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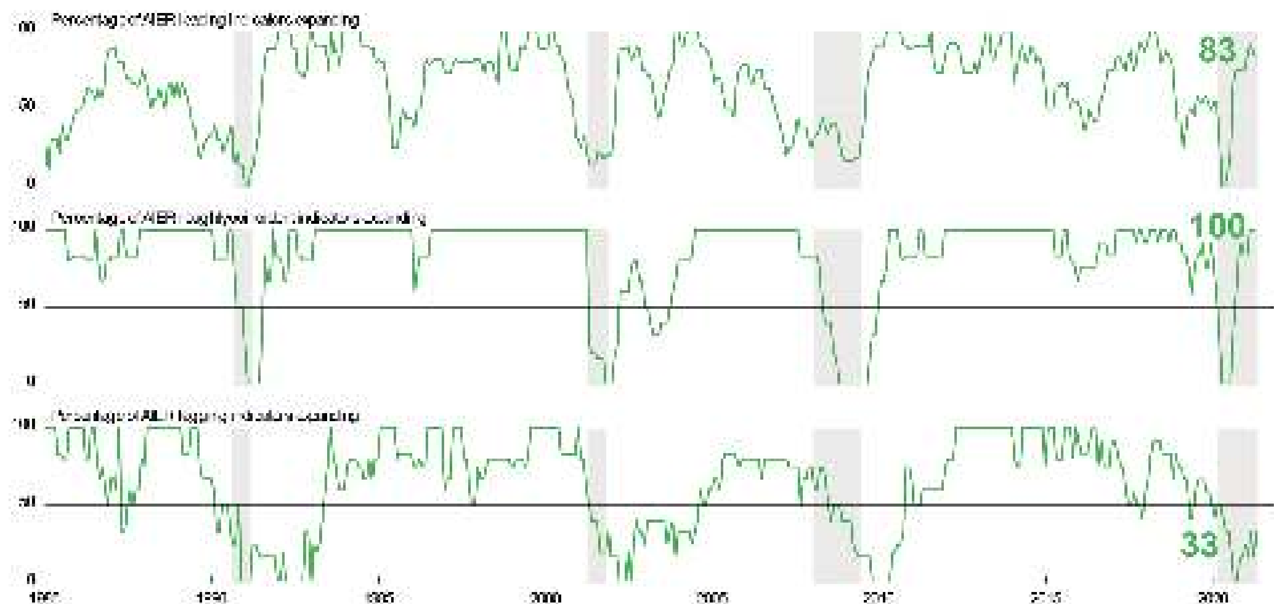
BUSINESS CONDITIONS MONTHLY

Robert Hughes
SENIOR RESEARCH FELLOW

AIER Leading Indicators Index Remained Solidly Above Neutral in May



Summary

AIER's Leading Indicators Index posted another slight decline in May, coming in at 83 versus 88 in April. Despite the pullbacks, the May result marks the ninth consecutive month above the neutral 50 level. The Roughly Coincident Indicators index held at 100 in May. The Lagging Indicators Index moved back to 33 from 17 in the prior month (see chart). Overall, the latest results for the business cycle indicator indexes still suggest continued economic expansion in the months ahead.

The cessation of restrictive government lockdown policies and reopening of the economy remain the driving forces behind the economic recovery. As restrictions are eased, economic activity increases. While some data have softened over the past month, the economy and in particular the labor market remain on a clear recovery path.

Primary risks in the short term include tightening labor conditions, shortages of materials, lingering logistical issues, and rising prices. The increases in price aggregates are garnering significant attention and likely to result in increased focus on monetary policies. Overall, the economic outlook remains tilted to the upside.

Leading and Roughly Coincident Indicators Indexes Remain Solidly Positive

The AIER Leading Indicators index posted a second consecutive decline in May, decreasing to 83 from 88 in April and 92 in March. However, the May result is the ninth month in a row above the neutral 50

threshold and suggests continued overall economic expansion in the months ahead.

Among the 12 leading indicators, ten were in a positive trend in May versus two trending unfavorably while none were trending flat or neutral. Just one leading indicator changed direction in May; real new orders for consumer goods changed from a neutral trend in April to a declining trend. Given the strong results from other measures of consumer spending, it is likely this indicator will return to a positive trend in the near future. The second unfavorable trend came from the Treasury yield spread which was also in an unfavorable trend last month.

Overall, the Leading Indicators index remained above the neutral 50 level for the ninth consecutive month, suggesting continued expansion is likely. Over the last nine months, the leading indicators index has averaged 79.2, the highest level since December 2018. Government policies restricting consumers and businesses continue to be removed, supporting a recovery in economic activity. However, ripple effects from the lockdowns continue to disrupt labor supply, production, and logistics and transportation, resulting in scattered shortages of input materials and rising pressure on prices.

The Roughly Coincident Indicators index held at a perfect 100 reading in May with all six individual Roughly Coincident indicators continuing to trend higher. The third consecutive month of perfect results follow four months of readings in the 83 to 92 range and are the first three-peat of perfect scores since July through September 2018. The Roughly Coincident Indicators index has been above the neutral 50 level for eight consecutive months, posting an average reading of 87.5, the highest since May 2019.

AIER's Lagging Indicators index returned to a reading of 33 in May, the seventh consecutive month fluctuating between 17 and 33. Those seven months follow back-to-back readings of zero in September and October 2020 and mark the 13th consecutive month below 50. The average over the last 13 months is 21.8.

Three of the six lagging indicators changed trend in the latest month: real manufacturing and trade inventories fell to an unfavorable trend while the composite short-term interest rate indicator and the 12-month percent change in the core consumer price index indicator both improved to favorable trends. Overall, four indicators were still trending lower, while two indicators were trending higher, and none were in a neutral trend.

U.S. Economy Adds 559,000 Jobs in May

U.S. nonfarm payrolls added 559,000 jobs in May after a gain of 278,000 in April. March and April had net upward revisions of 27,000. The May gain is the fifth in a row and 12th in the last 13 months, bringing the five-month gain to 2.391 million and the 13-month post-plunge recovery to 14.733 million, but is still well below the 22.362 million loss in March and April of 2020, leaving nonfarm payrolls 7.629 million below the February 2020 peak.

Private payrolls posted a 492,000 jobs gain in May after a 219,000 gain in April. The two prior months had a net upward revision of 17,000. The May rise in private payrolls is also the fifth in a row and 12th in the last 13 months. May brings the five-month gain to 2.179 million and the 13-month recovery to 14.891 million versus a loss of 21.353 million in March and April of 2020, leaving private payrolls 6.462 million below the February 2020 peak.

Breadth of gains for May was positive. Within the 492,000 gain in private payrolls, private services added 489,000 while goods-producing industries added 3,000. For private service-producing industries, the gains were led by a 292,000 surge in leisure and hospitality (following gains of 328,000 in April, 227,000 in March, and 413,000 in February), a 46,000 gain in health care and social assistance,

41,000 in education, a 35,000 rise in business and professional services, 29,000 new employees in information services, and 23,000 additional transportation and warehousing employees.

Within the 3,000 gain in goods-producing industries, construction was down 20,000, durable-goods manufacturing increased by 18,000, nondurable-goods manufacturing rose by 5,000, and mining and logging industries were unchanged.

Despite the ongoing recovery, every private industry group still has fewer employees than before the government lockdowns. Leisure and hospitality leads with a loss of 1.756 million jobs followed by health care, down 628,500, and professional and business services with a drop of 557,000.

On a percentage basis, the losses are more evenly distributed. Leisure and hospitality still leads with a 15.0 percent drop since February 2020, mining and logging comes in second with an 11.0 percent loss followed by education services at 7.8 percent and information services at 7.0 percent. Five of the 14 private industries shown in the report have declines of 4 percent or more since February 2020. For the labor market as a whole, total nonfarm payrolls and private payrolls are down 5 percent since February 2020.

The government sector added 67,000 employees in May, with local government payrolls rising by 33,000, state government payrolls up 45,000, and the federal government cutting 11,000 workers.

The total number of officially unemployed fell to 9.316 million in May, a drop of 496,000 from April. The unemployment rate dropped to 5.8 percent while the underemployed rate, referred to as the U-6 rate, fell to 10.2 percent in May. In February 2020, the unemployment rate was 3.5 percent while the underemployment rate was 7.0 percent.

The participation rate declined in May, coming in at 61.6 percent versus a participation rate of 63.3 percent in February 2020. The employment-to-population ratio, one of AIER's Roughly Coincident indicators, came in at 58.0 for May, above the 57.9 ratio in April 2021 but well below the 61.1 percent in February 2020.

Weekly Initial Claims for Unemployment Benefits Post Fifth Straight Drop

Initial claims for regular state unemployment insurance totaled 385,000 for the week ending May 29, a decrease of 20,000 from the previous week's tally of 405,000. The current result is the fifth consecutive decline and the seventh in the last eight weeks. Weekly initial claims are now less than half the number just 11 weeks ago, on March 13. The favorable results are a further indication of the strengthening labor market and overall economy.

The four-week average fell 30,500 to 428,000, the eighth consecutive decline and the 16th drop over the last 17 weeks. Initial claims are likely to continue trending lower as the combination of vaccine distribution and easing government restrictions on consumers and businesses support rising economic activity.

Job Openings Hit a Record High in March

The latest Job Openings and Labor Turnover Survey from the Bureau of Labor Statistics shows the total number of job openings in the economy rose to 8.123 million in March, up from 7.526 million in February. The number of open positions in the private sector increased to 7.290 million in March, up from 6.868 million in February.

The total job openings rate, openings divided by the sum of jobs plus openings, reached 5.3 percent in March while the private-sector job-openings rate increased to 5.6 percent, up from 5.3 percent in February. All four measures are at new highs since these data began in 2000.

The industries with the largest number of openings were trade, transportation, and utilities (1.475 million), education and health care (1.425

million), professional and business services (1.374 million), and leisure and hospitality (1.209 million).

The highest openings rates were in leisure and hospitality (8.1 percent), professional and business services (6.2 percent), education and health care (5.7 percent), manufacturing (5.4 percent) and trade, transportation, and utilities (5.1 percent; see third chart).

The rise in private job openings was a function of hires, separations and changing labor requirements. Private hires in March rose to 5.632 million from 5.490 million in February. At the same time, the number of private-sector separations fell to 4.998 million in March, down from February's 5.078 million. Within separations, private quits were 3.331 million (versus 3.184 million in February) and layoffs were 1.394 million, down from 1.636 million in the prior month.

The total separations rate fell to 3.7 percent from 3.8 percent in the prior month with the private sector experiencing a rate of 4.1 percent, down 0.1 percentage points from 4.2 percent in February.

From the worker perspective, labor market conditions improved again in March. The number of openings per job seeker (unemployed plus those not in the labor force but who want a job) rose to 0.497 in March, up sharply from 0.430 in February, and well above the April 2020 low of 0.156 but still well below the 0.721 peak in October 2019. In the economic expansion of the 2000s, the number of openings per workers peaked at 0.450.

Overall, the data relating to the labor market have improved significantly in recent months. Data on job openings and turnover along with a declining trend in the number of weekly initial claims for unemployment insurance provide a strong basis for optimism.

Job Market Strength Offsets Falling Expectations for Consumer Confidence

The Consumer Confidence Index from The Conference Board was little changed in May, falling just 0.3 points to 117.2 from 117.5 in April. The two major components of the index both had sharply differing results with the index for the present situation jumping while the future expectations component posted a loss.

The present-situation component rose 12.4 points to 144.3, the highest level since March 2020. This measure has posted four consecutive increases from a weak 85.5 reading in January 2021. The expectations component fell 8.8 points, taking it to 99.1 from 107.9 in the prior month. The details of the report suggest that consumers are significantly more optimistic with regard to current labor market conditions as widening vaccine distribution leads to less government restrictions on economic activity.

For the labor market, the net percentage of consumers saying jobs were plentiful jumped 10.5 points to 46.8 while those saying jobs were hard to get fell 2.5 points to 12.2. The net percentage for current labor conditions comes in at 34.6 for May, up from 21.6 in April, the highest since January 2020, and well above the -15.7 in April 2020.

Consumers were only marginally more optimistic (or less pessimistic) regarding current general business conditions with the net percentage of consumers saying business conditions were good falling 0.7 points to 18.7 while those saying business conditions were bad fell 2.7 points to 21.8 in May. Those results put the net business conditions percentage at -3.1 for May versus -5.1 in April.

Consumer expectation for the labor market also pulled back as the percentage expecting more jobs fell 4.5 points to 27.2 while the percentage expecting fewer jobs rose 2.9 points to 17.3. The net percentage for the outlook for jobs came in at 9.9, a decrease of 7.4 points from April.

Consumers' expectations for business conditions in six months deteriorated with the percentage expecting good conditions falling 2.8 points to 30.3 while the net percentage expecting bad conditions rose 2.7 points to

14.8. The net percentage for business conditions six months ahead fell 5.5 points to 15.5.

Fears of Price Instability Pull Down Consumer Sentiment in May

The results from the University of Michigan Surveys of Consumers show overall consumer sentiment fell in May and remains well below pre-lockdown levels. Fears over rising prices were the primary cause.

Overall consumer sentiment decreased to 82.9 in May, down from 88.3 in April, a 6.1 percent decline. From a year ago, the index is up 14.7 percent. The sub-indexes both fell in May. The current-economic-conditions index dropped to 89.4 from 97.2 in April. That is an 8.0 percent decline but leaves the index with an 8.6 percent increase from May 2020. The second sub-index — that of consumer expectations, one of the AIER leading indicators — sank 3.9 points or 4.7 percent for the month to 78.8 but is 19.6 percent above the prior year. All three indexes remain well below the pre-pandemic levels.

A resurgence in consumer demand as the economy reopens coming at the same time as a confluence of events including a semiconductor chip shortage, gasoline pipeline ransom hack, logistical and labor issues, and dramatic shift in consumer spending habits, are combining to push up prices. The pressures may continue for a time but are likely to fade as market forces redirect productive capacity.

Outlook Remains Positive

The U.S economy continues to show significant progress on the path to recovery. The AIER Leading Indicators index posted its ninth consecutive month above the neutral 50 threshold, suggesting continued expansion in coming months. The Roughly Coincident Indicators index posted a third consecutive 100 reading, confirming the strengthening economic recovery.

Fading government restrictions are leading to increasing economic activity. However, the rebound in demand is outpacing the recovery in supply as ongoing labor difficulties including a lack of qualified workers, absenteeism, temporary shutdowns, and inability to retain talent, have led to production shortages and logistical and transportation problems. These shortages are putting upward pressure on prices.

