goods we need, it is clear that the owners of robots will have incomes, but many people worry that most everyone else will end up competing for "jobs servicing the rich class in occupations that cannot be replaced by robots" (Milanovic, 2016).

Since economic insecurity depends on the net exposure of individuals to hazards – i.e. the probability and cost of loss after any offsetting income transfers – increases in economic insecurity are affected by both the economic trends driving income volatility and the political trends driving changes in social insurance entitlements. Since the early 1980s, an influential perspective in affluent nations (sometimes called the "Neo-Liberal" agenda) has argued for cuts to regulation, to social insurance transfers[27] and to the social protections for jobs available through labour law and social policy. The intended objective in this pursuit of greater "labour market flexibility" was an increase in the rate of growth of productivity - increased economic insecurity was seen as a tolerable cost[28]. In many middle income and rich countries continued high unemployment has also implied increased labour market risk, but this was seen as acceptable, albeit regrettable. Unfortunately, greater labour market flexibility has not actually paid productivity dividends – productivity growth in OECD nations has in fact slowed since 2000.[29]

Intellectually, the years preceding the Financial Crisis of 2008 were marked by remarkable hubris among many prominent economists. Lucas (2003), for example, famously declared: "macroeconomics ..has succeeded: Its central problem of depression prevention has been solved, for all practical purposes, and has in fact been solved for many decades". Macro-economists routinely congratulated themselves on the presumed end of the business cycle and a new era of a "Great Moderation" of economic fluctuations. But this complacency was shattered by the depth and unforeseen suddenness of the Financial Crisis, the Great Recession which followed, the slow speed of recovery and the consistent failure of macro-economic models to predict both the 2008 crisis and the slowness of recovery.[30] In addition to the insecurity generated by the surge in unemployment that the recession produced, middle class insecurities were also increased by the collapse of house prices (especially in the U.S.). Because the wealth of the middle class is concentrated in the value of their equity in owner occupied housing, the Great Recession had a massive impact on middle class net worth in some countries[31], eroding the sense of security that assets bring and generating a new level of mistrust. Faith that stable and predictable market forces could be depended on to produce rising incomes and economic security thus became more difficult to maintain, even before the pandemic.

5 Economic insecurity during the Covid-19 pandemic – and after???

Even before Covid-19 crashed the world economy in March of 2020, economic insecurity was a worsening problem in many countries. So what has the additional impact of the Covid-19 pandemic been? Because the pre-pandemic drivers of increased economic insecurity were not the same everywhere and because nations have differed dramatically in the nature and the success of their responses to the pandemic, its impacts on economic insecurity also differ around the world. Nevertheless, there are some common threads and for analysis purposes, the impacts of COVID-19 on economic insecurity can be separated into:

a. Short-term: the impacts of the initial shock and multiple lockdown phases (still ongoing, as of July 2021);

b. Medium-term: the income shifts and losses of output and income in the recession and recovery following the initial lockdowns; and

c. Long Run: the changes to trend growth and to social and economic policy regimes driven by the implications of [a] and [b].

Part of the reason why the Covid-19 pandemic has been such a massive shock to economic security is that the associated recession has been so very different from previous downturns. Historically, "normal" recessions have often begun in financial markets, as in the Financial Crisis of 2008 or when central banks have raised interest rates to restrain aggregate demand and reduce inflation. First round impacts on output are usually on interest rate sensitive sectors like plant and equipment investment and consumer demand for housing[32] or automobiles. As domestic demand for goods shrinks, layoffs follow with a lag (initially often of relatively well paid male workers). The downturn propagates across industries over a period of months and is mitigated to the extent that downturns are not synchronized internationally and exports can continue to countries that are not also in recession. Rising unemployment insurance and welfare payments and falling revenues from sales taxes and a progressive income tax system automatically tend to swell government deficits and thereby stabilize aggregate demand. In addition, monetary and fiscal policy makers know what to do – lower interest rates and initiate counter-cyclical deficit spending. Both governments and their publics also know roughly what to expect – some industries (e.g. construction) are known to be more cyclical than others and recession durations are fairly predictable, depending primarily on lags in impact of the macro-economic stimulus providing the aggregate demand boost necessary to push the economy back closer to capacity utilization.

