

TRANSITION OF THE JOB ECONOMY: ARE WE PREPARED?

U.S. ECONOMIC GROWTH and CREATING 'JOBS' FROM INCIDENTAL SERVICES, SOCIAL DISORDERS, and CONTAGIOUS VICES

Over the past four decades, the U.S. and E.U. economies shifted from nations of workers amidst scarcity to nations of indulging consumers with access to an unprecedented cheap surplus of consumer products and services. **U.S.** (and increasingly Europe's) **economic performance** is largely abetted by consequence of that transition manifested in **lifestyle indulgence, debilitating risks**, and expansion of **incidental¹, inessential, trivial, enterprise** activity.

“Americans, it would seem, are not willing to risk their health or the health of their loved ones for **nonessential activities.**” NYT reporting on the lower than expected employment figures.

In the wake of Covid-19 economic recovery it is said a healthy government depends on people buying things i.e., ‘simply spending’. Air terminals are in distress for lack of spending at concessions. Concessions dominate the space utilization while the crowded nature of things in terminals have people literally nose to nose waiting to get on the plane^{2,3}.

Similarly, in New York it is said the U.S. Open **tennis tournament** is the biggest income event of the year for hotels. With no fans in the stands, it filled just one hotel, the one where all of the players and tournament staff stayed.

The while reported is colleges and universities base a big part of their sales pitch on their physical setting, lifestyle indulgence and social perks, incurring costs incidental to the basic education and on occasion distracting from it⁴. US ranks No. 1 in the

¹ Hotels in the theater district added a scam called "resort fee". These fees are for **incidentals** that come with the room, a swimming pool and entertainment.

² Dr. Fauci said terminals neglected to allow enough space for people to spread out, offer high-efficiency particulate air filtration.

³ China transitioning from an economy of scarcity to surplus has pursued a different development policy. Amidst Covid-19 the Government encourages thrifty habits and foster a social environment where waste is shameful, and thriftiness is applaudable.

⁴ “The Coronavirus May Change College Admissions Forever: A pandemic returns the focus to what matters: education”, NYT, Sept. 6, 2020

world in quality of universities, but No. 91 in access to quality basic education⁵.

In central Florida leisure and hospitality industry has been decimated by the pandemic. Unemployment in Orange County — home to Disney World, the Universal Orlando Resort, SeaWorld and dozens of mom-and-pop tourist attractions — stood at 11.6 percent in August, up from 3.1 percent in August 2019. Osceola County had 15.1 percent unemployment in August, up from 3.5 percent.

The requirement to sustain the economy by Pavlonian consumer spending has exposed questionable consequences.

Incessant life-style spending is steadily the source form **Social misadventures and 'life-style diseases'** and has placed the health care as a foremost sector for economic growth, employment (jobs) and wages.

US **HEALTH CARE** system generates annual costs of \$3 trillion, or 18 percent of GDP, while accounting for only 10 percent of the factors that affect human health. While leading the world in medical technology, it is No. 97 in access to quality health care.

⁵ "We're No. 28! And Dropping!": A measure of social progress finds that the quality of life has dropped in America over the last decade, even as it has risen almost everywhere else." Nicholas Kristof, NYT, 9 Sept. 2020

In 2016 13, 090,000 were employed in the US HEALTH CARE INDUSTRY. Healthcare workers now account for a larger share of the employed workforce than they did a few months ago (from 10.8% in February up to 11.5% in May). More than 1 million additional medical care jobs are expected by 2022⁶. A major source for future economic growth is from individual's failure to adjust to new health risks, from potentially harmful consumer goods and activities and ensuing dependencies.

Moreover, in the aftermath of the **EPIDEMIC** there will be labor for a vast array of **REHABILITATIVE SERVICES** for 10 Mil. disease survivors (to date). Patients who are returning home after being hospitalized for severe respiratory failure from the virus are confronting physical, neurological, cognitive, and emotional issues.

Jobs and essential supplies in the health sector have been subject to the guiding principle of profitability. The pandemic exposes the extent to which this 'principle' fails to be a basis for preparedness in national disasters. Lawrence Summers estimate that "the economic cost of the pandemic in the US will be \$16 trillion, or about \$125,000 per household — far more than the median family's net worth. "

A recent instance has College students in Tuscaloosa, Alabama, throwing parties in which they invite people infected with the coronavirus and **gamble** on who comes down with the illness first⁷. (Even with economic growth economic quality of health care service has declined⁸.) Addressing health and medical effects from **self-inflicted harmful activity** are the highest single growth sector categories and the largest continuing source for employment (jobs).

A substantial quantity of health care in U.S. is wasteful⁹, accounting for hundreds of billions of dollars of the total health care budget. Wasteful care is driven by many forces: "defensive" medicine by doctors trying to avoid lawsuits; a reluctance on the

⁶ "Here's What Recovery from Covid-19 Looks Like for Many Survivors", NYT, Pam Belluck, 1 July 2020.