As price aggregates increase more quickly, consumers are growing more concerned about future prospects for employment and income growth. The accelerating gains in aggregate price measures are also putting greater attention on Fed monetary policy and intensifying the debate over fiscal stimulus spending. Despite the challenges, the outlook remains tilted to the upside.

CAPITAL MARKET PERFORMANCE

(Percent change)

	May	Latest 3M	Latest 12M	Calendar Year 2020	2019	2018	Annualized 3-year	5-year	10-year
Equity Markets									
S&P 1500	0.6	10.2	39.8	15.8	28.3	-6.8	15.4	14.8	12.0
S&P 500 - total return	0.7	10.7	40.3	18.4	31.5	-4.4	18.0	17.2	14.4
S&P 500 - price only	0.6	10.3	38.1	16.3	28.9	-6.2	15.8	14.9	12.1
S&P 400	0.1	9.3	54.6	11.8	24.1	-12.5	11.9	12.8	10.6
Russell 2000	0.1	3.1	62.8	18.4	23.7	-12.2	11.6	14.5	10.3
Dow Jones Global Large-Cap Index	1.3	7.9	37.9	14.7	23.8	-10.4	12.0	14.7	7.4
Dow Jones Global Large-Cap ex-U.S. Index	2.6	5.7	38.5	8.8	18.2	-15.7	6.7	10.6	2.8
STOXX Europe 600 Index	2.1	10.3	27.5	-4.0	23.2	-13.2	5.3	5.2	4.7
Bond Markets									
iShares 20-plus Year Treasury Bond ETF	-0.1	-3.3	-15.4	16.4	11.5	-4.2	4.5	1.2	3.7
iIShares AAA - A Corporate Bond Fund	0.2	-0.6	-2.1	7.1	9.1	-5.2	3.3	1.3	NA
Commodity Markets									
Gold	7.7	10.3	10.1	24.8	18.7	-1.7	13.5	9.4	2.2
Silver	6.8	3.5	57.1	46.8	16.7	-8.3	18.6	11.5	-3.3
Refinitiv CoreCommodities CRB total return index	3.0	8.0	55.7	-9.3	11.8	-10.7	1.7	3.2	-4.6

Sources: Barrons, Dow Jones, Frank Russell,
iShares, Standard & Poor's, STOXX Europe 600, Refinitiv.

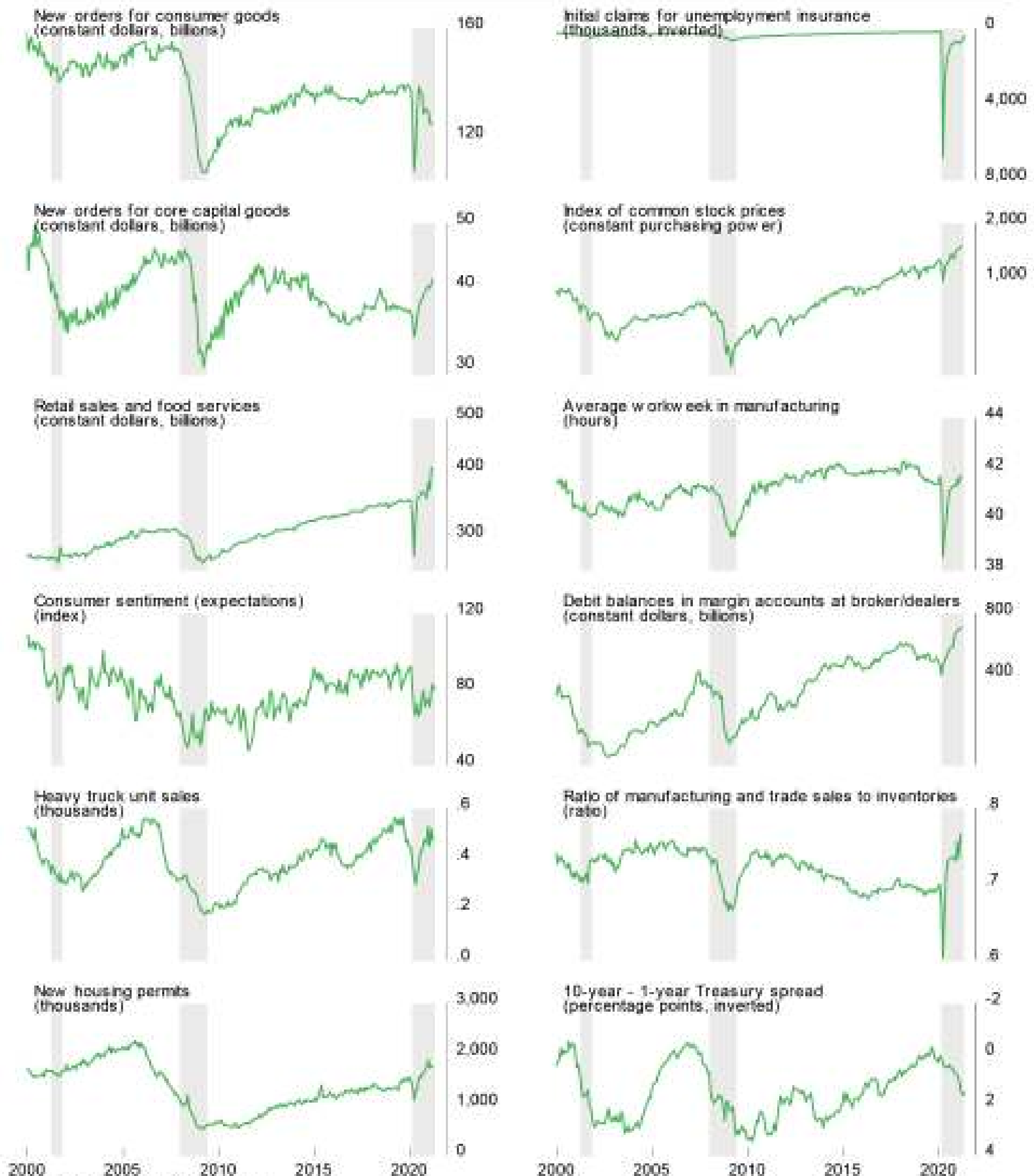
CONSUMER FINANCE RATES

(Percent)

	May	Latest 3M	Latest 12M	Average for Year 2020	2019	2018	Average over Period 3-year	5-year	10-year
30-yr. fixed mortgage	3.1	3.0	2.9	3.1	3.9	4.5	3.7	3.8	3.9
15-yr. fixed mortgage	2.4	2.3	2.4	2.6	3.4	4.0	3.2	3.2	3.2
5-yr. adjustable mortgage	2.8	2.8	2.9	3.1	3.6	3.8	3.4	3.3	3.1
48-month new car loan	5.2	5.2	5.1	5.1	5.4	5.0	5.2	4.9	4.8

Sources: Bankrate, Federal Reserve.

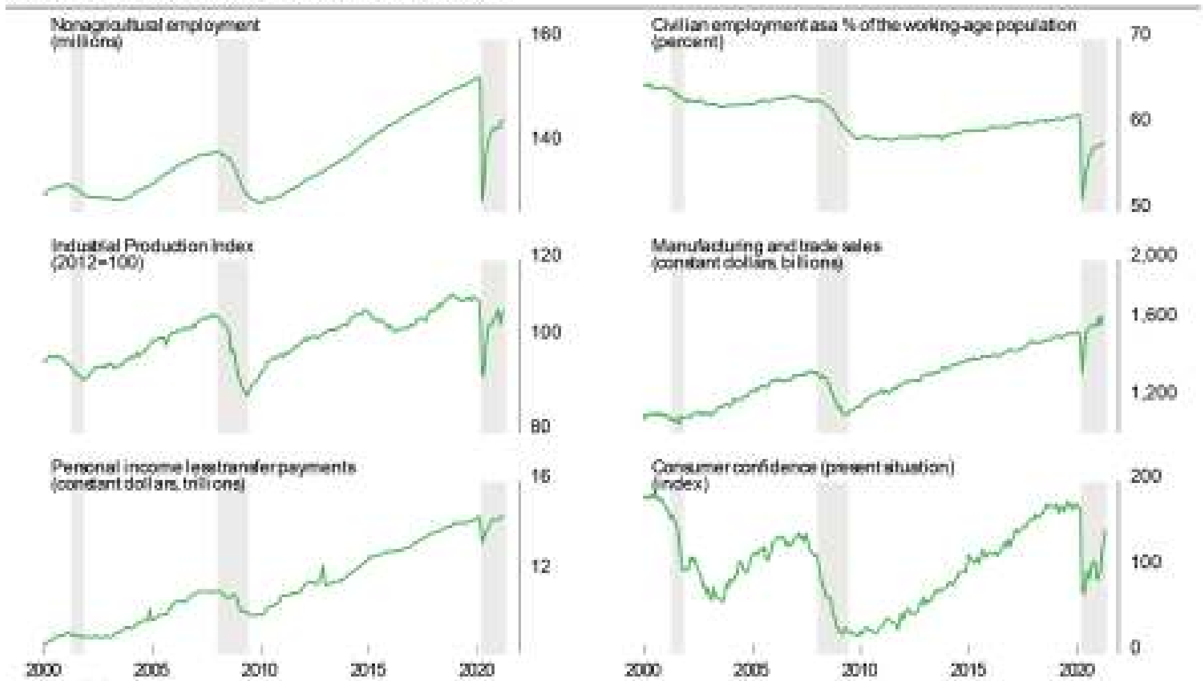
LEADING INDICATORS (2000-2021)



Note: Shaded areas denote recessions.

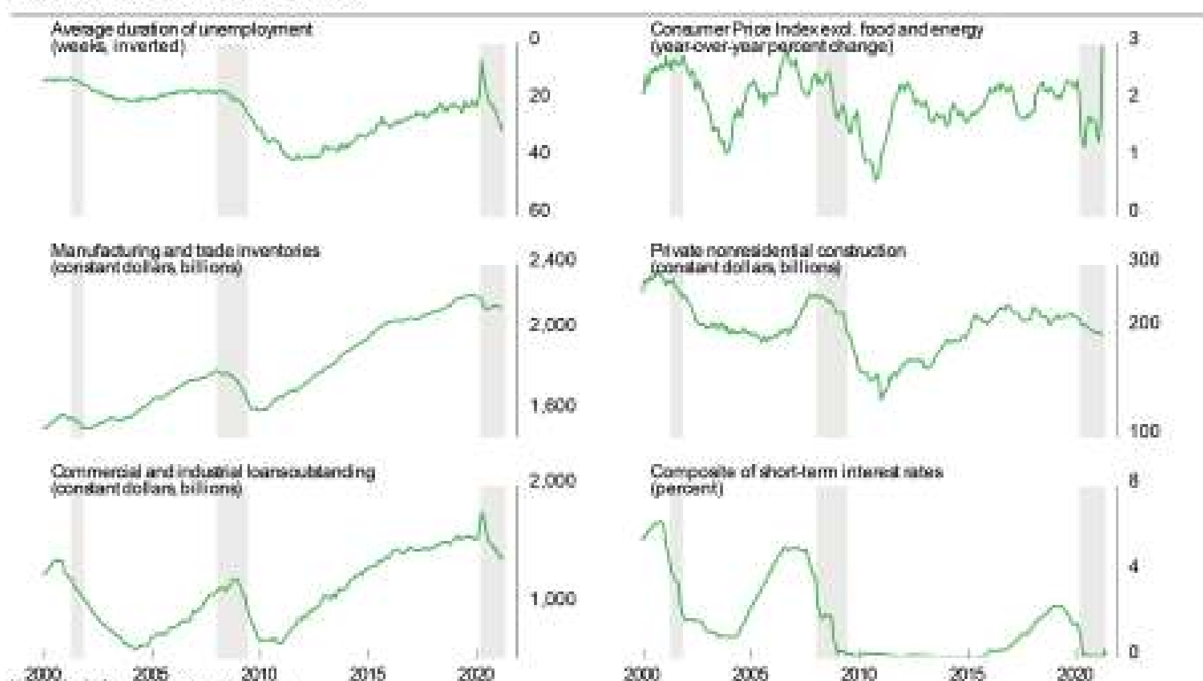
Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, The conference Board, Census Bureau, Department of Labor, Federal Reserve, Institute for Supply Management, Standard & Poor's, AIER (Refinitiv).

ROUGHLY COINCIDENT INDICATORS (2000-2021)



Note: Shaded areas denote recessions.
Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, The conference Board, Census Bureau, Department of Labor, Federal Reserve, Institute for Supply Management, Standard & Poor's, AIER (Refinitiv).

LAGGING INDICATORS (2000-2021)



Note: Shaded areas denote recessions.
Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, The conference Board, Census Bureau, Department of Labor, Federal Reserve, Institute for Supply Management, Standard & Poor's, AIER (Refinitiv).

The War on Retirement

JAMES R. HARRIGAN & ANTONY DAVIES
Contributors

Of the five most expensive wars the United States has waged, only one – World War II – involved an armed enemy. The other five – poverty, drugs, terror, and Covid, were all wars on nouns. Now the federal government appears to have inadvertently stumbled into another war – the War on Retirement. Unlike the other wars on nouns, this one isn't only undeclared, it wasn't even intended. But the federal government has taken a series of steps that, regardless of intent, have yielded a situation in which retirement may end up a pipe dream for many.

Ironically, this war on retirement began with Social Security in 1935. Rather than establishing a forced savings program wherein people would save money during their working years and have that money returned to them during retirement, the government established a Ponzi scheme wherein later participants paid off earlier participants. As with all Ponzi schemes, the program was sustainable only if there were more people paying into the system than were receiving benefits from it. By the early 1980s, too few people were paying in, and Congress fired its first salvo at retirees by making previously tax-free retirement benefits taxable. This tweak in the rules breathed new life into the Ponzi scheme, and Social Security reserves once again grew. But the scheme faltered again in 2010 and since then, Social Security has been paying out more than it brings in. Current estimates have the trust fund becoming insolvent by 2035.

To keep this bloated program afloat, Congress will eventually be forced to fire yet another salvo when it either raises workers' taxes or reduces retirees' benefits. And with each passing year this albatross around workers' necks will become heavier.

The Federal Reserve, predictably, has been an invaluable ally in the government's unwitting war on retirement. Since the late 1980s, the Federal Reserve has been relentless in driving interest rates down. Interest rates on savings accounts, certificates of deposit, and even Treasury bills are now functionally zero. Even the return on corporate bonds is so low as to barely keep pace with inflation. Fed policy has put such a squeeze on savers that the only way to save for retirement is to invest in stocks. And while younger workers have plenty of time to weather the risks of waxing and waning stock markets, forcing retirees and near-retirees into stocks exposes them to risks that they can't weather nearly as well.