Listing the characteristics of normal economic fluctuations illustrates how structurally different the Covid-19 recession has been in size, speed, sectors affected, synchronization of onset and ongoing uncertainty about timing of recovery. The world's economies all crashed within a period of weeks in March/April 2020, at a rate that the OECD has estimated was ten times greater than the initial rate of onset of the Great Recession of 2008[33] (previously the most severe international economic contraction since the Great Depression of the 1930s). "A historically unprecedented downturn" was the theme everywhere. The United Kingdom, where GDP estimates go back over 300 years (since 1709), experienced in 2020 the largest annual fall in UK GDP ever recorded.[34] Since the first-round impact was directly on employment in retail trade and in the personal services, travel, hospitality and accommodation sectors, low-wage, hourly paid employment, which is often female, racialized and young, was disproportionately affected. Lockdowns on school systems and childcare facilities further penalized female workers disproportionately[35]. Because employment impacts were so sudden, severe and differently distributed than in prior recessions, households had little prior experience to go by and almost no opportunity to offset risk by individual anticipatory actions[36].

Uncertainty about the capability of economic policy to reverse the downturn also increased anxieties. In the aftermath of the Great Recession of 2008, central banks had already cut nominal interest rates to historically low levels, so although the monetary policy response to the pandemic included quick interest rate cuts (to approximately zero), that could not be enough. In rich countries, subsidies to businesses and transfers to laid off workers produced massive increases in public sector spending, which combined with collapsing tax revenues to produce unprecedentedly huge public sector deficits and thereby prevent a complete collapse of aggregate demand.

However, a similarly robust fiscal response was not possible in much of the developing world. As the International Monetary Fund has noted: "The COVID-19 pandemic is a blow to an already fragile global

economic outlook. The health crisis, sharp downturn in activity, and turmoil in global financial markets caught emerging market and developing economies at a bad moment. The past decade has seen the largest, fastest, and most broad-based increase in debt in these economies in the past 50 years. Since 2010, their total debt rose by 60 percentage points of GDP to a historic peak of more than 170 percent of GDP in 2019[37]". The countries where existing social protection institutions were most likely to be inadequate were thus also often the places where governments were most financially constrained in their responses. Hundreds of millions of people slipped into absolute poverty.[38] The pandemic's impact on economic insecurity was greatest where insecurity already was highest.

As the pandemic has worn on, anxiety has also been increased by dawning realization of the importance of virus mutation. Since each new case is another roll of the dice for mutation, there is always a small probability, even if mutations are most often harmless, that new variants will be more contagious and more dangerous. Because the dice are being rolled hundreds of thousands of times daily as the spread of infections worldwide produces millions more new cases, the emergence of variants with dangerous new properties becomes highly likely. Although vaccine availability in rich countries offered the hope of attaining local herd immunity in 2021, widespread inoculation in poor countries may take much longer to arrive[39], implying that disease reservoirs may continue to exist for some time and perpetuating uncertainty about the pandemic's future.

Having a sense of agency – a belief in one's own ability to do something that matters to control events – reduces anxiety and insecurity for individuals and for polities[40]. But in the Covid-19 recession, the economic decisions of both individual households and policy makers had to react to events driven by a previously unknown virus, with poorly known transmission mechanisms, exponentially explosive infection propagation and continually mutating properties. Since there was and is no plausible certainty of whether additional waves will arrive or when the pandemic/recession will end (and thus no clear idea about how big the rapidly accumulating stock of public debt will eventually become or what to do about it), anxiety about an uncontrollable future has become normalized.