⁷ "US students 'are throwing coronavirus parties to infect each other'", Independent, **James Crump, July 2, 2020**,

⁸ Legatum Prosperity Index.

⁹ "People Have Stopped Going to the Doctor. Most Seem Just Fine: Do Americans really need the amount of treatment that our health care system is used to providing?", Sandeep Jauhar. (Dr. Jauhar is a cardiologist.)

part of doctors and patients to accept diagnostic uncertainty (which leads to more tests); the exorbitant prices that American doctors and hospitals charge, at least compared to what is charged in other countries; a lack of consensus about which treatments are effective; and the pervasive belief that newer, more expensive technology is always better.

Note: These figures do not include the effects of the **Coronavirus** epidemic. Healthcare-related workers are in most demand with approx. 80,000 jobs created in health care industry. (In 2016, Medicare began requiring each facility to employ an “**infection preventionist**” to oversee policies and train workers. But that is often a part-time position.) An estimated total 229,000 total with the majority of these in warehousing, stocking, and delivery for home consumption.

CAMPYLOBACTER alone medical costs from visiting a physician – \$20,318,753. Hospitalization – \$121,332,675 and post-hospitalization– \$1,140,269. Medical costs for those with GBS – \$320,416,057. Premature death for those hospitalized – \$657,959,135 and for those with GBS – \$748,428,516.

In US \$201 Bil. is spent on **MENTAL DISORDERS** (\$79 Bil. in 1996) like anxiety and depression, making it **the costliest medical condition in the country**. Heart conditions cost and estimated \$105 Bil. (1996). Depression, dysthymic disorder, and bipolar disorder are the **3rd most common cause of hospitalization** for both youth and adults aged 18–44. The share of Americans reporting every day is a bad mental health day has doubled over 25 years¹⁰.

In US, 43.8 million, or 18.5%, (1 in 5 adults) experiences **MENTAL ILLNESS** in a given year. 9.8 million, or 4.0%—experiences a **serious mental illness** in a given year that substantially interferes with or limits one or more major life activities. 1 in 5 youth

¹⁰ “We’re No. 28! And Dropping!”: A measure of social progress finds that the quality of life has dropped in America over the last decade, even as it has risen almost everywhere else.” Nicholas Kristof, NYT, 9 Sept. 2020

aged 13–18 (21.4%) experiences a **severe mental disorder** at some point during their life. For children aged 8–15, the estimate is 13%.

Job growth is in pharmaceuticals, short and long-term disability, inpatient and outpatient services, laboratory and diagnostic procedures.

Talkspace, \$100 Mil APP startup MENTAL HEALTH THERAPY-by-text company made burner phones available for fake reviews and doesn't adequately respect client privacy. Unlimited Messaging Therapy Plus" plan, at \$260 a month, can send a therapist messages at any time and are promised daily responses. Anonymous data Talkspace collects is not used just for medical advancements; it's used to better sell Talkspace's product.

In Europe MENTAL DISORDERS are the largest contributor to chronic conditions afflicting the population. **27%** of adult population (age 18–65) experienced at least one of a series of **mental disorders** (substance abuse, psychoses, depression, anxiety, eating disorders) in 2017. Neuropsychiatric disorders are 3rd leading cause of disability-adjusted life years (DALYs) in Europe and account for 15.2%, following cardiovascular diseases accounting for 26.6% and malignant neoplasms (cancers) accounting for 15.4%.

In 28 EU Member States 43 per cent of women have experienced some form of **PSYCHOLOGICAL VIOLENCE** from domestic partner in their lifetime. One in 4 women and one in 10 men experience IPV, and violence can take various forms: it can be physical, emotional, sexual, or psychological¹¹. In US incidents of **domestic violence** perpetrated against cost of women \$5.8 Bil. in 1995.

In the US among the 20.2 million adults who experienced A **SUBSTANCE USE DISORDER**, 10.2 million adults (50.5%) had concurring mental illness. US **fatalities** linked to **opioids** including fentanyl **killed roughly 72,000 people in the US in 2019** (NIH

¹¹ Intimate Partner Violence during Covid-19, NEJM,

account of nationwide drug deaths.) a rise of 40 percent over 52,404 drug deaths recorded in 2015¹² **and are continuing to climb**¹³. Meanwhile, **jobs from stages in care and mortuary services have increased**. Several billion dollars in grants to states since 2017 for treatment, prevention, and recovery services. Funding of a **few billion** dollars is said to amount to a pittance relative to what is needed for a vigorous response to opioid addiction and long-term funding for prevention, addiction treatment, social services, and research.