And now the Biden administration presents the coup de grace. President Biden has proposed doubling capital gains tax rates – you know, the taxes you pay when you make a profit in the stock market!

The White House says that the elevated tax will only apply to those earning over $1 million, but taxes on "the rich" have a solid history of eventually being applied to everyone else. For reference, look at the birth of the federal income tax. Politicians promised the new income tax would only be one percent and would only apply to the rich. Once instituted, it took Congress only five years to raise the income tax rate six-fold and to apply it to everyone, even the poor.

In a real war, there are rules that require humane treatment for vanquished enemies. Retirees can expect no such treatment in the War on Retirement. Those who manage to save enough for retirement, despite Social Security's problems and despite near-zero interest rates, will be punished in death. The Biden administration intends to raise the tax on dying by slashing the estate tax exemption in

half. Retirees' heirs would have to hand over to the federal government 40 percent of whatever savings the retirees had left over above the exemption.

The proposed exemption – around $5 million – is high enough that it will apply mostly to the rich and to small business owners. But like the federal income tax, the estate tax will soon come for the rest of us. And as Biden is trying to push the estate tax exemption down to reach more estates, simultaneously, he is trying to push the values of those estates up to cross the exemption threshold by eliminating step-up in basis rules – the effect of which will be to increase capital gains taxes on inherited stock.

Death and taxes indeed.

The War on Retirement shares much in common with an actual war: World War I. A Serbian killed the nephew of the Austro-Hungarian emperor, causing the empire to declare war on Serbia. But Russia was allied with Serbia, and the declaration forced Russia to mobilize. That caused Germany to declare war on Russia, which in turn caused France to declare war on Germany. World War I shouldn't have happened. It was an unintended cascade of what should have been isolated events. So too the War on Retirement. The government never intended to wage war on retirees, but it has set in motion policies that, collectively, do just that.

The American version of the assassination of Archduke Ferdinand, the event that began the steady march toward oblivion, was the passage of the Social Security Act in 1935. The dominos have been falling ever since, and the last ones are about to tip over, intentions be damned.

– May 22, 2021

The Fed Targets a Crafted Measure of Inflation: A Cautionary Tale

GREGORY VAN KIPNIS
Chairman of the Board

Understanding "hedonic" adjustments

The currently reported high rate of consumer price inflation is grabbing considerable attention. We are not surprised by this development, as we observed in an earlier note. In that article, we argued that the inflation rate was likely to rise to the 3.5-4% range for the foreseeable future due to predicted increases in the intensity of the use of money and credit, also known as increased velocity of money.

A month later we observe that the current CPI increased by 4.2%, year-over-year. This surprising increase is being analyzed and decomposed from every possible angle to argue that it is transitory; that is, mostly one-off in nature. Which means the data do not augur a "persistent" upward trend.

The Fed is tasked with the "dual mandate" of minimizing the rates of inflation and unemployment. For inflation, the Fed's stated objective is to adjust monetary policy so as to target an average inflation rate of 2% over time. The index of price inflation used by the Fed is referred to as the "core" inflation rate of personal consumption expenditures (PCE – a component of the GDP accounts). By "core," they mean all prices except energy and food prices, which are considered too volatile and mean reverting, for the most part. It is further believed that there is a close measurement similarity between the "core" CPI and the "core" consumer expenditure price index.

Though the Fed targets the inflation rate, there is much more to price inflation measurement than just collecting and averaging price data. There are many adjustments and conventions used, of which quality adjustments is a major one. For those concerned with having a deeper understanding of what the Fed is targeting, in this article we explore the effect of "hedonic" (a code word for quality) price adjustments the government makes to the raw price data it collects in the field.

Other adjustments that can influence the reported inflation rate, which we do not discuss here, include differing weights assigned to the price components, the scope of expenditure categories, and the treatment of rent. The CPI uses fixed weights that are revised infrequently. The PCE inflation index measures adjustments in the weights that change from quarter to quarter based on shifts in consumption patterns. The PCE index covers a wider scope of expenditure categories. Both indices introduce a controversial measurement of the imputed rent paid for residences owned by the occupant.

Hedonic (Quality) Price Adjustments

The purpose of this economic commentary is educational and to draw attention to aspects of the measurement of price inflation that are confusing, logical, illogical, and infuriating all at the same time. Right below the surface of the raw data reported for prices paid by consumers there are all sorts of adjustments made by government statisticians. Among them, adjustments are made to normalize for quality improvement in the aspects and features of a product. To do so they use a statistical technique called 'Hedonic' price adjustments. Those adjustments reduce the apparent rate of inflation that is seen in posted prices. To what end are these adjustments made? Do they make sense from a consumer's point of view versus the government's point of view?

In competitive markets, all aspects of goods offered in commerce are freely evaluated and prices are freely contracted. Too big, too small, too round,

too flat are examples of features that might enhance or detract from the price. In free markets, it is easy to determine whether various feature differences have value.

Putting a value on each of the basic features of a base-model car is largely nonnegotiable, because it is a package deal, but the US government tries to do that job for us in ways that will surprise you.

Hypothetical Examples

To help understand the consequences and significance of the issue of government estimates of value, two questions are posed. These questions involve hypothetical examples that illustrate the commonsense problems associated with government adjustments to price data.

When is a price increase not a price increase?

If a butcher increased the price of a pound of steak by 10% and told you it had less fat and 10% more protein per pound, would you think that was a price increase or no increase at all because he was selling you a 10% quality improvement? The answer depends on whether you want and value that quality increase – an increase in protein.

The perplexed consumer might say, "I don't want an increase in protein content. I like my marbleized steak just the way it was. If you can't sell it to me then I'll go next door and buy the old-fashioned style steak there."

In this case, from the consumer's perspective of having free choice, the qualitative change in the nutritional composition of the steak was considered a PRICE INCREASE! He valued taste over protein.

But what if he had no choice and the government mandated that all beef have less fat and a 10% higher protein content because that was better for your health and better for the climate? In the absence of choice, our hypothetical consumer would be forced to buy it. Or maybe he would buy only nine-tenths of a pound so as to hold his outlay to the same dollar amount as before. After all, if it were only proteins he wanted, he could make do with a smaller piece of meat.

What would the government report for the steak component of the CPI? The government's perspective would be that there was a quality improvement to the consumer's health and the health of the planet. Therefore, it would report that the price of steak did not go up at all – THERE WAS NO PRICE INCREASE. Hence no inflation!

Can you be impoverished by "quality" improvements?

Everyone has a different sense of "value" based on their own subjective preferences. If consumers find less value in the quality improvements to the CPI assigned by the government, then these changes can, in fact, make them poorer.

We know that most people live on a budget based on their paycheck. Money will only go so far. Let's assume, for a basic example, that an individual has a monthly budget of $1,000 to spend on only two items: food (meat), and housing (rent). Meat takes up $250 of the budget, and the rest is for rent, or $750.

Now assume rent goes up by 10% to $825 due to government-mandated quality improvements (e.g. the landlord installed a new energy-efficient air conditioner, which the local rent control authority said was a quality improvement and justified a 10% rent increase). Since one can't fractionally reduce the size of a home, and moving can be quite expensive, the person's rent outlay goes up by 10% or $75. The amount remaining in the budget for meat drops by $75 which results in a 30% drop in money available for meat.

Meanwhile, the price of meat was increased by 10% due to the supposed "quality" improvement mentioned earlier. This poor consumer would be impoverished by quality improvements over which he had no choice. He would have to reduce his meat consumption by $75 due to the rent increase and

then by another 10% due to the protein-related price increase. His meat consumption would be driven down by 37%.

So, what is the true state of our hypothetical consumer? What happened to his standard of living?

According to the government statistical method of adjusting prices for quality improvements, the consumer experienced NO INFLATION. In fact, he was 10% better off. After six months of this statistical betterment our hypothetical consumer would be skin and bones and quite certain that his standard of living had fallen.

If Mr. Hypothetical had a 10% pay increase, perhaps then all would be well. By government standards, he would be eating healthier meat and living in the luxury of efficient air conditioning. Government statistics would actually show that he experienced a REAL INCREASE in his standard of living – a 10% pay increase and ZERO inflation.

Of course, in this example the consumer had no choice. His spending went up by the same amount as his pay increase. He doesn't feel better off.

But the reality is even worse. It's really bad news for Mr. Hypothetical because his pay raise is tied to a CPI-based COLA. He won't get a cost-of-living adjustment because the CPI didn't go up. NO PAY INCREASE.

Does this sort of thing actually happen with U.S. Government CPI data? Yes, it does. Just ask the retirees living on Social Security if, over the past few years, their benefits have risen to match the cost of living increases they faced.

Reality – Some Quality Adjustments are Sensible, Others Not

When it comes to quality adjustments to prices, there is some room for appreciation. Here are a few clear-cut examples. First is an example where Hedonic Price adjustments for quality improvements have wiped out decades of price increases but the adjustments never work the other way.

Well-known standard car models have more than doubled in price over the last 25-30 years. For example, a basic Ford Mustang has risen by 200% and a basic Honda Accord is higher by slightly more than 100%. Yet the component of the CPI for new cars has barely changed – NO AUTO PRICE INFLATION. The reason given is that it is all quality improvements, not price increases. The quality improvements over time include such things as:

- Longer power-train life and warranties
- More horsepower
- Catalytic converters (good for the environment but less horsepower)
- Improved mileage efficiency
- More cargo space
- All-wheel/4-wheel drive
- Anti-skid locking brakes
- Air bags everywhere
- 3-point safety belts, front and back seats
- Power brakes
- Rear view camera
- Lane departure warnings
- Blind side warning lights
- High intensity/LED lights
- … etc.

Because of these many improvements, the CPI reports that the average price of new cars has risen by much less than other prices in the economy. Over the past 25 years (1995-2020, the period when hedonic adjustments were introduced), the CPI for new vehicles has risen cumulatively by 4.9% compared with 70% for all items in the CPI. Even though the price of a Honda Accord, with all its new features, more than doubled in price, its quality adjusted price has risen by far less than other items in the economy.

Most of these improvements are appreciated

and desired and have improved the quality of the car in ways, more than just safety wise, that mitigate much of the price rise. But how can we tell if the bureaucratic quality adjustments are in any way related to the "qualities" consumers want? Try and buy a new vehicle with only the old 1990 technology. Without being able to do that there is no market-based foundation to tell where real inflation ends, and quality improvements begin.

Many consumer goods have improved in quality in ways that are difficult to measure. If one thinks about computers, cellphones and TVs, all of which have gone down dramatically in price according to the CPI, there may be less disagreement. For many people cellphones have simplified life and combined the functions of separately purchased devices such as a computer, a camera, a portable video player, and a Walkman; all that and more are now available on a basic smartphone. But are these improvements accurately categorized in CPI adjustments? If not, the CPI may be largely *overstating* inflation due to the much better products consumers can buy at relatively lower prices. The quality adjusted components of the CPI says telephone hardware and calculators have fallen by 87% since 1997 and computer prices have declined by 97% after all quality adjustments are made.

There are some reverse examples where quality has worsened yet an adverse quality adjustment to price doesn't result in a higher CPI price. For example, downsizing airplane seats and the addition of water-saving regulators in showers, toilets and dishwashers. Greater discomfort doesn't seem to count as a price increase due to the reduction in quality. As for water regulators, ostensibly water is saved but consumers complain they have to shower longer to fully rinse, flush toilets twice, and rewash some dishes.

Where Does Truth Lie?

Overlooking the technological improvements in computers, cellphones, and automobiles would cause the CPI to overstate the true degree of price inflation. On the other hand, excessive quality adjustments could understate inflation if these "improvements" are not judged by consumers to be true measures of quality. But how can we know if the government's quality ratings are accurate?

Fortunately there is a critic of the government inflation data who believes that quality and other factors in the CPI result in greatly understating the true rates of consumer price inflation. John Williams publishes Shadow Government Statistics. His classic chart shows what the CPI inflation rate would be without all the adjustments the government makes to the data and compares it with the official inflation data.

Courtesy of ShadowStats.com

Two points stand out from the chart above: (1) Unadjusted prices are rising much more rapidly than what the official data report; (2) the growing wedge of effects due to implicit quality improvements and other adjustments, which occurred mostly in the 1990s. In 1990 the difference in inflation rates was about 2%; by 2000 it had widened to nearly 7%. In 2020, it was close to 8%, so the difference has remained fairly stable over the past two decades. ShadowStats.com reports that the April 2021 CPI,

which the government reported at 4.2% (year-over-year), was actually 12.2% stripped of all adjustments.

Even if the ShadowStats numbers are correct, they seem to represent a different type of inflation than what concerns most Federal Reserve Bank economists.

Is the Fed Targeting Prices or Quality Improvements?

These adjustments to prices create much more uncertainty about inflation than people realize. So how can one disentangle all the effects of statistical adjustment so as to know what to expect – how to read the official data on the rate of inflation? What is the Fed actually targeting?

Of course, the Fed is not explicitly targeting quality improvements. To do so would imply that the Fed expects quality improvements to continue at a rate sufficient to offset all but 2% of posted price increases. That seems a stretch. What if the pace of quality improvements faltered? Would that justify raising the benchmark interest rate?

Even if we can assume that the Fed was able to adjust monetary policy so as to achieve its 2% inflation target, how seriously can we accept it as relevant to the average American's cost of living since it is a crafted number, which is the outcome of narrow definitions and statistical manipulations?

Are We Better Off By Having a 2% Target?

Given this measure of inflation, what are the actual effects on US consumers from achieving the target? Do the quality adjustments really make us better off?

There is an old expression in the investment industry: 'You can't eat relative performance; you can only eat if there is positive performance.' In the world of price inflation measurement, the folks adjusting the data for quality improvements are telling us that those quality improvements mean our money is going further because our costs aren't rising rapidly. Thus, our budget is better off. We can eat more steak.

But that is not true for all goods or all consumers.

The quality adjustments to the CPI may not accurately measure the true cost of inflation faced by many consumers. It does not measure changes in the actual cost of living. This may be especially true for those whose budgets favor goods that are less technological such as food, rent, and healthcare.

Understanding government data for what they are and what they are not is vital to understanding the impossibility of targeting the cost of living, even though the Fed is targeting a crafted measure of price inflation.