Familiarity with a hazard often produces a habituation response (a.k.a. "people can get used to pretty much anything") which usually acts to reduce the stress experienced. But habituation to a new pandemic reality has been made more difficult by the oscillation of optimism and pessimism driven by changing infection rates, virus variants and vaccines. A "Covid Fatigue / Loosening Up / Rising Transmission / Renewed Lockdown" cycle in infection rates was observed in some jurisdictions, and the roller coaster of optimism/pessimism news cycles of vaccination progress and more contagious mutations has fueled a fatigue whose impacts are magnified by the unknown end point of pandemic controls (a.k.a. "when we will get back to normal").

These impacts on insecurity are accentuated by the contagious nature of anxieties. In analyzing many issues, one can consider individuals, and their individual behaviors, separately and just add up the results. The purchases of different commodities by a household can, for example, be added together to get the household's consumption spending, which can then be added to the spending of all other households to get total consumer expenditures in the economy. In issues of this kind one can then also directly calculate the inequality among individuals in any one dimension of life (e.g. financial assets) knowing that measures of inequality like the Gini index are not a function of the average. Because adding up individual outcomes is appropriate in some contexts (e.g. household consumption) and is convenient statistically, it is commonly adopted as a way to think of well-being indicators [41] – but it is unlikely to be a realistic way of thinking about anxieties and insecurities[42], particularly in the context of Covid-19.

Contagion is a more plausible way of thinking about anxiety states and insecurity. For a given individual, contagion across domains occurs because the insecurity produced by being very anxious about one

dimension of life (like one's own health) affects the likelihood of worrying about related issues (like one's children's or parent's health) and is affected by the anxiety felt about other dimensions of life (like whether or not one will have a job next week). Contagion across people occurs partly because of empathy – being in the presence of anxious people tends to increase one's own anxiety level. But contagion across people also occurs when people worry more because the actions of other people, in response to a hazard, may potentially make their own hazard greater[43]. In the Covid-19 pandemic and recession, both the health anxieties and the economic anxieties of people have increased, simultaneously but in highly unequal degrees, implying that insecurity is, like the pandemic itself, contagious.

The pandemic's impact on economic insecurity and the public policy response has been very different across countries – and also within countries. Although in some countries the Covid-19 pandemic has revealed gaping holes in aspects of social safety nets that had previously gone unnoticed – e.g. the standard of care in elderly care facilities – this was unequally experienced, mainly increasing insecurity for at risk households by adding to their list of worries to consider. Labour market impacts of the pandemic have also been very unevenly experienced. In the pandemic lockdowns, salaried professionals at the top of the earnings distribution who could work online typically kept their pay cheques. Low wage workers in essential services also kept their jobs, which were now accompanied by heightened hazards of illness from workplace transmission of corona virus, and consequently greater insecurity. But the closure and restrictions of workplaces involving face-to-face interaction in the hospitality, travel and retail sectors[44] meant drastic job cuts and since these sectors have always been disproportionately female, racialized, younger and lower-waged, these groups were most dramatically affected by Covid-19's economic and health impacts[45].

Because the top deciles of the hourly wage distribution fairly rapidly recovered their losses in working hours from the initial lockdown, but the poorest paid quintile did not[46], the Covid-19 recession has been "K shaped" in market incomes, with recovery at the top but continued depression at the bottom. However, the pandemic's net impact on poverty and economic inequality in disposable annual income after taxes and transfers depended on the design of the emergency transfer programs implemented to deal with the crisis. Where emergency payments were lump-sum amounts (as in both Canada and the U.S.), some low-wage households could end up better off in annual disposable income than they were before the pandemic (at least while payments continued). But because that reduction in inequality and poverty was totally dependent on the continuance of the emergency programs, political uncertainty assumed a new level of importance for economic insecurity – as illustrated in the U.S. by the continuing Congressional crises in 2020 around the renewal delays and level of supplementary unemployment insurance and Covid-19 transfer payments.

The Covid-19 pandemic and recession has thus been a massive, unequally experienced insecurity shock, whose duration is still difficult to predict, other than that it is not over. It already has produced unprecedentedly large public policy responses in many countries[47]. But the political economy question is how many of those changes will remain in place and what new policies will be demanded.