“Andrew Kolodny, co-director of opioid policy research at Brandeis University, says at least **\$6 billion a year is needed for 10 years** to set up a nationwide network of clinics and doctors to provide treatment with medicines like buprenorphine, methadone, and suboxone. In addition, proposed is a **billion-dollar program** for advanced electronic monitoring of all international package (318m parcels last year were not monitored.) Over 2 million Americans are estimated to be dependent on opioids, and an additional 95 million used prescription pain killers in the past year — more than used tobacco. **US will create 100,000 jobs** to address the epidemic¹⁴.

“Recently proposed legislation modeled on the Ryan White Act that would appropriate **\$100 billion over 10 years** for research, treatment and support. President Trump’s Council of Economic Advisers said in November that the **epidemic cost the economy \$504 billion in 2015 alone.**”

¹² Auto fatalities-40,200; **Economic Cost: \$242B; Societal Harm: \$836B**

Guns- 38,440;

Natural disasters-Economic Cost \$889B

¹³ U.S. Drug Overdose Deaths Resurge to Record, NYT, Josh Katz, Abby Goodnough and Margot Sanger-Katz July 15, 2020

¹⁴ **China’s drug industry thrives (an estimated 500,000 jobs)** and a drug bazaar on Chinese websites, provide one-stop shopping for users around the world.

Additional \$ billion are needed for increased **medicolegal autopsies**. 50 percent of autopsied deaths in 2007 were external cause deaths compared with 19 percent in 1972. Autopsies are *overwhelming medical examiners police* and medical care, for widespread naloxone distribution and for a stronger foster care system (opioid dependent newborns) that can handle the swelling number of **neglected or orphaned children**.

In Europe in **2015** total **8,441 OVERDOSE deaths**, mainly related to heroin and other opioids, are estimated to have occurred, a **6% increase on the estimated 7,950 deaths in 2014**. Increases were reported in almost all age groups. The UK accounts for 31% of these or 2,655 deaths. Germany is a distant second with 15%. Europe Lawmakers also have fallen far short of a vigorous response to **opioid** addiction. **Three European countries with the highest volume of drug online sales are Germany, Netherlands, and United Kingdom**, MDMA and cocaine accounting for most of the sales revenue. **These are nations with populations above median income and low unemployment**. **Five EU states have 76 percent of sales revenue** (Germany, Netherlands United Kingdom, France, Spain)

The most recent data shows an increase in the number of **heroin-related deaths in Europe**, notably in the UK. In England and Wales, **heroin or morphine was cited in 1,200 deaths registered in 2015**, a **26% increase on the previous year** and a massive **57% increase compared to 2013**. Heroin or its metabolites have been present in most fatal overdoses reported in Europe as well.

US cost from **OBESITY** reach \$51.64 billion for direct medical costs in 1995. Medical care included 89.5 million bed-days, and 62.6 million physician visits. Compared with 1988 NHIS data, in 1994 the number of restricted-activity days (36%), bed-days (28%), and work-lost days (50%) increased substantially. **Obesity-related cirrhosis or scarring of the liver** has increased steadily with rates of liver cancer increased. The number of physician visits attributed to obesity increased 88% from 1988 to 1994. Direct costs associated with obesity represent 5.7% of US national health expenditure. Overeating has become a far worse problem than famine. In 2014 2.1 Bil. people were overweight compared to 850 Mil. who suffered from malnutrition. Half of humankind is expected to be overweight by 2030¹⁵.

¹⁵ "How the World Could Better Fight Obesity", McKinsey & Co., Nov. 2014

In **US DIABETES** diagnosed persons affects 25.8 million people, 8.3% of the population. For instance, high rates of diabetes among pregnant women impair lungs to develop in the uterus requiring baby's life sustain assistance on tiny ventilators until they are strong enough to breathe on their own. Cost of diabetes in 2007 was \$116 billion in medical care. Charges for patients who underwent an amputation totaled **\$8.7 billion** in 2013. **The number of amputations caused by diabetes increased by 24% from 1988 to 2009.** International Diabetes Federation (IDF) predicts that current global prevalence of diabetes will burgeon **from 285 million to reach 435 million by 2030.** Spending on hospitals, physicians, pharmaceuticals, and nursing homes attributed to diabetes include \$27 billion for care to directly treat diabetes, \$58 billion to treat the portion of diabetes-related chronic complications that are attributed to diabetes, and \$31 billion in excess general medical costs. Hospital inpatient care (50% of total cost), diabetes medication and supplies (12%), retail prescriptions to treat complications of diabetes (11%), and physician office visits (9%). Unemployment benefits from disease-related disability cost \$7.9 billion.

In **EU countries DIABETES** in 2010 reached 6% of the population, or 33 million people aged 20-79 years.

US **JOB INJURIES**¹⁶ reach 23,000 each day. Annually, this adds up to 8.5 million injuries and a cost to the economy of \$192 billion. Employers workers' compensation costs of \$62 billion in 2013. The number of occupational **illness** and injury deaths in 2007 (59,102) was greater than the number of deaths from causes such as motor vehicle crashes (43,945), breast cancer (40,970), prostate cancer (29,093), and homicide (18,361).