– May 28, 2021

The Lumber Market Delirium

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As government-imposed lockdown measures confined hundreds of millions of Americans to their homes, many began to entertain DIY projects they previously hadn't the time or resources to complete. Over 75 percent of homeowners surveyed by Porch.com in July 2020 had completed a home improvement project since the beginning of the pandemic. Would-be craftsmen who have waited until now to begin renovations may be out of luck, however—over the past year, the price of lumber has skyrocketed, and home project expenses have risen with them.

From a price of $259.80 per thousand board-feet (the standard unit of lumber trading) on 1 April 2020, on Friday 7 May 2021, the price of lumber had risen to $1,686 per thousand board-feet as the DIY boom coincided with dire challenges to the lumber industry, including increased home building, mill closures, and staffing shortages.

Lumber prices per thousand board-feet (2020–Present)

(Source: Bloomberg Finance, LP)

Construction crews began to build homes with scarce materials, exacerbating shortages. Even a year on, mill capacity is limited, and production simply cannot meet the booming demand.

Lumber's meteoric price rise has been unprecedented. In the futures markets, where producers and users of commodities trade to hedge against unanticipated changes of price over longer periods of time, lumber markets have typically been among the most quiescent, especially compared to crude oil, gold, natural gas, and soybeans. In fact, lumber contracts have typically been neck-and-neck with frozen concentrated orange juice (FCOJ) contracts at the bottom of daily trading volumes ranked among all such derivatives. Indeed, with only a handful of exceptions between the mid-1980s and late 2019, the price of lumber per thousand-board feet has traded somewhat listlessly between $200 and $500. Yet front-month lumber has risen 450 percent between the end of 2019 and the end of April 2021, with the period between March 26 and April 19, 2021 showing an unbroken run of 16 daily price increases and a number of limit-up triggers along the way.

Without suggesting that the rise in prices has been purely speculative, perhaps the modern embodiment of Joseph P. Kennedy Sr.'s barometer of frenzy—stock tips from shoeshine boys—is found in the burst of TikTok videos taking notice of prevailing market conditions. (Many employ the hashtags #lumberprices and #woodprices.)

Great Recession Origins

The circumstances explaining skyrocketing prices, at least in part, trace back to policies implemented by President Barack Obama in the wake of the Great Recession. Until that point, as a 2011 paper summarizes,

> The first decade of the twenty-first century proved tumultuous for the West[ern US] forest products industry. A strong economy, low interest rates, easy access to credit, and real estate speculation fostered more than two million US housing starts in 2005 and record lumber consumption from 2003 to 2005. With the decline in US housing beginning in 2006, the 2008 financial crisis, an over 50-year record low 554,000 housing starts in 2009, wood product prices and production fell dramatically. In 2009 and 2010, virtually every major western mill suffered curtailments and 30 large mills closed permanently. Sales value of wood and paper products in the West dropped from $49 billion in 2005 to $34 billion in 2009. Employment declined by 71,000 workers and lumber production fell by almost 50 percent from 2005 to 2009. Capacity utilization at sawmills and other timber-using facilities fell by from over 80% in 2005 to just over 50% in 2009 and 2010.

For obvious reasons, the lumber industry was one of the worst-hit sectors; the housing market at the center of the financial crisis put a halt to new construction. The economy was weak and unemployment remained high, despite Obama's American Recovery and Reinvestment Act of 2009 and tax cuts implemented by President Donald Trump. As Ryan Cooper explains in *The Week*,

> After 2008, residential investment as a share of the economy plunged to the lowest level recorded since 1947, and recovered with grinding slowness — only returning to the level of the previous record low in mid-2014. So not only did the lumber industry take a massive hit, it did not experience any kind of rebound in demand for over a decade.

In the ensuing years, firms resorted to operating on thin margins due to now-conservative expectations. (More about this, below.) When the pandemic struck, nonpharmaceutical interventions such as lockdowns, business closures, and social distancing hit individuals and firms, and lumber production capacities were further reduced: In Canada and the United States, many mills had to close temporarily or permanently, and only a year into the pandemic have some begun to spring back.

In isolation, this decline may not have caused such an atypical rise in lumber prices. And ironically, as lockdowns and shutdowns were initially imposed, lumber producers and wholesalers canceled outstanding orders. As further reduced production capacities intersected with the precipitous rise of the pandemic DIY movement and the downward spike in mortgage rates, it's little wonder that lumber became a precious commodity.

At a broader level, in the last quarter of 2020, residential investment reached 4.6 percent of GDP—a recent peak. This momentum was underscored by further exacerbations of existing lumber supplies, and now that construction season is upon much of the U.S., the situation is likely to worsen before it improves.

U.S. Producer Price Index for logs, bolts, timber pulpwood, and wood chips (1980–Present)

(Source: Bloomberg Finance, LP)

Just a few weeks ago, on April 16, Chicago Mercantile Exchange Random Length Futures contracts for every 2021 delivery month tallied above $1,000 per board foot. (For comparison, as of April 16, 2020, a May 2021 futures contract traded at around $345.) Lumber production, for its part, has begun to rebound; this past February, it hit a 13-year high. But so long as demand remains hot—both for materials for small-scale projects and grand residential investment—lumber prices will almost certainly stay high.

Of course, supply and demand will converge before long, as they are wont to do; encouraged by high prices, producers will send lumber to market and alleviate supply shortages, while would-be buyers will be priced out of the lumber market until prices drop sufficiently.

The Reliability of Bad Ideas

The meteoric rise of prices has led to the addition of price escalation clauses to sales and construction contracts. According to a Woodworking Industry News poll, some 47 percent of responding builders report shifting from a shared cost default (where builders and homeowners share the expense of rising input prices) to contractual stipulations that adjust the final cost of the home to the change in the cost of lumber.

The fortunes of well-positioned companies are readily apparent. The stock price (white) and per-share earnings estimates (red) of Canadian lumber, strand board, plywood, pulp, and paper producer Canfor Corporation from just before the pandemic began until now is shown below.

Canfor Corp (2019–Present)

(Source: Bloomberg Finance, LP)

Yet despite contract changes, hedgings, and a handful of other market-oriented solutions (including employing substitutes where possible), misguided policy recommendations soon materialize where financial or economic extremes exist.

Predictably, no fewer than 37 groups with varying proximities to the timber industry have called upon the Biden administration for aid. It's difficult to imagine what form of government aid those lumber firms and groups may have in mind other than direct subsidies, since trees take time to grow and certain protectionist measures (tariffs, for instance) are already in place. Some will no doubt take note of the advantages of "proximity to the trough," as demonstrated by another, highly specialized arboreal subsector:

> A few months ago, those who supply America's homes with fresh Christmas trees were approved for special aid by the US Department of Agriculture to help against the economic ravages of the coronavirus pandemic. Frozen out were the people harvesting their less glamorous industrial cousins: loggers and truckers behind the nation's construction, paper, and furniture-making industries. Only farmers who provided species like firs and spruces to Christmas tree lots were greenlighted for relief…The reason: an only-in-Washington

> tale of the importance of lobbying and political connections. The National Christmas Tree Association, along with the larger nursery trade group, American Hort, has worked the corridors of power for decades [with] a full-time team of lobbyists in Washington at a cost of $1 million cumulatively over the past decade…By comparison, the American Loggers Council, which represents the logging industry and log truckers, has spent $85,000 on lobbyists over the same period and has no PAC. "We have been in DC since at least the 1940s or 1950s," said Craig Regelbrugge, the chief lobbyist for American Hort. "It's fair to say that having a consistent presence and relationships is a huge strategic advantage for the industry.

That is an advantage, one predicts, that will soon be sought by the less foresightful lumber subsectors. Identifying the inability of timber mills to meet current demand as rooted in excessive caution following the Great Recession housing collapse, the aforementioned Cooper comments that,

> The result of th[ose] choices was a prolonged depression in housing construction….A whole decade passed where wood sales were chronically weak, and anyone who tried to boost production risked bankrupting themselves (particularly because it is very expensive to grow, harvest, transport, and store wood)… The problem is not excessive demand, the problem is *lack of supply* consistent with what is needed to provide housing for the American people. [Emphasis in the original.]

The previous residential building boom and its effects on timber production were products of the expansionary monetary policy stance the Federal Reserve assumed in the wake of the bursting of the dot-com bubble and the 9/11 attacks. What Cooper assumes to be the normal or ordinary state of affairs distorted in 2008 was a previous boom-bust cycle: the creation, exposure, and liquidation of malinvestment in housing and related industries, including lumber. Instead, what he and others are assuming was the routine course of housing market growth was mostly a product of credit expansion: the artificial lengthening of the term structures of production accompanied by an artificial lowering of interest rates, which drove down mortgage rates. The raft of Fed monetary programs which injected trillions of dollars into financial markets in March of 2020 began a new cycle of distortions and asset price inflation.

Cooper continues:

> Following the advice of conservative economists like Mickey D. Levy and Michael D. Bordo, who argue that the Federal Reserve should be ready to hike interest rates to forestall any inflation, would only strangle the economy so that people once again are unable to afford housing. To adopt John Maynard Keynes, this idea "belongs to the species of remedy which cures the disease by killing the patient."

Consider the following *gedanken* experiment: If lumber-employing firms characterized as overly cautious after the 2007–2009 correction had remained the same or continued growing in the post-crisis period, would this point not have been reached much sooner, with timber products exhausted long ago and quite possibly at much higher prices? Would lumber shortages as early as May or June 2020, with prices at $2,000 or $3,000 per thousand board-feet and the concomitant effects seen on housing and in other areas, be superior to what we see today?

Average weekly hours, US sawmill employees (Jan 2020–Present)

(Source: Bloomberg Finance, LP)

Lumber prices per thousand board-feet (1990–Present)

(Source: Bloomberg Finance, LP)

One wonders where pundits think that the impact of interventionist campaigns begin or end, and/or whether they believe that such programs are so neat and tailorable that unintended outcomes can be disregarded. At any rate, advocating for new government measures to address the unanticipated, pernicious effects of previous government measures is in keeping with the noblest traditions of punditry.

On It Goes

One of the extraordinary moments following the unprecedented government response to the Covid-19 pandemic, where the May 2020 West Texas Intermediate oil futures contract settled at a negative price (-$37.63/barrel), represents the opposite of the current lumber situation.

In that case, a dispute between "OPEC+" (Saudi Arabia and Russia) led to a price war, with a superabundance of oil being released on world markets at nearly the same time that lockdowns reduced travel to a standstill. A massive, sudden boost to supply met plummeting demand, with oil and gasoline prices utterly collapsing. With lumber, we see the effects of a nearly-overnight explosion of demand with low and decreasing supply to meet it. And in both cases, the price system functioned as it should: signaling, economy-wide, as to conditions of scarcity or abundance.

However academically fascinating it may be to examine the recent oddities of the lumber industry, it bears mentioning that consumers and would-be homeowners are feeling the heat. According to Will Ruder of the Home Builders Association of Greater Kansas City, who was interviewed by NPR on *All Things Considered*, "Shortages are tacking months onto the time it takes to build a house and driving up costs. And he says that for every $1,000 price increase nationwide, more than 150,000 potential buyers are being priced out of the market." Sales of new single-family homes and new housing starts fell by 18 and 10 percent, respectively.

It's a classic story of supply and demand, albeit muddied by pandemic complexities. This constellation of considerations has transformed lumber into one of the hottest assets on the market. In time, much of the fervor and many of the complicating factors surrounding lumber will fall to the wayside—but until demand wanes, mill capacity returns to normal, and production can grow accordingly, the exorbitant price of lumber seems to be here to stay. If the promoters of economic interventionism have their way, though, timber markets will become yet another milestone in a long, meandering, and dependable timeline of unforeseen and unintended consequences.

– May 11, 2021

Canadian Doctors Are Being Censored

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On April 30th, 2021 the College of Physicians and Surgeons of Ontario put out a highly controversial statement regarding what it considers to be Covid misinformation. The CPSO is a regional regulatory body empowered by statutory law to exercise licensing and disciplinary authority over the practice of medicine in Ontario. Think of it as the equivalent of a State Bar Association for American lawyers except for Canadian doctors. The statement from the *CPSO* goes as follows,

> *The College is aware and concerned about the increase of misinformation circulating on social media and other platforms* ***regarding physicians who are publicly contradicting public health orders and recommendations.*** Physicians hold a unique position of trust with the public and ***have a professional responsibility to not communicate anti-vaccine, anti-masking, anti-distancing and anti-lockdown statements and/or promoting unsupported, unproven treatments for COVID-19.*** *Physicians must not make comments or provide advice that encourages the public to act* **contrary to public health orders and recommendations.** *Physicians who put the public at risk* ***may face an investigation by the CPSO and disciplinary action, when warranted.*** *When offering opinions, physicians must be guided by the law, regulatory standards, and the code of ethics and professional conduct. The information shared must not be misleading or deceptive and must be supported by available evidence and science.*

The CPSO justifies its statement with the following rationale,

> "There have been isolated incidents of physicians using social media to spread blatant misinformation and undermine public health measures meant to protect all of us."

This development is nothing short of horrifying. Although there are certainly concerns about the spread of falsehoods and conspiracy theories in the age of Covid-19, this sort of broad censorship of speech from practicing medical professionals is not only an ethical sham but anti-science. The practice of science is premised on the rigorous application of the scientific method which among other things requires falsifiability and debate. The move to silence doctors also flies in the face of liberal democracy – something that has been deteriorating around the world as both the public and private sector move to silence dissent.

The fact that the CPSO, a licensing body wielding the power of the state, has taken such an aggressive move to silence dissent even on lockdown policies is especially disturbing given that they are preventing doctors from voicing their expertise on such important matters. The *Toronto Sun* comments on the incident by writing,

> "Right now, restrictions are severe in Canada. The public health orders concerning, for example, the closure of basketball courts and golf courses in Ontario have been widely condemned by many physicians.

Why should physicians not speak out against restrictions that they feel are harmful to the health of their patients?

"Despite undeniable suffering due to lockdowns, the CPSO wants Ontario doctors to stay quiet," wrote Dr. Shawn Whatley, a former president of the Ontario Medical Association, in a guest column in the *Sun*."

It Doesn't Stop In Ontario

One may think that the policy adopted by the CPSO may be an extreme aberration unique to Ontario. According to the *Toronto Star* this practice is seeing more adoption, not less. It writes,

"Doctors in British Columbia are being warned they could face investigation or penalties from their regulatory body if they contradict public health orders or guidance about COVID-19.

The warning is contained in a joint statement from the College of Physicians and Surgeons of B.C. and the First Nations Health Authority."

One doesn't even need to have a strong opinion on this matter to understand that censoring doctors and mandating conformity to state policy is not only immoral but a direct attack on scientific freedom.