In some respects, the long run impacts of Covid-19 on labour demand, job structure and earnings are likely to produce an acceleration of pre-existing trends. The pandemic has given firms the incentive to make greater use of robotics and reduce employment of low-skill labour in jobs involving personal contact[48], accentuating recent trends to increasing inequality and insecurity of earnings. Even before the pandemic, advocates of a Guaranteed Annual Income in rich nations were arguing that new institutional mechanisms for income distribution are becoming necessary as robotics and artificial intelligence displace human labour in low and middle skill tasks, in services as well as in manufacturing. The pandemic has thus accelerated debates that were already ongoing. But the pandemic's political economy impact on those debates has been magnified by the size and speed of its direct impacts and the increases in public sector spending that were necessary responses. The fact that multi-billion-dollar social spending programs (in the U.S., multi-trillion-dollar programs) were

created and implemented so quickly also constitutes important "possibility proofs" that (1) rapid, large changes in social spending are possible and (2) the sky does not immediately fall when government deficits increase.

The political economy impacts of pandemics can be problematic. As IMF research has found, "past major pandemics led to a significant increase in social unrest in the medium term, by reducing growth and increasing inequality. Higher social unrest, in turn, is associated with lower growth, which worsens inequality, forming a vicious cycle"[49]. They note that there is "more unrest when redistributive transfers are low, suggesting that social safety measures help reducing social tensions." At the height of a pandemic, overt discontent may be limited by the social controls and solidarity necessary for pandemic control, so "social scarring in the form of unrest may not show up quickly…. But looking beyond the immediate aftermath, the risk of social unrest spikes in the longer term (and) threats may be bigger where the crisis exposes or exacerbates pre-existing problems such as a lack of trust in institutions, poor governance, poverty, or inequality.[50]" To offset such risks, they advocate: "Strengthening social protection systems to help counter inequality and poverty; and Rethinking tax systems to promote greater fairness and provide incentives to protect the environment." [51]

The Covid-19 pandemic is the formative experience of a whole global generation and will shape their lifetime political perspectives, as well as their immediate political demands, so its long run political economy impacts are sure to be large. Its severity, unevenness and simultaneous global impact make it historically unique. Once the current recession has run its course, the political economy impacts of Covid-19 will remain a lasting legacy – but the crucial issue is the uncertain direction of change. Because Covid-19 has been a massive insecurity shock, demands for a greater sense of safety about the future are likely – but what will such demands produce?

One possibility is that political systems will actually provide more adequate social protection. Having so many incomes evaporate overnight, in a way that so obviously is not due to personal failings, may produce a greater general appreciation of the insurance value of social safety nets. In the rich nations, the Millennial generation also saw the Great Recession of 2008, entered the gig economy and rising top end inequality of the 2000s, incurred much of the earnings loss of the Covid-19 recession and can anticipate bearing the costs of climate change. Their perspective on political economy is unlikely to be the same as that of the Baby Boom generation, whose attitudes to government shaped the political agendas of recent decades. The pension incomes of Baby Boomers may have largely been untouched by the Covid-19 recession, muting any chance they might ask for social insurance reforms, but they are a shrinking fraction of the electorate in rich nations. If Millenials successfully put a new level of pressure on governments to make good on the promise of Article 25 of the Universal Declaration of Human Rights to provide "security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his/her control", the end result could be a more secure future for individuals.

In societies where there are reasonable grounds to believe that existing political structures have risen to the challenge, the Covid-19 pandemic may then reinforce the social legitimacy of existing polities. If greater demands are placed on existing political structures, and successfully met, the desire of the Covid-19 generation for greater security may be satisfied by an expansion of existing welfare state institutions. Although secular stagnation may mean that the governments of liberal democracies cannot deliver more rapid and inclusive GDP growth, they can deliver more economic well-being, if they can increase the economic security of their citizens. However, this optimistic scenario does require governments to tax and spend – to redistribute income – at a time when growth is slowing, which will be politically difficult. Since the 1980s, most rich countries have seen considerably faster income growth at the top of the income distribution than for the middle class. This unbalanced growth has produced political discontent among those "left behind" but elites have been content – and there is no evidence that they will now acquiesce easily in increased redistribution.