US fatal and nonfatal **JOB INJURIES** in 2007 was estimated to be more than 5,600 and almost 8,559,000, respectively, at a cost of \$6 billion and \$186 billion. The number of fatal and nonfatal illnesses was estimated at more than 53,000 and nearly 427,000, respectively, with cost estimates of \$46 billion and \$12 billion. For injuries and diseases combined, medical cost estimates were \$67 billion (27% of the total), and indirect costs were almost \$183 billion (73%). Injuries comprised 77 percent of the total, and diseases accounted for 23 percent. The total estimated costs were approximately \$250 billion, compared with the inflation-adjusted cost of \$217 billion for 1992.

¹⁶ https://www.cpsc.gov/s3fs-public/2017-Neiss-data-highlights.pdf?3i3POG9cN.rlyu2ggrsUkD1XU_zoiFRP

In U.S. **MOTOR VEHICLE CRASHES** have **\$871 billion** economic and societal impact on U.S. citizens. There were 33,654 fatal motor vehicle crashes in the **United States** in 2018 in which 36,560 **deaths** occurred.

US **SPORT INJURIES** from contact sports reaches \$1.5 billion per year for colleges and \$19.2 billion per year for high schools. And that considers only the immediate consequences of an injury, not the long-term effects of concussions or repeated jarring of the brain in collisions.

In US the **WELLNESS MARKET**, encompassing fitness, skin care, travel and nutrition, was valued at \$4.2 trillion in 2017. Roughly half of Americans dabbled in **alternative medicine**. As states legalize recreational and medical marijuana, and hallucinogens gain credibility the number is likely to grow.

In US **SALMONELLA** (food poisoning) costs **\$15.6 Bil.** and hits about 1.35 million Americans each year, hospitalizing about 26,500, with bloody diarrhea, and killing 420. **Economic** loss of **foodborne illness** comes to **\$77 Bil** annually, **128,000** are hospitalized, and **3,000** die of foodborne diseases¹⁷.

CIGARETTE SMOKING is still the **No. 1 cause of preventable death in this country, killing 500,000 people each year.** (According to some studies, more than half of longtime smokers will die from smoking-related complications.) U.S. Cigarette market is worth \$120. Bil. and employs 186,000. Meanwhile, an estimated **100,000 are employed in various capacities that address health care cost of tobacco related disease.** Smoking related illnesses cost taxpayers \$16 billion. **Tobacco farmers will receive up to \$100 million in subsidy payments,** easing some of the financial pain that has been felt the epidemic.

Tobacco companies invest billions in creating heat-not-burn products, (**VAPING**) which generate smoke from tobacco at lower temperatures than cigarettes. While this form of smoking reduces the hazards from tar, the **nicotine is anticipated to increase addiction and serious mental disabilities.** North America's **e-cigarette** market is estimated at \$5.2 billion in 2017. US, UK, and China account for a combined global share of around 53% in 2017. Russia, Germany, Italy, and Japan are the other major

¹⁷ <https://www.foodpoisonjournal.com/food-poisoning-information/food-poisoning-costs-u-s-15600000000-yearly/>

markets witnessing fast growth. The global e-cigarette market is forecasted at \$48 billion by 2023. Germany's market is projected to reach over \$852 million by 2023.

US generated \$68.4 million ORGANIC MILK FORMULA sales in 2012 and projected to \$76 Bil. by 2021, making it one of the **fastest growing food and beverage categories**. World Health Organization warned that "**lack of breastfeeding**—and especially lack of exclusive breastfeeding during the first half-year of life—are **important risk factors for infant and childhood morbidity and mortality**". Breastfed infants experience less acute and chronic **otitis media, bronchiolitis, diarrhea, meningitis, necrotizing enterocolitis, less recurrent wheezing, have a higher IQ**, and develop insulin-dependent diabetes mellitus less frequently than those who are fed formula. Also, fewer breastfeeding mothers develop ovarian cancer and bone demineralization than women who do not breastfeed their infants.

In EU **one-third** of the FOOD PRODUCED and packaged for human consumption **IS LOST OR WASTED**. That equals 1.3 billion tons a year, worth nearly \$680 billion. The figures represent more than just a disastrous misallocation of need and want, given that 10 percent of people in the world are chronically undernourished. All that excess food, scientists say, contributes to climate change. In US, **food waste** is estimated at between 30-40 percent of the **food** supply. 31 percent **food** loss at the retail and consumer levels, corresponded to approximately 133 billion pounds and \$161 billion worth of **food** in 2010.

US HOSPICE HEALTH care for people **terminally ill** (not elder care) was in 2016 about \$17 billion. Hospice teams include nurses, therapists, coordinators, and others who work together to minimize a patient's discomfort in preparing for death.