The Declaration of Canadian Physicians for Science and Truth

In response to the CPSO's order, there has rightly been pushback from the Canadian medical community in the form of the Declaration of Canadian Physicians for Science and Truth. The Declaration's website features a petition that has been signed by over 4,700 physicians and concerned citizens at the time of this writing.

The declaration lays out three basic complaints with the CPSO's order.

1. **Denial of the Scientific Method itself:**
2. **Violation of our Pledge to use Evidence-Based Medicine for our patients:**
3. **Violation of Duty of Informed Consent**

More elaboration and information can be found on the Declaration's website.

Closing Thoughts

To paraphrase the great human rights activist and Soviet dissident Natan Sharansky, what it meant to be a loyal Soviet citizen was to say what you're supposed to say, to read what you're permitted to read, and to vote the way you're supposed to vote, and to know it was all a lie.

It doesn't take a background in medicine to know that the censorship of medical professionals during a pandemic is the last thing that should be happening. There is no better time for rigorous debate on the efficacy of public health measures than now with unprecedented and unproven lockdown policies being forced on populations worldwide.

Some may say that we can trust that freedom of speech will be restored and that censorship is necessary to expedite the end of the pandemic. This is abundantly flawed for two reasons. The first being the idea that Canadian doctors must conform to the vision of the state and not question it. This is not only a violation of their duty as medical practitioners and scientists but deeply crippling to a sound public health response. Finally, this move is fundamentally opposed to the values of liberal democracy which have now been jeopardized on a global scale. With the lights of an enlightened and modern civilization going out across the world, it would be fair to ask, will they ever be turned back on in our lifetime?

– May 13, 2021

Imperial College Predicted Catastrophe in Every Country on Earth. Then the Models Failed.

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The satirist Ambrose Bierce once defined prophecy as the "art and practice of selling one's credibility for future delivery." Covid-19 has produced no shortage of doomsaying prophets whose prognostications completely failed at future delivery, and yet in the eyes of the scientific community their credibility remains peculiarly intact.

No greater example exists than the epidemiology modeling team at Imperial College-London (ICL), led by the physicist Neil Ferguson. As I've documented at length, the ICL modelers played a direct and primary role in selling the concept of lockdowns to the world. The governments of the United States and United Kingdom explicitly credited Ferguson's forecasts on March 16, 2020 with the decision to embrace the once-unthinkable response of ordering their populations to shelter in place.

Ferguson openly boasted of his team's role in these decisions in a December 2020 interview, and continues to implausibly claim credit for saving millions of lives despite the deficit of empirical evidence that his policies delivered on their promises. Quite the opposite – the worst outcomes in terms of Covid deaths per capita are almost entirely in countries that leaned heavily on lockdowns and related nonpharmaceutical interventions (NPIs) in their unsuccessful bid to turn the pandemic's tide.

Assessed looking backward from the one-year mark, ICL's modeling exercises performed disastrously. They not only failed to accurately forecast the course of the pandemic in the US and UK – they also failed to anticipate Covid-19's course in almost every country in the world, irrespective of the policy responses taken.

Time and time again, the Ferguson team's models dramatically overstated the death toll of the disease, posting the worst performance record of any major epidemiology model. After a year, some of the ICL predictions reach farcical territory. Their forecast of 179,000 deaths in Taiwan, which never locked down, was off by 1,798,000% (as of this writing, Taiwan has just 12 Covid-19 deaths). A similar story played out in other countries that eschewed the lockdown approach for the first year of the pandemic. Imperial overstated the predicted mortality of Sweden (392%), South Korea (17,461%), and Japan (11,670%) in the absence of heavier-handed NPIs than any of these countries actually imposed.

But what about the rest of the world? Most other countries experimented with some form of Neil Ferguson's prescriptive advice over the last year, although for different degrees of severity and duration. Despite widely different mortality outcomes of their own, no other country provides anything approaching a clear validation of the ICL model.

Country	Suppression Deaths (ICL, R0=3, 75% contact reduction maintained until vaccine)	Population-wide Social Distancing Deaths (ICL)	Unmitigated spread Deaths (ICL)	1 Year Actual Cumulative Deaths	Overestimate, Suppression scenario	Overestimate, Population-wide Social Distancing scenario	Overestimate, Unmitigated scenario	Overestimate % – Suppression	Overestimate % – Population-wide Social Distancing	Overestimate % – Unmitigated
Afghanistan	35,740	55,929	74,381	2,467	33,273	53,462	71,914	1349%	2167%	2915%
Albania	3,678	7,274	15,342	2,192	1,486	5,082	13,150	68%	232%	600%
Algeria	51,775	103,677	171,534	3,074	48,701	100,603	168,460	1584%	3273%	5480%
Angola	32,104	39,321	54,691	532	31,572	38,789	54,159	5935%	7291%	10180%
Antigua and Barbuda	67	207	401	28	39	179	373	139%	639%	1332%
Argentina	47,284	104,787	212,412	55,235	-7,951	49,552	157,177	-14%	90%	285%
Armenia	3,757	7,178	14,678	3,434	323	3,744	11,244	9%	109%	327%
Aruba	137	289	576	82	55	207	494	67%	252%	602%
Australia	30,453	69,102	146,707	909	29,544	68,193	145,798	3250%	7502%	16039%
Austria	9,925	27,404	59,573	9,200	725	18,204	50,373	8%	198%	548%
Azerbaijan	12,999	19,605	36,990	3,445	9,554	16,160	33,545	277%	469%	974%
Bahamas	505	759	1,480	188	317	571	1,292	169%	304%	687%
Bahrain	2,256	2,962	4,155	512	1,744	2,450	3,643	341%	479%	712%
Bangladesh	197,281	388,051	592,125	8,830	188,451	379,221	583,295	2134%	4295%	6606%
Barbados	479	881	1,808	41	438	840	1,767	1068%	2049%	4310%
Belarus	14,226	25,594	54,090	2,202	12,024	23,392	51,888	546%	1062%	2356%
Belgium	21,190	46,924	91,586	22,852	-1,662	24,072	68,734	-7%	105%	301%
Belize	432	616	1,127	317	115	299	810	36%	94%	256%
Benin	10,842	18,307	26,809	90	10,752	18,217	26,719	11947%	20241%	29688%
Bhutan	741	1,935	3,007	1	740	1,934	3,006	74000%	193400%	300600%
Bolivia	10,069	21,488	41,442	12,143	-2,074	9,345	29,299	-17%	77%	241%
Bosnia and Herzegovina	3,414	9,274	19,917	6,220	-2,806	3,054	13,697	-45%	49%	220%
Botswana	2,573	4,340	6,628	506	2,067	3,834	6,122	408%	758%	1210%
Brazil	206,087	452,442	908,009	307,112	-101,025	145,330	600,897	-33%	47%	196%
Brunei Darussalam	659	1,047	1,628	3	656	1,044	1,625	21867%	34800%	54167%
Bulgaria	6,892	21,257	46,532	12,601	-5,709	8,656	33,931	-45%	69%	269%
Burkina Faso	17,149	26,005	36,433	145	17,004	25,860	36,288	11727%	17834%	25026%
Burundi	12,284	14,615	20,455	6	12,278	14,609	20,449	204633%	243483%	340817%
Cabo Verde	754	1,163	1,823	165	589	998	1,658	357%	605%	1005%
Cambodia	20,144	32,090	50,146	8	20,136	32,082	50,138	251700%	401025%	626725%
Cameroon	26,251	35,534	50,535	721	25,530	34,813	49,814	3541%	4828%	6909%
Canada	45,828	132,687	266,741	22,809	23,019	109,878	243,932	101%	482%	1069%
Central African Republic	4,035	6,560	9,349	64	3,971	6,496	9,285	6205%	10150%	14508%
Chad	16,469	20,336	28,507	158	16,311	20,178	28,349	10323%	12771%	17942%
Channel Islands	256	504	1,063	86	170	418	977	198%	486%	1136%
Chile	24,532	46,981	96,205	22,587	1,945	24,394	73,618	9%	108%	326%
China	2,130,919	4,813,476	8,642,939	4,636	2,126,283	4,808,840	8,638,303	45865%	103728%	186331%
Colombia	35,399	104,613	208,179	62,645	-27,246	41,968	145,534	-43%	67%	232%
Comoros	846	1,301	1,894	146	700	1,155	1,748	479%	791%	1197%
Congo, Dem. Rep.	76,526	126,170	182,429	726	75,800	125,444	181,703	10441%	17279%	25028%
Congo, Rep.	4,813	7,697	11,058	135	4,678	7,562	10,923	3465%	5601%	8091%
Costa Rica	5,414	11,349	22,929	2,931	2,483	8,418	19,998	85%	287%	682%
Cote d'Ivoire	26,328	36,417	52,235	229	26,099	36,188	52,006	11397%	15803%	22710%
Croatia	6,799	12,834	28,100	5,854	945	6,980	22,246	16%	119%	380%

Cuba	16,875	33,464	69,278	413	16,462	33,051	68,865	3986%	8003%	16674%
Curacao	181	512	1,041	28	153	484	1,013	546%	1729%	3618%
Cyprus	1,575	3,064	6,392	248	1,327	2,816	6,144	535%	1135%	2477%
Czechia	10,909	31,263	67,843	25,639	-14,730	5,624	42,204	-57%	22%	165%
Denmark	9,853	17,181	37,521	2,411	7,442	14,770	35,110	309%	613%	1456%
Djibouti	1,189	1,935	3,004	66	1,123	1,869	2,938	1702%	2832%	4452%
Dominican Republic	11,722	20,414	39,710	3,298	8,424	17,116	36,412	255%	519%	1104%
Ecuador	16,951	32,897	63,996	16,632	319	16,265	47,364	2%	98%	285%
Egypt	139,958	211,731	332,672	11,804	128,154	199,927	320,868	1086%	1694%	2718%
El Salvador	6,837	12,903	25,395	1,996	4,841	10,907	23,399	243%	546%	1172%
Equatorial Guinea	1,460	1,739	2,448	102	1,358	1,637	2,346	1331%	1605%	2300%
Eritrea	3,699	6,341	9,586	9	3,690	6,332	9,577	41000%	70356%	106411%
Estonia	2,083	4,088	8,885	847	1,236	3,241	8,038	146%	383%	949%
Eswatini	1,134	1,955	2,909	666	468	1,289	2,243	70%	194%	337%
Ethiopia	135,203	180,157	265,429	2,769	132,434	177,388	262,660	4783%	6406%	9486%
Fiji	1,126	1,989	3,176	2	1,124	1,987	3,174	56200%	99350%	158700%
Finland	7,089	17,089	36,230	817	6,272	16,272	35,413	768%	1992%	4335%
France	114,526	332,877	621,256	93,714	20,812	239,163	527,542	22%	255%	563%
French Guiana	456	467	860	89	367	378	771	412%	425%	866%
French Polynesia	382	806	1,388	141	241	665	1,247	171%	472%	884%
Gabon	2,041	3,578	5,336	109	1,932	3,469	5,227	1772%	3183%	4795%
Gambia	2,430	3,061	4,318	163	2,267	2,898	4,155	1391%	1778%	2549%
Georgia	4,251	10,543	22,252	3,738	513	6,805	18,514	14%	182%	495%
Germany	148,683	359,743	722,405	75,828	72,855	283,915	646,577	96%	374%	853%
Ghana	37,539	47,538	69,815	740	36,799	46,798	69,075	4973%	6324%	9334%
Greece	10,957	34,822	76,798	7,754	3,203	27,068	69,044	41%	349%	890%
Grenada	102	245	478	1	101	244	477	10100%	24400%	47700%
Guadeloupe	557	1,362	2,808	164	393	1,198	2,644	240%	730%	1612%
Guam	227	492	883	134	93	358	749	69%	267%	559%
Guatemala	19,902	26,733	48,661	6,775	13,127	19,958	41,886	194%	295%	618%
Guinea	13,072	18,048	25,858	116	12,956	17,932	25,742	11169%	15459%	22191%
Guinea-Bissau	1,838	2,662	3,795	61	1,777	2,601	3,734	2913%	4264%	6121%
Guyana	887	1,430	2,744	225	662	1,205	2,519	294%	536%	1120%
Haiti	14,297	17,170	31,462	251	14,046	16,919	31,211	5596%	6741%	12435%
Honduras	8,515	15,004	27,412	4,536	3,979	10,468	22,876	88%	231%	504%
Hong Kong SAR, China	9,863	52,304	81,551	205	9,658	52,099	81,346	4711%	25414%	39681%
Hungary	20,378	28,278	61,425	19,499	879	8,779	41,926	5%	45%	215%
Iceland	496	903	1,892	29	467	874	1,863	1610%	3014%	6424%
India	2,085,532	3,539,149	5,513,476	161,240	1,924,292	3,377,909	5,352,236	1193%	2095%	3319%
Indonesia	339,539	652,399	1,056,765	40,166	299,373	612,233	1,016,599	745%	1524%	2531%
Iran (Islamic Republic of)	152,376	207,085	335,490	62,223	90,153	144,862	273,267	145%	233%	439%
Iraq	32,114	61,652	91,197	14,157	17,957	47,495	77,040	127%	335%	544%
Ireland	6,500	12,614	26,313	4,651	1,849	7,963	21,662	40%	171%	466%
Israel	11,521	19,728	40,283	6,165	5,356	13,563	34,118	87%	220%	553%
Italy	131,378	227,159	477,895	107,256	24,122	119,903	370,639	22%	112%	346%
Jamaica	1,930	6,171	12,284	557	1,373	5,614	11,727	246%	1008%	2105%
Japan	143,380	469,064	1,055,426	8,989	134,391	460,075	1,046,437	1495%	5118%	11641%
Jordan	10,769	18,302	27,719	6,374	4,395	11,928	21,345	69%	187%	335%
Kazakhstan	22,379	36,697	70,577	3,217	19,162	33,480	67,360	596%	1041%	2094%
Kenya	57,613	70,948	100,001	2,098	55,515	68,850	97,903	2646%	3282%	4666%