An alternative possible scenario is that heightened insecurity may produce a greater tendency to cling more strongly for safety to authoritarian leaders. Public opinion polling at the start of the first lockdown phase showed a "rally around the flag" initial surge in support for political leaders in most countries [52], a surge that was uneven in size and in staying power. Despite clearly doing very badly in pandemic management, authoritarian regimes in India, Brazil and the U.S.[53] have still maintained a base of popular support with nationalistic appeals. And when authoritarian methods of control appear actually to succeed in protecting citizens from the pandemic, the soft power appeal of human rights based liberal democracies may suffer by comparison. In 2020, by delivering both health and wealth, China's success in eliminating Covid-19 and quickly returning its economy to growth contrasted sharply with the many deaths and deep recession produced by shambolic pandemic management in the U.S. – a contrast that encouraged the narrative that "Chinese ways and methods are a model of governance worth observing and learning"[54]. In 2021, rapid vaccination progress and massive stimulus spending offer hope for a recovery of the U.S. model – but at the time of writing, the year was not over.

The danger for international stability is that if authoritarian nationalism is unaccompanied by the social protection programs that actually deliver economic security to individuals on an ongoing basis, the root problem of increasing economic insecurity festers. Authoritarian regimes may then try to maintain their political legitimacy by continually diverting the anxieties of their populace onto the villainous importance of external and internal enemies. When the real roots of increasing economic insecurity and inequality remain unaddressed, new scapegoats for popular anger must always be found – a dynamic whose consequences the founders of the United Nations had seen at first hand during the 1930s and 1940s and hoped to have prevented from happening again.

The Covid-19 pandemic and recession is an extreme type of stress test for people and their governments, around the world. It has massively increased global poverty, market income inequality and economic insecurity. But it is not over yet, so we cannot yet know what political economy lessons for economic insecurity the world's citizens are learning from it. One can hope for the best.

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Endnotes

1 In referring to "himself and his family", the gendered language usages of the 1948 document sound odd today. Article 2 of the Universal Declaration of Human Rights makes it clear that "Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status." Nevertheless, gender roles, and their evolution over time, are always crucial context of the human right to economic security.

Indeed, one of the defined risks in Article 25 – widowhood – is defined using a term that is quite clearly gendered. The context, when the Universal Declaration was signed in 1948, was a social reality in which the "male breadwinner" model was an empirically accurate description of normal family life in industrial nations but high male mortality during World War II had deprived many women and children of access to those breadwinner earnings. Although working age male mortality is still significant in many nations, divorce/separation is now the more common reason why single parent female-headed households remain at high risk of poverty worldwide. (see Osberg and Sharpe, 2014).

The more general point is that economic security is a human right both for those adults who directly receive money income and for the other individuals who now depend on consumption being shared within households (i.e. children and, in some societies, many women and elderly), so economic security depends on what is happening within family units. Changes over time and differences across societies in the stability of household composition and in the evolution of the norms which dictate the intra-household distribution of power and resources are indisputably gendered, but space constraints dictate that this paper cannot attempt a full gender analysis, despite the importance of these issues.

2 As indicated by the lack of cross-referenced citations in the different literatures, these are often surprisingly nonintersecting conversations.

3 Fuller discussions can be found in the survey articles of Osberg (2015a), Rohde and Tang (2018), Rohde, Tang, D'Ambrosio, Osberg and Rao (2019) and Richiardi and He (2020). In these discussions, "security" and "insecurity" are not separately defined, because they are understood as negatives of each other. However, Shafique (2018) suggests defining economic security separately as: "The degree of confidence that a person can have in maintaining a decent quality of life, now and in the future, given their economic and financial circumstances." (Shafique, 2018:4) and economic insecurity as: "Harmful volatility in people's economic circumstances. This includes their exposure to objective and perceived risks to their economic well-being, and their capacity to prepare for, respond to and recover from shocks or adverse events." (2018:10).