U.S. CATERERS with annual revenues of more than \$60 Bil. Events like graduation and anniversary parties, bar mitzvahs, charity dinners and weddings have been canceled.

U.S. RESTAURANT INDUSTRY with annual revenues of more than \$899 Bil. employed 15.6 million. Projected 1.6 Mil. new restaurant jobs created by 2030

US **NAIL SALONS** are a growing vibrant **industry**. Total revenue in 2015 reached **\$4.4 BIL.** up 15% from the previous year. Over the next decade, employment in the **industry** is expected to grow by 13%.

US **CANNABIS** industry forecasts **growth** from about **\$8 billion in 2017** for the global market to \$55.8 billion by 2025. Arcview market research forecasts **spending on cannabis worldwide \$57 billion by 2027**, with **\$47.3 billion generated in North America**. According to Deloitte, the retail **Canadian** cannabis market will reach **\$8.7 billion** when full legalization takes effect, on par with the **\$9.2 billion Canadians spent on beer in** the 12 months ended March 31, 2017. An 820,000 sq. ft. facility built on 72 acres outside of Montreal has a completion target for the second quarter of 2019. (Quebec is one of the lowest power rates in Canada, coming in around 5 cents per kWh for TQOD thanks to an economic development rate with Hydro Quebec.)

US medical reports cite adolescents are at high risk for **self-inflicted** injury. **SUICIDE** (44,065 in 2016) is currently one of the 10 leading causes of death overall. **SUICIDE** is the **2nd leading cause of death in young people**, after unintentional injury, the **3rd leading cause of death for people aged 10–14** and the **2nd leading cause of death for people aged 15–24**. 90% of children who die by suicide have a mental health condition.

US **VIDEO GAMING ADDICTION**, revenue is up 50 percent driven by widening bandwidths that make digital games fun to play on mobile phones. 2018 US Revenues were **\$18.4 Bil. with total of 220,000 people employed**. 25 percent of teenagers in U.S. spend 8 or more hours in front of a screen. 2.7 billion people play video games regularly, including two-thirds of American household¹⁸. Gaming revenues have risen steeply from under \$20 billion in 2010 and are on track **to hit \$180 billion** in 2020 — more than books, music or movies. Compulsive/excessive social networking and other forms of problematic technology-based media consumption has been designated by WHO in its draft of the organization's International Classification of Diseases.

¹⁸ Entertainment Software Association

Rates of youths reporting **PURPOSEFULLY HURTING** themselves (non-suicidal self-injury) approach 30 percent of the population. About one in four adolescent girls reported deliberately harming herself often by cutting or burning. The figure was 1 in 10 boys. Overall prevalence of self-harm was 18 percent. Depression; suicidal thoughts, plans, and attempts; sexual minority status; being electronically bullied; smoking; and substance use were associated with NSSI. Employment for mental health drug workers and outpatient therapists expands steadily.

MURDER is rising across a swath of America¹⁹. In New York, there were 166 **HOMICIDES** through June 21, 2020 up from 134 over the same period last year. 336 people have been murdered in Chicago through July 2, 2020, a homicide rate to hit the 2016 record of 778 deaths. In Chicago more than 100 were shot over the weekend, the most in a single weekend since 2012, and 14 died. 24 persons were killed among 85 shot over the Memorial Day weekend. In Minneapolis 111 have been shot in the four weeks. A multitude of jobs are sustained in attending shooting incidents.

In US **SCHOOL CAMPUS SECURITY** has become a growth market. Sales of security equipment and services to the education sector (palm scanners, mobile barricades, heat detectors, walkie-talkies, trauma kits, active shooter resistance training, \$120. ballistic panels for students to put in their backpacks) reached \$2.7 Bil. up from \$2.5 billion in 2015. Civilian **body armor** market was valued at \$72.2 million in 2016 and is expected **to more than double by 2024**.

In US **PRIVATE CONTRACT SECURITY INDUSTRY** valued at **\$44.0 Bil.** industry that provides **800,000** jobs gaining 5% over the 2015 year. UK reports 4.1 million offences across the retail industry in 2014-2015. This represents losses of some £613 million, three times as much as only five years before. **UK, Securitas (firm) employs over 13,000 people making it one of the Nation's largest security employers.** The industry sector globally is valued at \$165 billion with 25 million jobs and growth rate of approximately eight percent per annum.

¹⁹ "Murders Are Rising. Blaming a Party Doesn't Add Up." NYT, Sept. 28, 2020, Jeff Asher.

US annual cost of **MASS INCARCERATION** (prison) is \$81 Bil. and employs 423,000. But that figure addresses only the cost of operating prisons, jails, parole, and probation — leaving out policing and court costs, and costs paid by families to support incarcerated loved ones. One fourth of the prison population in the world is in the US.