Korea, Rep.	64,648	141,198	301,352	1,721	62,927	139,477	299,631	3656%	8104%	17410%
Kuwait	5,133	8,362	12,045	1,270	3,863	7,092	10,775	304%	558%	848%
Kyrgyz Republic	5,026	10,296	18,179	1,494	3,532	8,802	16,685	236%	589%	1117%
Latvia	3,102	5,846	12,762	1,867	1,235	3,979	10,895	66%	213%	584%
Lebanon	8,260	17,528	29,649	6,013	2,247	11,515	23,636	37%	192%	393%
Lesotho	2,883	4,237	6,562	315	2,568	3,922	6,247	815%	1245%	1983%
Liberia	4,963	7,754	11,366	85	4,878	7,669	11,281	5739%	9022%	13272%
Libya	8,438	14,215	21,621	2,602	5,836	11,613	19,019	224%	446%	731%
Lithuania	4,344	8,580	18,810	3,529	815	5,051	15,281	23%	143%	433%
Luxembourg	966	1,681	3,454	738	228	943	2,716	31%	128%	368%
Madagascar	24,189	41,022	59,652	378	23,811	40,644	59,274	6299%	10752%	15681%
Malawi	19,646	25,059	35,425	1,112	18,534	23,947	34,313	1667%	2154%	3086%
Malaysia	42,814	80,183	133,076	1,249	41,565	78,934	131,827	3328%	6320%	10555%
Maldives	671	1,031	1,515	66	605	965	1,449	917%	1462%	2195%
Mali	23,986	24,844	34,778	376	23,610	24,468	34,402	6279%	6507%	9149%
Malta	708	1,345	2,914	382	326	963	2,532	85%	252%	663%
Martinique	674	1,406	2,904	48	626	1,358	2,856	1304%	2829%	5950%
Mauritania	5,092	7,024	10,278	448	4,644	6,576	9,830	1037%	1468%	2194%
Mauritius	2,102	4,561	7,934	10	2,092	4,551	7,924	20920%	45510%	79240%
Mayotte	244	494	742	169	75	325	573	44%	192%	339%
Mexico	187,758	243,724	475,425	200,862	-13,104	42,862	274,563	-7%	21%	137%
Moldova	5,796	9,544	19,480	4,745	1,051	4,799	14,735	22%	101%	311%
Mongolia	3,555	6,667	10,124	5	3,550	6,662	10,119	71000%	133240%	202380%
Montenegro	638	1,651	3,468	1,233	-595	418	2,235	-48%	34%	181%
Morocco	46,280	93,011	157,668	8,793	37,487	84,218	148,875	426%	958%	1693%
Mozambique	29,794	42,412	60,577	758	29,036	41,654	59,819	3831%	5495%	7892%
Myanmar	55,193	125,968	202,947	3,205	51,988	122,763	199,742	1622%	3830%	6232%
Namibia	2,801	4,173	6,219	504	2,297	3,669	5,715	456%	728%	1134%
Nepal	33,206	67,861	103,435	3,024	30,182	64,837	100,411	998%	2144%	3320%
Netherlands	28,186	51,419	112,170	16,421	11,765	34,998	95,749	72%	213%	583%
New Zealand	7,540	12,981	27,680	26	7,514	12,955	27,654	28900%	49827%	106362%
Nicaragua	7,924	10,735	20,112	177	7,747	10,558	19,935	4377%	5965%	11263%
Niger	23,313	29,995	42,351	185	23,128	29,810	42,166	12502%	16114%	22792%
Nigeria	218,632	274,742	391,607	2,039	216,593	272,703	389,568	10623%	13374%	19106%
North Macedonia	2,925	5,228	10,897	3,604	-679	1,624	7,293	-19%	45%	202%
Norway	7,688	15,162	32,507	656	7,032	14,506	31,851	1072%	2211%	4855%
Oman	4,706	8,006	11,235	1,650	3,056	6,356	9,585	185%	385%	581%
Pakistan	314,407	446,288	650,513	14,158	300,249	432,130	636,355	2121%	3052%	4495%
Panama	7,196	8,742	17,275	6,087	1,109	2,655	11,188	18%	44%	184%
Papua New Guinea	10,103	14,502	21,438	39	10,064	14,463	21,399	25805%	37085%	54869%
Paraguay	6,665	12,272	23,426	3,958	2,707	8,314	19,468	68%	210%	492%
Peru	37,133	65,987	131,010	51,032	-13,899	14,955	79,978	-27%	29%	157%
Philippines	174,749	229,877	368,084	13,149	161,600	216,728	354,935	1229%	1648%	2699%
Poland	67,077	116,997	239,472	51,305	15,772	65,692	188,167	31%	128%	367%
Portugal	11,241	33,548	74,122	16,819	-5,578	16,729	57,303	-33%	99%	341%
Puerto Rico	5,468	10,100	21,023	2,109	3,359	7,991	18,914	159%	379%	897%
Qatar	2,867	4,025	5,488	282	2,585	3,743	5,206	917%	1327%	1846%
Réunion	1,481	2,282	4,646	102	1,379	2,180	4,544	1352%	2137%	4455%
Romania	28,083	56,264	121,855	22,835	5,248	33,429	99,020	23%	146%	434%
Russian Federation	211,955	393,846	830,636	95,410	116,545	298,436	735,226	122%	313%	771%

Rwanda	13,651	19,218	27,958	300	13,351	18,918	27,658	4450%	6306%	9219%
Sao Tome and Principe	196	329	475	34	162	295	441	476%	868%	1297%
Saudi Arabia	39,636	67,619	97,344	6,637	32,999	60,982	90,707	497%	919%	1367%
Senegal	18,625	24,172	35,013	1,031	17,594	23,141	33,982	1706%	2245%	3296%
Serbia	14,629	24,624	53,057	5,075	9,554	19,549	47,982	188%	385%	945%
Seychelles	107	285	467	20	87	265	447	435%	1325%	2235%
Sierra Leone	9,281	11,319	16,287	79	9,202	11,240	16,208	11648%	14228%	20516%
Singapore	9,910	31,059	46,333	30	9,880	31,029	46,303	32933%	103430%	154343%
Slovakia	6,509	14,719	31,253	9,373	-2,864	5,346	21,880	-31%	57%	233%
Slovenia	3,349	6,444	14,051	4,008	-659	2,436	10,043	-16%	61%	251%
Somalia	14,627	21,478	30,769	471	14,156	21,007	30,298	3006%	4460%	6433%
South Africa	90,469	125,367	198,365	52,602	37,867	72,765	145,763	72%	138%	277%
South Sudan	13,802	17,136	25,154	108	13,694	17,028	25,046	12680%	15767%	23191%
Spain	73,562	146,917	321,029	75,010	-1,448	71,907	246,019	-2%	96%	328%
Sri Lanka	25,691	72,564	122,991	557	25,134	72,007	122,434	4512%	12928%	21981%
St. Lucia	307	415	825	58	249	357	767	429%	616%	1322%
St. Vincent and the Grenadines	206	248	483	10	196	238	473	1960%	2380%	4730%
State of Palestine	5,030	7,586	11,219	2,537	2,493	5,049	8,682	98%	199%	342%
Sudan	48,953	71,299	105,847	2,028	46,925	69,271	103,819	2314%	3416%	5119%
Suriname	755	1,084	2,090	177	578	907	1,913	327%	512%	1081%
Sweden	14,518	30,434	66,393	13,402	1,116	17,032	52,991	8%	127%	395%
Switzerland	10,111	26,090	56,606	10,298	-187	15,792	46,308	-2%	153%	450%
Syrian Arab Republic	17,075	34,945	54,349	1,216	15,859	33,729	53,133	1304%	2774%	4369%
Taiwan	35,834	93,712	179,828	10	35,824	93,702	179,818	358240%	937020%	1798180%
Tajikistan	10,643	12,535	20,747	90	10,553	12,445	20,657	11726%	13828%	22952%
Tanzania	75,749	78,830	111,893	21	75,728	78,809	111,872	360610%	375281%	532724%
Thailand	90,286	245,967	459,500	92	90,194	245,875	459,408	98037%	267255%	499357%
Togo	7,758	11,609	16,675	107	7,651	11,502	16,568	7150%	10750%	15484%
Trinidad and Tobago	1,928	3,247	6,603	141	1,787	3,106	6,462	1267%	2203%	4583%
Tunisia	15,612	34,649	58,391	8,684	6,928	25,965	49,707	80%	299%	572%
Turkey	85,866	172,668	337,078	30,772	55,094	141,896	306,306	179%	461%	995%
Uganda	33,823	50,272	68,481	335	33,488	49,937	68,146	9996%	14907%	20342%
Ukraine	59,515	122,293	260,783	33,068	26,447	89,225	227,715	80%	270%	689%
United Arab Emirates	9,932	13,056	17,644	1,472	8,460	11,584	16,172	575%	787%	1099%
United Kingdom	120,735	242,593	489,828	126,515	-5,780	116,078	363,313	-5%	92%	287%
United States	474,227	1,099,095	2,186,315	548,396	-74,169	550,699	1,637,919	-14%	100%	299%
United States Virgin Islands	170	348	700	26	144	322	674	554%	1238%	2592%
Uruguay	4,098	9,966	20,633	875	3,223	9,091	19,758	368%	1039%	2258%
Uzbekistan	40,299	53,713	94,968	624	39,675	53,089	94,344	6358%	8508%	15119%
Venezuela (Bolivarian Republic of)	40,968	54,955	107,419	1,543	39,425	53,412	105,876	2555%	3462%	6862%
Vietnam	120,476	271,555	461,352	35	120,441	271,520	461,317	344117%	775771%	1318049%
Western Sahara	625	993	1,501	1	624	992	1,500	62400%	99200%	150000%
Yemen	28,558	42,045	60,394	820	27,738	41,225	59,574	3383%	5027%	7265%
Zambia	17,377	21,462	29,569	1,194	16,183	20,268	28,375	1355%	1697%	2376%
Zimbabwe	14,960	21,359	30,807	1,518	13,442	19,841	29,289	886%	1307%	1929%

The searchable results above, compared to the actual death toll on March 26, 2021 – one year after the original release of Imperial's international model.

The table depicts three modeled scenarios that were published in ICL's report from one year ago (ICL also included a fourth scenario attempting to approximate focused protection of elderly populations; however this approach was not meaningfully attempted in any country).

The first scenario shows an extreme "suppression" model, triggered when a country reached 1.6 deaths per 100,000 residents. This strategy envisioned a stunning 75% overall "uniform reduction in contact rates" across the entire population. Even in the short term, this approach is akin to the harsh measures first implemented in the Wuhan region of China as distinct from the lesser lockdowns with "essential business" exemptions seen in most of the world. But ICL's suppression strategy also assumed that this measure "will need to be maintained in some manner until vaccines or effective treatments become available" – basically a full year or more of uninterrupted lockdown.

No country on earth maintained a 75% suppression rate of all contacts for an entire year, making ICL's first model an extreme hypothetical of what a "best case" aggressive policy response could attain rather than a predictive reflection of reality. Despite its hypothetical nature, ICL's suppression model still managed to overstate the number of Covid-19 deaths in all but the 20 worst-afflicted countries – none of which used anything close to the scenario's policy approach.

The second ICL strategy is closer to reality in most countries. This "mitigation" model envisioned mandatory population-wide social distancing with a primary aim of preserving hospital capacity to treat the disease – a "flattening of the curve" as the popular slogan maintained. Using the most conservative replication rate that they modeled, R=2.4, Imperial's "mitigation" forecasts managed to dramatically overstate the number of deaths in every single country on earth. Using a higher R0 yields even more extreme overpredictions. But sticking with the 2.4 scenario is sufficient to show the systemic problem in the ICL model. Their "mitigation" numbers were too high by roughly 20-30% in hard-hit locations such as Peru, Mexico, and the Czech Republic – all countries that used stringent lockdown measures at several points in the last year. On the other extreme, ICL overstated the "mitigation" scenario's predicted death toll by 100,000% or more in a dozen countries. All but about 20 of the hardest-hit countries had "mitigation" forecasts that ran high by 100% or more.

The third ICL strategy projected the results of an "unmitigated" pandemic in which governments did nothing at all. This is the scenario that famously predicted 2.2 million deaths in the United States, 500,000 in the United Kingdom, and similar catastrophic outcomes across the world. Although Ferguson's team has a bad habit of falsely claiming credit for saving millions of lives premised upon these apocalyptic numbers, the truth is they all amounted to wild exaggerations from a fundamentally flawed model. At the 1-year mark, no country on earth approached anywhere near ICL's "unmitigated" projections, and certainly not any of the countries that avoided heavy-handed lockdowns.

Although ICL did not release its full timeline of how the pandemic would play out under these scenarios, its modeling enterprise was built upon the assumption that the peak daily death toll for each country would hit approximately three months after the introduction of the virus. For most countries, that means a predicted peak sometime in the summer of 2020, with the overwhelming majority of forecast deaths to have occurred by the end of that wave. A year later, most countries have not even remotely resembled the tolls predicted under most of the ICL model scenarios.

Several questions remain.

Why is Ferguson, who has a long history of absurdly exaggerated modeling predictions, still viewed as a leading authority on pandemic forecasting? And why is the ICL team still advising governments around the world on how to deal with Covid-19 through its flawed modeling approach? In March 2020 ICL sold its credibility for future delivery. That future has arrived, and the results are not pretty.

– May 5, 2021

Papers, Please! Oregon Now Requires 'Proof of Vaccination'

JORDAN SCHACHTEL

Contributor

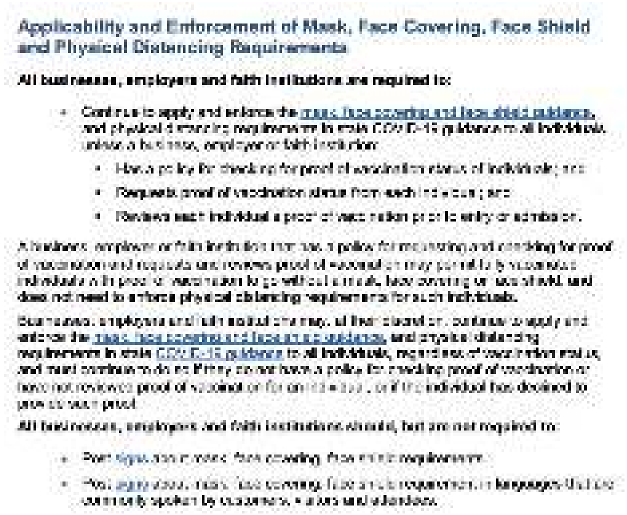
If you want to participate in Oregon society without being forced to wear a mask, you better have your paperwork in order.

The state is now requiring individuals to display "proof of vaccination" if they'd like to take their masks off indoors, Oregon's Health Authority has announced.

In rejecting the more practical and individual liberty embracing "honor system" approach that we've seen across the United States, the authorities in Salem are taking the fascist policy route.

"Oregon will allow people to go maskless outside but will require them to be fully vaccinated against COVID-19 — and be able to prove it — to forgo masks in most public indoor settings," the Oregonian reports.

Yes, you read that correctly. Oregon finally ended its *outdoor* mask mandate, a full year and a half into Covid Mania. And in exchange for "granting" systems the freedom to breathe fresh air, they will now be forced to show "proof of vaccination" if they want to participate in society.