4 Rohde et al (2017) find consistent empirical results using either approach.

5 Hollyday (1970, p. 65) The hazards listed in Article 25 of the UN Universal Declaration of Human Rights replicate those enumerated by Bismark and remain the focus of the welfare state – as evidenced by the percentage of GDP spent by governments in their alleviation (see Osberg, 2015a: Chart 1). Note that Bismark's policy motivation was conservative – maintaining social stability (and the rule of the Kaiser) during a period in 19th century Prussia when rapid economic and social change had produced revolutionary political movements threatening the status quo.

6 See Osberg (2015a: Chart 1, page 9) Legislatively mandated superannuation schemes, as in Chile or Australia, can be seen as taxation with private sector administration of the revenues. Because these schemes do not get counted as part of "public spending", the role of public policy is understated.

7 Expectations about the future are rarely considered in the measurement of poverty and inequality, with the exception of a small literature considering inequality and poverty in the net present value of lifetime income, which sometimes assumes younger cohorts are predictably similar to older cohorts in age/earnings profiles (and therefore rules out any possibility of anxiety). Osberg, Erksoy and Phipps (1998) is one of the few published examples of analysis of inequality in the net present value of certainty equivalent income.

8 For trends in employment protection legislation in OECD nations see https://www.oecd.org/employment/emp/oecdindicatorsofemploymentprotection.htm.

Chapter 3 OECD Employment Outlook 2020 begins with a succinct summary of the economics literature – see https://www.oecd-ilibrary.org/sites/1686c758-en/1/3/3/index.html?itemId=/content/publication/1686c758-en&_csp_=fc80786ea6a3a7b4628d3f05b1e2e5d7&itemIGO=oecd&itemContentType=book.

The general equilibrium effects of Employment Protection Legislation (EPL) on firm behaviour, job stability, unemployment and wages have been much discussed in the economics literature. Whatever the objective status of the conclusions of this literature, it is certainly not read by workers. There is no evidence that EPL legislation is subjectively viewed by workers as not increasing security.

9 "Security" for gig workers depends both on whether there are enough jobs to go around (i.e. the level of aggregate labour demand) and on institutional context. Some industries, like construction or film production, in which workers typically have a sequence of employers who unavoidably need highly specialized skills at particular stages of specific projects, have long employed individual workers on short-term contracts. Where craft unions in construction and the film industry have controlled hiring halls they have been able to create some security by ensuring equity in the allocation of work, as well as by often administering workplace benefits like pension and health plans and providing training opportunities. However, the expansion of gig work in other industries has not been accompanied by similar expansion of craft union institutional protections, and gig work remains particularly exposed to the hazard of cyclical unemployment.

10 See Kong and Phipps (2016).

11 See Osberg (2015a, Chart1).

12 Redistribution of annual income depends on the probability of receiving benefits in any given year, but social insurance only redistributes expected lifetime income when there is a differential in probability of benefit receipt.

13 When social benefits are calculated as a percentage of earnings up to a ceiling income level (usually called maximum insurable earnings), the replacement rate on earnings above that income is zero, implying that the effective average replacement rate is lower for top income earners. In practice, maximum insurable earnings for public pensions and unemployment insurance tend to be placed much higher in the earnings distribution in European countries than in U.S. states or Canada. As well, in some countries (e.g. U.S. Social Security) the benefit replacement rate percentage is set higher at low income levels and declines as an individual's income increases. Both differential replacement rates and a ceiling on insurable earnings reduce the tendency for social benefits calculated as a percentage of earnings to reproduce the inequality of earned income, to a degree that depends on how high a level is set for maximum insurable earnings and on the details of calculations of the low income benefit replacement rate.