In US **FIREWORKS** accounted for 12,900 hospital emergency room injuries from fireworks in 2017. 8,700 of fireworks-related injuries occurred on and after the July 4 celebration in 2017.

U.S. **AD MEDIA** reached \$324 billion in revenue and is predicted to grow by 1.5% in 2020²⁰. However, this growth pales in comparison with the tech giants, which are seeing 9 times the growth of traditional media at 13.2%. Advertising revenue for Facebook and Google-parent Alphabet is forecast to hit \$231.9 billion this year, having surpassed TV revenue for the first time in 2019. There are approximately **623800 people** employed as an Advertising, Marketing, Promotions, Public Relations, and Sales Managers.

U.S. RECORDED MUSIC business generated \$11.1 Bil. in revenue in 2019 a 13% year-over-year increase from the \$9.8 billion it reached in 2018.

MARKETING RESEARCH AND PUBLIC OPINION POLLING industry in the U.S. was in 2017 a \$20.1 Bil. industry sector. In 2017, payroll per employee was \$58,750

In US were 472,000 bill and **ACCOUNT (DEBT) COLLECTORS** in 2015. Between 2016 to 2022 the debt collections industry is expected to increase by 11% with employment opportunities expanding for debt collectors **at a faster than average rate across all occupations.**

In US 4 Mil **HOUSEHOLD EVICTIONS** are filed each year. Legal and related expenditures come to \$500. Bil.

²⁰ TV to drive traditional media ad revenue growth in 2020, James Pearce, 28 February 2020

In US **CHAPTER 11 BANKRUPTCY** cases ranged as high as 2.3% of 2014 GDP. 2.2 million job losses were attributable to cases involving bankruptcies.

US **FEDERAL ELECTION** cycle in 2016 saw \$6.4 Bil. spent on campaigns, and that's *not counting the anonymous corporate sums that are not reported*. Campaigns spend billions on media and pricey consultants. The sum for the 2020 campaign will be even larger²¹. Mr. Biden and Mr. Trump each raised more last month than what Mr. Trump and Hillary Clinton combined to collect in June 2016 — a sign of the costs of a 2020 campaign. Total expenditures may **reach \$1 Bil.** just for the 2 candidates. The total 2020 election cycle may reach \$8. Bil. President Trump raised \$165 million in July for his campaign and shared committees with the Republican National Committee, outpacing Joseph R. Biden Jr., who raised \$140 million last month as a record-setting pace of money for the campaign.

US **BEAUTY INDUSTRY** in 2015 generated \$56.2 billion in the US. There are nearly **one million** people employed in the primary service segments of the market, and there are **strong growth expectations. Massage therapists: 168,800 employed in 2014 with a 22% growth by 2024.** Products and services are focused on an aging population.

US **FAST FOOD** industry in 2017 generated \$____ B in the US. **Since 2010, fast-food jobs have grown nearly twice as fast as employment over all, contributing to the economic recovery. Total employment 3.8 million.**

US **BEER, WINE, AND LIQUOR** store sales amounted to \$54.09 billion in 2017. **Liquor store** employment was 156,800. The industry group that purchases the most products from store sales is *construction*. Estimated job growth 0.5 percent per year.

²¹ “Dizzying Amounts of Money Pour Into the Biden and Trump Campaigns”, NYT, Shane Goldmacher, 2 July 2020

US **GAMBLING INDUSTRY** statistic indicates 81.4 million persons participated in casino betting within a period of 2017. Casinos makes a direct contribution of \$137.5 Bil. and indirect (multiplier) \$101.Bil. to economy annually and directly **employs more than 730 thousand people**. 28 percent of Nevadans were out of work at one point in the pandemic.

Native American **CASINOS INDUSTRY** is one of the largest new sources of employment of any economic sector in the US. 40 percent of the 574 federally recognized tribes operate casinos. Non-Native Americans account for about 70 percent of workers in tribally owned casinos. Tribal gaming enterprises generated \$17.7 billion in local, state, and federal tax revenue in 2019. **Estimated 700,000 workers** employed in the industry

US has \$150 billion in **WAGERS ON PROFESSIONAL AND AMATEUR SPORTS** market.

US **ENTERTAINMENT** and media market generated **\$479.23 billion** to the economy in **2012**, (29.2 percent of worldwide revenue of **\$1.639 trillion**²². In **2017**, it. is expected to account for **\$632.09 billion** (29.4 percent of the worldwide total of **\$2.152 trillion**). **Motorsports** was \$3.3 billion in 2015, revenues accrued from different channels like sponsorship, advertising, merchandising, ticketing, hosting fees and broadcasting. **New York state's** arts and cultural sector contributed \$120 billion to the city's and employed a half a million people.