Applicability and Enforcement of Mask, Face Covering, Face Shield and Physical Distancing Requirements

All businesses, employers and faith institutions are required to:

Oregon Health Authority website

"We hope that Oregonians will not lie or cheat and put others at risk by forging a vaccine record if they aren't vaccinated," Oregon's state epidemiologist, Dean Sidelinger, said in a presser with local journalists. Sidelinger, a power drunk quack, made a name for himself in the state by demanding long-term closures of businesses and faith institutions. He has recently perpetuated the falsehood that schools are vectors for transmission.

It would be worth seriously debating the merits of this authoritarian insanity if in fact Oregon could demonstrate that they were "following the science" on this issue, but it's clear that this order has nothing

to do with science, and everything to do with power and control.

The idea that there is any science backing a "papers, please" approach to "stopping the spread" is entirely baseless.

Two important points:

First and foremost, there is no comprehensive trial that shows masks actually work at preventing COVID-19, so the premise for the mask policy is false. There is no evidence that cloth masks help stop the spread of a submicroscopic infectious particle. In fact, there is more evidence demonstrating that masks may act as a vector for disease transmission.

Second, if vaccines work to protect people from serious outcomes related to COVID-19, what exactly is the point of demanding that businesses force customers to show their vaccine papers? Yes, that was rhetorical. COVID Mania has largely been nothing more than an excuse for politicians and oligarchs to accumulate more power. If the vaccine protects individuals from people who choose not to take the COVID-19 vaccine, then there is no particular threat to anyone but those who choose to opt out. There is zero science behind the idea of a COVID-19 vaccine passport.

It seems that the next steps for Oregon are obvious. That may come in the form of a more streamlined digital vaccine passport system, as we've seen in places like New York and Hawaii (the good news is that these systems are struggling big time). Small businesses may not be able to find resources to manually check vaccine cards, as many companies with thinner margins simply don't have the resources to add a vaccine passport doorman to their roster. Therefore, companies will be forced to automate and use corporate authoritarian vaccine passport systems like those designed by companies like IBM, Common Pass, and Clear, among others.

Another side effect of this fascistic dystopian policy is the reality that people will be encouraged to wear their "vaccine credentials" to complement their mask, as a "practical measure" to be allowed entry into a business. It will be understood as the ultimate virtue signal, and a sign of complete obedience to authority, should Oregonians have both a mask on and a vaccine card readily on display.

With the corrupt policies being pursued by the authorities in statewide office, it shouldn't come as a surprise that not everyone in the state is thrilled with the policies being pushed by Salem. On Tuesday, 5 Oregon counties voted in favor of leaving the state and becoming part of Idaho.

– May 25, 2021

Supply-Side Neoliberalism Sure Beats the Alternative

RICHARD M. SALSMAN
Senior Fellow

Besides "capitalism," the two concepts perhaps most reviled by left-leaning intellectuals are "neo-liberalism" and "supply-side economics." These intellectuals harbor an odd antagonism, because each concept is associated with greater freedom, prosperity, and security. As such, one might suspect that the antagonists yearn for something other than these human values.

But what's not to like about capitalism? It's the social system that codifies individual rights to life, liberty, property, and the pursuit of happiness, the system in which property is owned and controlled privately. Capitalism was made possible by the Enlightenment, by the 18th century respect for reason in all fields – in science, politics, economics, the arts. In just a couple of centuries it revolutionized and modernized our material world; for the nations that embraced it, capitalism improved their health, increased their wealth, and extended their lifespans.

We no longer have a pure capitalist system, of course. The ideal form was best practiced in America between the Civil War and WWI. But whenever social systems have been closer to capitalism's pure form (e.g., Hong Kong), they have performed wonders; systems farthest from capitalism, we all know (or should) have produced horrors.

Why does capitalism perform wonders? Why is it so efficient, practical, productive, and life-enhancing? Because it is the *optimal habitat for humanity*. It provides individuals the freedom to think, act, and pursue their self-interest. Some of capitalism's foes are nihilists, of course, eager to terminate (not merely "redistribute") its opulence; but many more foes disdain its ethical code of rational egoism, a disdain felt alike by secular socialists and religious conservatives (who otherwise pose as rivals). Many also hate inequalities in income, wealth, and social status, even though in freer nations that mostly reflects the diversity of developed talents and life choices.

What about "neoliberalism?" It means "new liberty" and refers to the post-WWII spread of pro-capitalist ideas from the likes of Ludwig von Mises, Friedrich Hayek, Ayn Rand, Milton Friedman, Robert Nozick, James Buchanan, and others. Liberty had not been as defended since before WWI.

The nearby exhibit – "A Timeline of Neoliberalism" – depicts key works in moral theory, politics, and economics that appeared over five decades and inspired party platforms, campaigns, and elections. The successful, multi-year governance of political leaders like Ronald Reagan, Margaret Thatcher, and Brian Mulroney would not have been possible without the fuel of neoliberal ideas. Nor would there have been pressure placed on the Soviet Union and its East European colonies; when they too relented, it could be said without hyperbole (as Thatcher put it) that neoliberals "won the Cold War without firing a single shot." Even successors to the neoliberals in rival parties dared not change policy much. In the 1990s Bill Clinton first beat the Reagan successor (GHW Bush) who had pledged "no new taxes" (before raising them), then, before a Republican-controlled Congress, declared "the era of big government is over." Soon thereafter, Clinton signed a law to "end welfare as we know it." In Britain in 1995, Labor Party leader Tony Blair demanded a recission of the nationalization plank (in place since 1918) and with other neoliberal acts served as Prime Minister (1997-2007).

Amid the rise of neoliberalism and the fall of the U.S.S.R., Marxism and Keynesianism were in disrepute and retreat. Ideologues and control freaks in each camp detested the spread of neoliberalism; still today they use the term as an epithet, preferring a return to the old despotism.

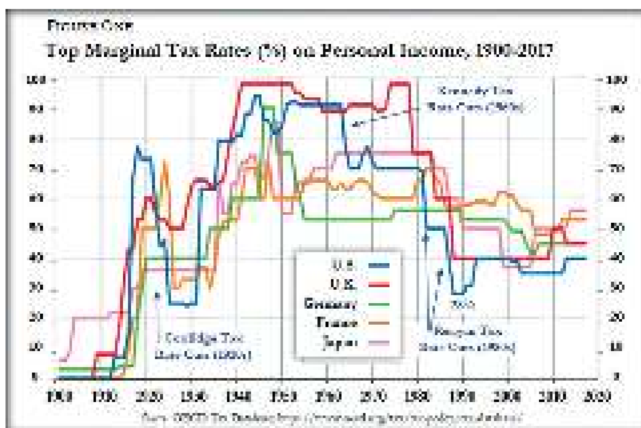
What about "supply-side economics?" It was developed primarily by economists Robert Mundell (Nobel prize winner, 1999) and Arthur Laffer (famous for the Laffer curve, which showed the disincentive effects of high marginal tax rates and called for material cuts). Their work was popularized by Jude Wanniski (*The Way the World Works*, 1978) and Bob Bartley (in charge of the editorial pages of the *Wall Street Journal*, 1972-2002). Supply-side doctrines were applied with great success by practitioners including Congressman Jack Kemp, Treasury economists Paul Craig Roberts (*The Supply-Side Revolution*, 1984) and Bruce Bartlett – and, of course, America's 40th President – in the form of "Reaganomics." It is true (and sad) that few supply-siders were willing to shrink the morally suspect welfare state, but neither were their critics (who demanded a still *larger* version). Besides, their failure to get shrinkage does not negate their valid principles, one of which is that the real burden on the economy is *government spending*, not how it is *financed*.

Just as many intellectuals and politicians despised neoliberalism, they despised supply-side economics, deriding it as "voodoo economics" and "trickle-down economics." Even Reagan budget director David Stockman, a brief convert, tried to appease critics by claiming it was a "trojan horse" to provide "giveaways to the rich." Despite foes' smears, supply-side economics was neither untrue nor untried; it was a healthy revival of the sound doctrines and policies explicated by Jean-Baptiste Say (1767-1832), Frederic Bastiat (1801-1850), and Joseph Schumpeter (1883-1950). The trio's pro-capitalist ideas and policies were dismissed and distorted (albeit never refuted) under the onslaught of Marxian-Keynesian dogmas during the brutal first half of the 20th century.

The essence of supply-side economics is not, as critics claim, that "tax cuts will balance the budget." It's not even a minor principle but, rather, a "straw man" argument which no supply-sider ever advanced. Budget balance (or imbalance) is determined as much by public spending as by tax revenues; if the former is excessive, no amount of tax reform can ensure budget balance. Moreover, the uniqueness of the supply-side approach to taxation is to focus on tax rates and how they affect incentives to produce, earn income, save, and invest. Unlike most other models, this one makes the reasonable assumption that people are self-interested, don't pay taxes out of duty, and dislike paying their hard-earned income to corrupt and fiscally profligate governments.

Supply-side fiscal theory contends that if tax *rates* are too high (confiscatory, punitive) they can depress

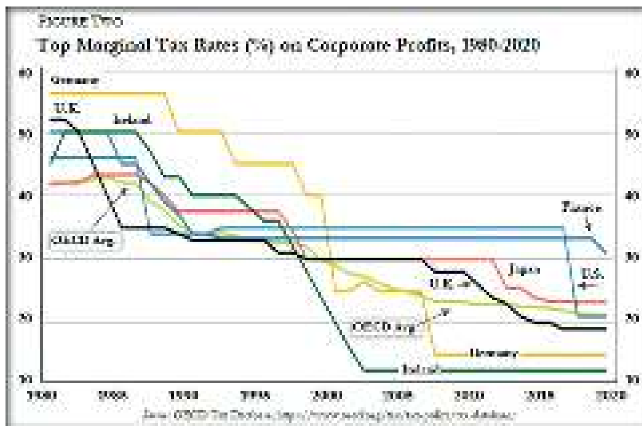
the tax base and thus tax *revenues*. If so, a *cut* in rates can increase output and income as well as the tax *base* (hence tax *revenues*). This is common sense, basic economics; it is price theory (microeconomics) applied to the economy (macroeconomics) and to public finance. It is the essence of the Laffer curve, which has been verified empirically in dozens of cases worldwide since the 1970s. It is precisely the much-reviled supply-side revolution that fueled the case for material cuts in top marginal tax rates in major nations since the early 1980s (Figure One) – and those cuts also, predictably, fueled a revival in economic growth rates in those nations.



Another major myth about supply-side economics is that it pertains only to taxes or to the maximization of government revenues. As did Say, Bastiat, and Schumpeter, supply-siders today rightly extoll entrepreneurship, profit-seeking, and prosperity. They know that wealth creation requires the rule of law, the protection of all aspects of private property rights, sound (gold-based) money, low and flat tax (and tariff) rates, free trade, efficient infrastructure, and national defense. For supply-siders, the real burden on any economy is government spending, not how it's funded. Unlike demand-siders (whether Keynesian or Monetarist), they stress supply, production, and wealth creation; they recognize that supply is the only source of real demand, that demand is not akin to consumption (the using up of wealth), that government spending per se creates neither supply nor demand, that aggregate supply and aggregate demand are never "out of balance" or in need of a government corrective, since they're the *same thing* viewed from different angles.

Figures One and Two illustrate the dramatic decline on top marginal tax rates resulting from the supply-side revolution of the 1980s and 1990s. The U.S. federal government's top marginal tax rate on personal income (Figure One) was cut from 70% in 1980 to 50% by 1983, then further to a low of 28% in 1986 (a rate that lasted for only five years, until the Bush tax hikes). Notice how tax rates likewise were cut in Britain, Germany, France, and Japan. This was a global revolution. Yet rates have been raised again in the opening decades of this century. The top U.S. rate is now 40%.

Top corporate tax rates also were cut dramatically due to the supply-side revolution (Figure Two). In 1984 top marginal rates averaged 42% in OECD nations; by 1999 the average was 32%; today it is 22%. Germany's top rate was 55% in 1980; by 1999 it was 40%; today it is 14%. The top U.S. rate for large "C-corporations" was cut from 46% in 1980 to 35% in 1986 and remained there, above the OECD average, until the Trump rate cut (to 21%) beginning in late 2017. In the U.S., the top tax rate for smaller, pass-through business entities ("S-corporations") was equivalent to the top personal rate, which was cut from 70% in 1980 to 28% in 1986; this tax-rate differential inspired faster growth in small-to-mid-size businesses in the U.S. relative to larger firms.



A crucial aspect of the supply-side revolution was pro-capitalism and anti-cronyism. A main goal was to simplify the tax code, with fewer brackets and fewer special exemptions, deductions, and credits. Private sector activity would shift from tax avoidance to wealth creation. The idea was to lower tax rates while widening and increasing the tax base (i.e., taxable income). That meant a much lower negative impact on total tax revenues. Moreover, less onerous tax rates and fewer tax favors radically reduced the motivation to lobby for special tax breaks (i.e., far less cronyism).

The supply-side revolution – being pro-capitalist, pro-entrepreneur, pro-profit, pro-growth, and pro-prosperity – understandably has faced many counterrevolutionaries in the early decades of this century. Top marginal tax rates on personal income have been increased, although not back to pre-1980 confiscatory levels; pressure is building to further raise top rates, and politicians who endorse the idea have been gaining traction and getting elected. The reactionaries also have been busy reintroducing tax favoritism, eliciting more lobbying, campaign contributions, and cronyism.

We have heard a lot in recent decades about capitalism allegedly degenerating into "cronyism" or "plutocracy" (rule by the rich). But cronyism has nothing to do with capitalism. The only way to get money out of politics is to get politics out of money making. That is a uniquely supply-side prescription, but it is the last thing in the world any Marxist, Keynesian, or welfare-state fan wishes to see. It is ludicrous when foes of supply-side policy claim that it "favors the rich," for these foes are the same people who, by seeking to punish the rich, insidiously seek their favors.

Tax policy aside, there has also been a boom in government spending this century, which supply-siders interpret as a burden (not a "stimulus") for the economy. There also has been greater regulation, stemming from 9/11 (PATRIOT ACT), the accounting scandals of the early 2000s (Sarbanes-Oxley Act), the financial crises of 2008-09 (the Dodd-Frank Act), and the Covid-19 lockdowns of 2020-21. Finally, there have been sharp policy turns away from free trade.