14 Influential in, for example, the U.K., Australia and New Zealand.

15 A classic early statement of this perspective is Debreu (1959:98): "A contract for the transfer of a commodity now specifies, in addition to its physical properties, its location and its date, and the event on the occurrence of which the transfer is conditional."

16 However, because administration costs and firm profits must be paid from premium revenue, premiums in private insurance markets cannot be actuarially fair, i.e. equal to the expected value of loss.

17 Barr (1992) is often cited.

18 Hazards are, in general, greater in poor countries. As an example, consider the daily task of cooking breakfast. For many people in poor countries, that often requires splitting firewood, which carries the repeated risk of putting an axe in the foot. Poor medical care may then imply, if an infected wound produces lameness, permanently lower lifetime earnings. In affluent nations one just turns the stove on – both the risks associated with daily tasks and the possible consequences are far smaller.

19 If incomes flows were measured in certainty equivalent income, poverty and inequality would be greater, both within and between nations. See Osberg and Sharpe (2014) for illustrative calculations of the impact of economic insecurity on economic well-being in rich and poor nations.

20 The literature on increasing inequality is now vast. Osberg (2018) provides a recent summary.

21 Article 25 does not assert a general right to a constant income or to indemnification against income declines for any reason – stock market losses would not qualify. It limits the human right to security to protection from the consequences of the same important hazards of life enumerated by Bismark some sixty years previously and to protection from circumstances imposed on individuals ("other lack of livelihood in circumstances beyond his control.").

22 Roosevelt (1944).

23 See https://ourworldindata.org/fertility-rate#https://ourworldindata.org/grapher/total-fertility-rate-by-development-level-including-un-projections-through-2100?tab=chart&region=World.

24 In 1870, the total fertility rate in Mexico (6.8), Brazil (6.29), Germany (5.06) and the U.K. (4.75) spanned a slightly larger range.

25 See Hacker et al (2014).

26 Estimates of the possible disruptive impacts of robots and machine learning on employment vary widely, from 47 per cent of all persons employed (Frey and Osborne: 2013) within the next ten to twenty years to 9% of jobs (Arntz, Gregory and Zierahnon (2016:4).

27 In addition, in the U.S. employer pensions decreased in coverage and most shifted from a Defined Benefit to a Defined Contribution pension design, thereby offloading to workers the portfolio risk of pension management– see Wolff (2015).

28 Brancaccio et al (2020) argue that the evidence that this approach produces an increase in growth is dubious.

29 See "Trends in multifactor productivity and capital deepening" https://www.oecd-ilibrary.org/sites/bc0ae2e6-en/index.html?itemId=/content/component/bc0ae2e6-en.

30 See Turner, (2016), Guénette, St-Pierre, Leduc and Rennison (2016) and Lewis and Pain (2015).

31 See Wolff (2017) and D'Ambrosio and Rohde (2014).

32 Leamer (2007: 1) argued that "housing starts and the change in housing starts together form the best forward-looking indicator of the cycle", which accurately foretold the 2008 Great Recession.

33 OECD (2020) Economic Outlook, June 2020.

34 A 9.9% decline from 2019 to 2020 – see https://www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/gdpfirstquarterlyestimateuk/octobertodecember2020.

35 By contrast, the 2008 Great Recession disproportionately impacted men.

36 Hoarding behaviour was reported in many places, but the short notice preceding lockdowns precluded most other risk-mitigation strategies.

37 COVID19-and-debt-in-developing-economies-kose.pdf.

38 See Oxfam (2020) and Gentilini et al (2020).

39 As of May 27, 2021, cumulative cases were 167.9 million (see https://ourworldindata.org/grapher/cumulative-covid-cases-region?tab=chart&stackMode=absolute&time=2020-01-05..latest&region=World) increasing at roughly 532,000 daily. Even if cases have been massively under-reported, most of the world's 7.8 Billion people remained open for infection. However, 1.81 Billion people had received at least one vaccine dose and 413.7 million were fully vaccinated. The vaccination rate was 30.38 million daily. This rate, if maintained, could produce 75% vaccination of the world's population by May 2022, but there is considerable uncertainty about the level of vaccination required for global herd immunity, the duration of immunity and vaccine efficacy against emergent new virus variants.