WORLD WRESTLING ENTERTAINMENT had a net worth of **\$5.71 Bil.** as of 2020. WWE in the second quarter of 2018 recorded a revenue of \$281.6 million - a 31% increase, the highest in WWE history. WWE employs 1000 in its operations. World Wrestling Entertainment Inc's net income grew by 320.48 % in II. Quarter 2020 year on year, above company average,

KARAOKE MARKET Size is expected to register a **CAGR of 2.52%** to reach **\$5,733Bil. by 2024**. Karaoke is a form of entertainment in which a singer uses a karaoke machine to perform with prerecorded music using a microphone. System includes microphones, mixing amplifier, speakers, a karaoke player, speaker stands, DJ LEDs, and visual display.

²² Chaos erupts in France after PlayStation 4 drops its price and new meaning is given to 'console wars', NYT, 18 June 2020

US **NASCAR** has doubled the number of Cup road course events in 2021. It is forecast to grow at CAGR of 1.90% and reach **\$3.3 billion by 2023**; **IndyCar** racing is estimated to grow at a CAGR of 6.41% to reach **\$276 billion by 2023**. Europe **MOTORSPORTS** was estimated to be \$1.9 billion in 2017 which is projected to **reach \$2.96 billion by 2023**.

US annual **BIKER Festival** generates about **\$800 million** in revenue. Bikers converging for the Sturgis Motorcycle Rally, a 10-day affair that attracts roughly 400,000 enthusiasts this year — about half the number who attended last year but a figure that puts it on track to be among the country's largest public gatherings since the first coronavirus cases emerged in the spring.

SKATEBOARDING is **\$4.8 Bil. growth** market. About 11 million people **skateboard** on a regular basis.

CONCERT INDUSTRY generated about **\$8 billion** in revenue In 2017, and the top 25 single **artist** concerts grossed about \$360 million. More people are going to concerts and ticket **prices** are rising.

US **AMUSEMENT AND THEME PARKS** generated a total direct economic impact of approximately \$55.4 billion in 2011. The industry directly **employs 1.3 million** and indirectly generates 1 million jobs, creating a **total job impact of 2.3 million**. Europe in 2013, the industry generated an estimated €4.9bn (US\$5.3 billion) in total revenue and contributed approximately €10bn (US\$10.8 billion) to the European economy.

US **FESTIVAL INDUSTRY** has grown into a major moneymaker with 100s of events annually. A 2019 Deloitte survey of millennials—a group that makes up at least 45% of the 32 million people who **attend music festivals**. e.g., Mardi Gras, the New Orleans Jazz & Heritage Festival, Essence Festival. Coachella, one of the most popular festivals in the country, grossed \$114.6 million in 2017.

US **CRUISE SHIP** industry generates \$53 Bil. annually in economic activity and employs 246,000.

US **PET FOOD** manufacturing employed a total of **55,817** people in March 2015. **Pet and pet supplies stores** employed **113,067**. **Veterinary services** employed **333,291...total 510,000**. Pet owners spent a record **\$66.75 billion on the pet industry in 2016**, and spending is projected to **increase to nearly \$70 billion in 2017**. **\$30.66 billion** on vet care and medical supplies. With humanization now essential in the pet space, **human food trends now directly drive product development for pets**. The more revenue the pet industry continues to generate the more **jobs in the pet industry are expected to grow to 11% through 2024**.

US **WASTE INDUSTRY** has annual revenue of \$75 billion. The industry employs **367,800 employees**, most of them being part of the private sector of the industry. The private sector generates three-fourths of the waste industry's revenue. US with one of the largest consumer markets produces approximately 251 Mil. tons of trash every year.

US **CLEANING SERVICES INDUSTRY** with Janitors and cleaners (not including maids and housekeeping cleaners) 3.24 million employees. Commercial contract cleaning is currently worth \$78 billion. In the past 10 years, contract **cleaning** has grown at an average rate of 6.6 percent each year. There are 882,573 **Janitorial Services businesses** as of 2020.

US **CELEBRITY AND SPORTS AGENTS** is a **\$10 Bil.** sector employing 61,380. **Celebrity Gossip** sector tops more than \$3 Bil per year and is expected to grow.

U.S. **employed** as **PUBLIC RELATIONS** specialists has been growing at a rate of 5.41%, from 131,609 people in 2017 to 138,724 people in 2018.

US **SUNGLASSES** sector is forecasted to reach \$5.81 billion in 2018, which would be a 3.4% increase over 2017. 8,200 firms in US classify themselves as a sunglasses store employing 46,000. The global **SUNGLASSES** market size was valued at \$ 14.5 Bil in 2018 and is expected to expand at a healthy CAGR over the forecast period. Increasing awareness regarding the harmful effects of UV rays on the eyes, coupled with the growing acceptance of eyewear, including sunglasses, as a part of modern lifestyle accessory, is expected to drive the demand for sunglasses over the forecast period. Consumers are willing to spend more on luxury and branded sunglasses to create their own style statement.

ECONOMIC GROWTH and CREATING 'JOBS' FROM EPIDEMICS, CATASTROPHES, AND WARS

Epidemics, catastrophes, and wars contributed significantly to US growth and employment through the 20th century. Jobs stemmed not only from property damage; new institutional responses (NIH, FEMA, NOAA); and technology responses, but also to labor shortages and periods of full-employment.

US (and increasingly Europe's) economic performance is abetted by the **impact from destruction and deaths of 'FORCE MAJEURE'** which create prospects for employment (and labor shortages) and so have expanded opportunities for jobs and wages. Climate turbulence created \$15 Bil. in property damage in 2016. A major source for **future economic growth** is from distress and destruction in the wake of *climate change*.

TURBULENCE IN ATMOSPHERE has the prospect of vast weather havoc. Cyclones have been the most devastating. A 2017 storm (Hurricane Maria) alone created estimated \$90 Bil. in damage; a 2005 storm (Hurricane Katrina) created an estimated \$160. Bil. in damage. **In the 20th century** recovery from natural disasters contributed near **\$1 Tr. dollar** to the economy and countless jobs. In the 21st century calculation, which considers sea-level rise, rainfall and flooding along smaller creeks not mapped federally, estimates that 14.6 million properties are at risk from what experts call a 100-year flood, far more than the 8.7 million properties shown on federal government flood maps²³. Meanwhile **just 1** wildfire in California has forced more than 100,000 people out of their homes, filled the skies with thick smoke and consumed hundreds of dwellings. U.S. **equity market firms** by one estimate 93 percent are exposed to harms from climate change, with this year's intensified fire and hurricane seasons offering a devastating preview of more to come.

²³ "New Data Reveals Hidden Flood Risk Across America", NYT, Christopher Flavelle, 29 June 2020.

Engagements in **WARS AND FOREIGN CONFLICTS** during the 20th century along with peace-time expenditures for military preparedness expanded opportunities for jobs and wages. Economic and employment contributions from the U.S. aerospace and defense industry increases employment and economic growth. The industry sector employs a yearly average of 2.8 million jobs (2 percent of the nation's employment.) **123 million** died in all wars of the **20th Century**, **37 million** military deaths, **27 million** collateral civilian deaths, **41 million** victims of 'democide'.

In **AFGHANISTAN** US lost more than 2,400 lives and spent some \$2 trillion over the past two decades.

Periodic **EPIDEMICS**²⁴ during the 20th century and mitigating their impact vastly expanded medical research while expanding opportunities for jobs (Healthcare Practitioners and Technical Occupations, Healthcare Support Occupations, and Community Health Workers, and recently disease detectives and case monitors) and wages.

Just one contagion, **HIV**, killed approximately 24 million, and left an estimated 40 million people infected. In U.S. there were **expenditures of \$32 Bil. in 2017**, and near **\$100 Bil. since 1982**. **Spanish flu** pandemic in the US had killed **675,000, 195,000** in October 1918 alone. In Great Britain 228,000 people died. The 1918-19 **pandemic killed eventually upwards of 50 million**...perhaps more than WW-I and WW-II combined. Adults in the **prime of life** had died in droves. In the 1957 Flu Pandemic (Asian Flu) an estimated 69,800 deaths had occurred in the United States.

The present **CORONAVIRUS** epidemic while displacing workers in routine and incidental trades has created jobs in a number of new professional occupations (e.g., disease detectives, case monitors, etc.) while momentarily displacing medical workers in elective medical procedures. The pandemic infused \$2.2 trillion Coronavirus Aid, Relief and Economic Security Act, or CARES Act.

²⁴ <https://www.nytimes.com/interactive/2020/06/10/world/coronavirus-history.html?action=click&module=RelatedLinks&pgtype=Article>

UNIVERSITY EDUCATION has become a major enterprise and its operation expenditures along with the expenditures from students supports the economies of school locales. In one locale, Iowa City, the university accounts for more than 26,000 area resident jobs as university employees.

Meanwhile, US employment for **COMPUTER PROGRAMMERS (coders)** will decline 8% to 302,000 positions over the next decade with increasing numbers of jobs performed under contract globally. **Of 2,739 listings for programmers (coders) 61%, do not specify a 'degree' or a 'bachelor's' as one of the requirements,** and 39% list a degree somewhere in the job posting, either as a requirement or as a preference. 56% of developers in fact do not have a college degree in computer science or related fields. The most popular way for developers to learn is by 'self-teaching' in some way (69% of respondents told us they were at least partially self-taught; 13% said they were *entirely* self-taught). **Amazon employs just 35,658 workers** holding executive, technical, and administrative jobs in its half-million workforce.

U.S. **Semiconductor** industry employs 250,000 workers. **Semi-Conductor Processors** employment is 23,540 workers