40 Milman Lee , and Neimeyer (2020) discuss the role of individual behaviors (e.g. socially isolating, hand-washing) in reducing corona virus anxiety.

41 For example, the Stiglitz-Sen-Fitoussi (2009) report.

42 If one could assume that each person's insecurity/anxiety along any one dimension of life is independent of their insecurity on other dimensions and that their individual insecurities are independent of the insecurities of others, that would imply that one could add up across the specific anxieties of individuals to individual totals and add up across individuals to social totals. Independence would imply that one could calculate the total level of insecurity without considering the distribution of insecurities among people and that one could calculate the inequality in individual insecurities without reference to the aggregate level of insecurity. Neither calculation is straightforward in the more likely case that stressors interact. If the joint impact of stressors is multiplicative, rather than additive, the aggregate level of insecurity depends on its distribution, and vice versa.

43 Contagion of insecurity occurs when an increase in the insecurity of one agent increases the insecurity of other agents. In direct contagion, social contact and empathy between agents produces a convergence of anxiety/subjective insecurity. In what can be called "Behavioral Contagion", the behavioural response of other individuals to a given hazard worsens the consequences of that hazard, which causes increased anxiety about that hazard – i.e. increased insecurity about the hazard is transmitted across agents by behavior. For example, the release of data showing that unemployment is rising is a common knowledge event. It increases my anxiety and insecurity because it indicates that it is now more likely that I will lose my job. If I associate with others who similarly become more anxious and insecure, there may be direct contagion in our anxiety states. If I also expect that when the unemployment rate rises other people will get less fussy about the kind of jobs they will accept, I know that the vacancies they accept will not be available to me, so my unemployment duration will be longer. Behavioural contagion is the increase in my insecurity that arises because I think that my unemployment duration will be longer should I lose my job, because I can anticipate a change in other people's behaviour. Hoarding behavior and bank runs are also examples of behavioral contagion. When the Covid-19 lockdowns were announced, anxiety/insecurity about the availability of personal protective equipment and food produced hoarding by some people. Suddenly bare supermarket shelves then made everyone else anxious about the availability of necessities. Hoarding behavior thus caused greater anxiety and insecurity for others, because food and PPE were in fact suddenly scarcer.

44 See Messacar, Derek, René Morissette and Zechuan Deng (2020). Inequality in the feasibility of working from home during and after COVID-19. Statistics Canada, Cat. No. 45280001, June 2020.

45 See https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00026-eng.htm.

46 See https://www150.statcan.gc.ca/n1/daily-quotidien/200904/cg-a006-eng.htm.

47 See Gentilini, Almenfi, and Dale (2020) and Almenfi et al (2020) for national policy responses to Covid-19.

48 See Saadi-Sedik and Yoo (2021); Handwerker, Meyer, Piacentini, Schultz, and Sveikauskas (2020).

49 When Inequality is High, Pandemics Can Fuel Social Unrest – IMF Blog.

50 COVID's Long Shadow: Social Repercussions of Pandemics – IMF Blog.

51 Government Support Is Vital as Countries Race to Vaccinate – IMF Blog .

52 See, for example, https://www.statista.com/chart/21437/coronavirus-and-leader-approval-ratings/.

53 Brazil is an example – see https://www.reuters.com/article/us-brazil-politics-idUSKCN25A1JX or https://en.mercopress.com/2020/12/14/bolsonaro-remains-with-a-37-approval-shows-datafolha-public-opinion-poll.

54 Chang (2020).

55 To be comparable, they should include the administrative costs of pension delivery, which would take the cost to roughly 0.7% of GDP – but the main point remains.

56 https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD?locations=TZ.