Back in 2012, fearful of a Romney-Ryan victory and a mere preservation of supply-side policies, two analysts at the left-leaning Center for American Progress issued a report titled "The Failure of Supply-Side Economics." They included a half dozen graphs allegedly showing that "supply-side doesn't work." They showed no such thing. They cherry-picked data, conveniently altered time periods, and posited irrelevancies. Their shoddy work was yet another in a long train of similarly bogus "studies" that have appeared since the beginning of Reaganomics in the early 1980s.

Let us review the relevant empirics, both *fully* and *fairly*. Table One summarizes and contrasts U.S. economic-financial performance in 1980-2000 versus 2000-2020. Whereas the last two decades of the 20th century were animated *by globalism and supply-side neoliberalism*, the first two decades of the 21st century have been animated by *nationalism and demand-side neofascism.*

The extent of the differential performance should be astonishing to those unaware of the facts but honest enough to learn them. Tragically, America

has shifted from prosperity to austerity in a single generation. Real GDP growth was 3.4% per annum in 1980-2000, *twice* the rate of 2000-2020. Industrial production over the last two decades has been a mere 1/6th of the previous annual rate. Real private fixed investment expanded by 4.8% per annum in 1980-2000, more than *double* the rate since then. Growth in civilian employment this century has been a mere *quarter* of what it was in 1980-2000.

What about the dollar and money? The dollar *appreciated* at a compounded annual rate of 1.1% in 1980-2000 but *depreciated* at that same rate in 2000-2020. In real terms (ounces of gold), the dollar appreciated 3.9% per annum in 1980-2000 but has been devalued 9.2% per annum since then. The money supply has increased 15% per annum so far this century, *triple* its rate of increase in 1980-2000. To what end? For what purpose? Obviously, the production of money isn't the production of real wealth. As more money has been issued, more has been demanded (hoarded). That hardly depicts a robust, future-oriented, risk-taking, entrepreneurial economy.

TABLE ONE
Prosperity to Austerity in Just One Generation

compounded annual % changes	1980-2000	2000-2020
the real economy		
Real GDP	3.4%	1.8%
Industrial Production Index	3.0%	0.5%
real private fixed investment	4.8%	2.0%
civilian employment	1.6%	0.4%
the U.S. Dollar		
M1 money supply	5.0%	15.0%
M1 money demand	3.3%	15.8%
U.S. $ in FX (Dollar Index)	1.1%	-1.1%
US$ in gold ounces	3.9%	-9.2%
U.S. in consumer goods	-3.3%	-2.0%
financial assets		
S&P 500, real total return	11.7%	5.3%
U.S. T-Bonds, real total return	8.1%	3.6%
U.S. T-Bills, real total return	3.2%	-0.7%
commodities		
crude oil/barrel	-1.3%	2.5%
gold/ounce	-3.7%	10.1%
foodstuffs	-2.0%	3.2%
public finance		
U.S. Federal spending	5.6%	6.9%
U.S. Federal revenues	7.0%	2.6%
U.S. Federal debt (net)	5.1%	9.0%

What about real gains on financial assets? The S&P 500 returned 11.7% per annum in the supply-side decades of 1980-2000, more than *double* what it has delivered since then (5.3% per annum). U.S. T-Bonds returned 8.1% per annum in 1980-2000, likewise double their return since (3.6% per annum). Prices of key commodities like crude oil, gold, and food *declined* in 1980-2000, but have since *increased*. With robust growth in output and jobs in 1980-2000 came less costly living.

What about U.S. public finances? The supply-side policy mix is ridiculed most, perhaps, for its alleged fiscal profligacy. But Table One reveals how federal spending has increased far *more* in 2000-2020 (6.9% per annum) than it did amid supply-side dominance in 1980-2000 (5.6% per annum). Recent profligacy hasn't done very much to "stimulate" the economy, has it? But surely federal tax revenues stagnated amid all the tax cutting of 1980-2000? No, they grew by 7.0% per annum, more than *twice* their growth rate so far this century. Whereas in 1980-2000 revenue growth outpaced spending growth, the *reverse* has occurred in 2000-2020, with spending growth outpacing revenue growth. The result: a relatively faster rise in the national debt this century. The turn of the last century recorded four straight years (1998-2001) of budget surpluses. So much for fiscally "reckless" supply-side policies. The U.S has registered not a single surplus since 2001.

The near-phobic disdain for supply-side economics and neoliberalism this century is part of a new wave of anti-capitalist sentiment. We have seen this movie before. It is a horror film. The true friends of rationality, liberty, and prosperity should wake up, stand proudly, and contend boldly.

– May 25, 2021

War Of Words Over Inflation Stirs Questions for the Fed

JUDY SHELTONN
Contributor

The war of words unleashed on Wall Street and in Washington by Wednesday's announcement of an unexpectedly high rate of consumer price inflation is escalating by the day.

Legendary hedge fund manager Stanley Druckenmiller had warned on Tuesday in the *Wall Street Journal* that the Fed was enabling fiscal and market excesses by not standing up to the political whims of Congress; he stated on CNBC that the Fed's overly accommodative monetary policies posed a risk to the status of the United States dollar as a global reserve currency.

Refuting such concerns, Paul Krugman asks today in his column for the New York Times whether President Biden should scrap his entire economic agenda merely because the spike in consumer prices as reported by the Bureau of Labor Statistics was bigger than expected. "OK, I'm being a bit snarky here, but only a bit," Mr. Krugman concedes.

Snarky is hardly the word for the crass deprecations he offers in his concurrent newsletter, wherein he notes "a lot of buzz around how the Fed's wanton abuse of its power to create money will soon lead to runaway inflation." The Nobel laureate dismisses fears of monetary debasement as being anchored in neither fact nor logic but rather attributable to an "infestation of monetary cockroaches."

What seems to be missing in the debate over whether the inflation number itself is alarming as a bellwether — some were disconcerted when the Fed's vice chairman, Richard Clarida, admitted that it "surprised" him — is the larger question of government competence in steering the economy.

Does it make sense, for a nation founded on the notion of individual liberty, equality under the law, and personal property rights, to allow a government agency to manipulate the value of the currency used by its citizens? Would it be better to have a stable monetary foundation to facilitate free-market outcomes, rather than empower the Federal Reserve to distort interest rates and dilute dollars in the service of government policy?

It's not as if we haven't been here before. The question of whether rules-based monetary stability historically delivers better economic results in terms of increasing middle-class incomes than relying on the discretionary judgment of central bankers has been wholly analyzed and resolved.

In the 2015 Economic Report of the President issued under the Obama administration, a special section describes the period from 1948 to 1973 as the "Age of Shared Growth" — characterized by accelerating labor productivity, falling income inequality, and increased workforce participation.

The report makes little mention of the fact that this period of remarkable growth, which increased living standards across all income levels, coincided with the existence of the Bretton Woods international monetary system under which the U.S. dollar was convertible into gold at a fixed price.

The report does posit that if post-1973 productivity growth had continued at its pace from those previous 25 years, "incomes would have been 58% higher in 2013" and "the median household would have had an additional $30,000 in income."

All of which should give pause to those who belittle the uneasiness felt by conservatives who fear that compromising monetary integrity not only violates founding principles but also economic rationality. And it's not just conservatives per se,

but rather an increasingly larger segment of the population expressing concerns about the wisdom of government officials and the correctness of government policies.

The momentum behind the rise of cryptocurrencies is being fueled by populist aspirations to decentralize finance in the name of democracy — in radical defiance of central bank polices that are perceived as favoring big investors, big business, and big government.

Even as the Fed appears to be signaling its willingness to comply with a progressive agenda that would enlist our nation's central bank in efforts to focus on climate change or systematic racism, there is growing skepticism that the solution to such problems is to be found in Fed purchases of Treasury debt and government-backed mortgage securities.

In short, while economists and policy makers bicker about the implications of an inflation number that raised eyebrows for some, bile for others, and now has become a marker for questioning the infallibility of government management of the economy, most Americans are left wondering what it means for their own financial well-being and prospects.

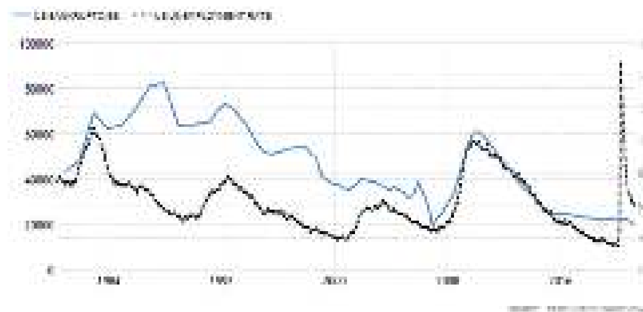
Some may even start questioning whether Fed officials' insistence that being "patient" about tolerating higher inflation "for some time" until there is "substantial progress toward our goals" provides meaningful forward guidance.

– May 15, 2021

Unemployment and Bankruptcies – Is This Time Different?

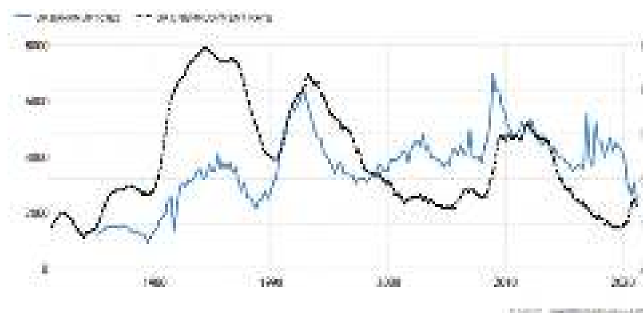
COLIN LLOYD
Contributor

During the Covid-related recession, which has been awash with *unprecedented* economic features, an unusual, but almost overlooked, situation has occurred; whilst unemployment has risen, bankruptcies, which normally follow or move in tandem with the path of unemployment, have actually fallen. The chart below looks at the pattern in the US: –



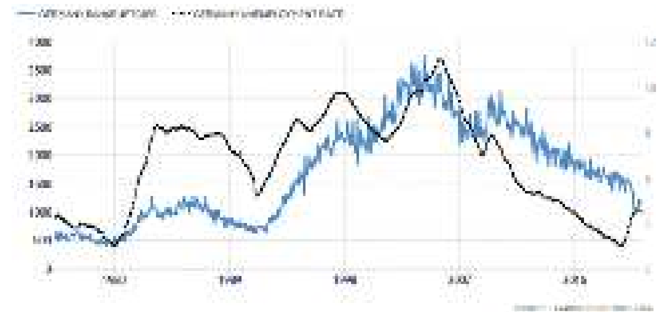
Source: Trading Economics

The US data is more pronounced but it is echoed in other countries. Here is the chart for the UK: –



Source: Trading Economics

The US and UK are examples of more open, Anglo-Saxon, economies with traditionally weaker trade unions and more flexible labour laws, but, as you can see below, a similar pattern is evident in Germany: –



Source: Trading Economics

Even Japan has shown some tendency to extend and pretend, although the recent data has been rather volatile: –

Source: Trading Economics

According to the International Labor Organisation, 8.8% of global working hours were lost in 2020 compared to Q4 2019. That is equivalent to 255mln full-time jobs, yet during the same traumatic period, corporate bankruptcy filings fell 21% across major industrial economies. The OECD reports that bankruptcy filings declined in 24 of 25 advanced economies.

Workers are frequently the first casualty of

recessions but, in more normal times, bankruptcies either occur in lockstep or quickly follow. This recession has been different in many ways, but the absolute decline in bankruptcies is not an indication of a reduction of financial distress; by April of last year 37% of US small businesses were temporarily or permanently closed. An ONS survey of UK businesses found 17% still shut in April 2021. Instead of filing for protection from their creditors, however, firms have chosen to downsize or close temporarily. Meanwhile, to support the efforts of enterprises large and small, many governments have, among other actions, imposed moratoria on bankruptcy filings. Seven countries; Australia, Belgium, Germany, Hungary, the Netherlands, Singapore and the UK, have even revised their bankruptcy laws. The legal changes have generally taken three forms: –

- Illiquid corporations have been granted greater authority to reach agreement with their creditors without court intervention
- Distressed companies have been given greater latitude to force restructuring agreements on every creditor provided the majority of creditors agree
- Suppliers have been prevented from stopping deliveries to distressed debtors as long as the debtor firm pays its suppliers in a timely manner – in several cases granting suppliers precedence over banks in restructuring negotiations

For an overview of the many other policies adopted in the wake of the pandemic, this paper from the **OECD – One year of SME and entrepreneurship policy responses to COVID-19: Lessons learned to "build back better"** is instructive. More information about the range of credit support programmes implemented within Europe's five largest economies can be found in this paper from **Bruegel – COVID-19 Credit Support Programs in Europe's Five Largest Economies** – it offers a wealth of detail. One line, in particular, suggests policies may change in future (emphasis mine): –

> *The severity of the GDP loss largely determined firms' demand for credit.* ***Low interest rates do not appear to have driven levels of lending*** *beyond what could be expected in response to GDP loss.*

Another aspect of the recent crisis, which has thrown unemployment and bankruptcies out of sync, is the speed with which jobs were lost, as companies were forced to close as a result of the lockdown restrictions. During the Great Financial Crisis (GFC) it took three years for US bankruptcies to rise from less than 20,000 in Q4 2006 to more than 60,000 in Q4, 2009. Meanwhile unemployment initially remained muted, not reaching its low of 4.9% until March 2008. Even once job losses started to rise, the cycle proved swift, peaking 19 months later at 10% in October 2009. During the GFC, rising bankruptcies were, in fact, a leading rather than a lagging indicator.

The economic recovery from the pandemic is likely to be protracted. Sufficient vaccination to achieve herd immunity will take time to administer and new variants of the virus will force governments to renew lockdown restrictions. Developed nations may fare better but the risks for developing countries remain high.

Zombie Apocalypse

Governments are acutely aware of the risk of removing financial support prematurely; several *temporary* fiscal packages are now expected to run well into 2022. In this environment bankruptcies may be postponed further still. Economists, however, are sharply divided as to the wisdom of these fiscal and monetary responses; is this really essential *life support*? Will it honestly allow time

for a productivity miracle to emerge? Or, have the zombie firms, propped up by cheap money for more than a decade since the GFC, simply been given yet another Chapter 11 reprieve?

In a recent publication – **Who's afraid of zombie firms? The Peterson Institute's Joseph E. Gagnon** – argues that: –

> *Zombies are a consequence of a weak economy, not a cause.*

The author quotes from Deutsche Bank research which estimates that nearly one fifth of publicly traded US companies are now zombies, compared to 10% as recently as 2013. He goes on to cite a 2008 *American Economic Review* paper – **Zombie Lending and Depressed Restructuring in Japan** – which found that: –

> *…the data show that destruction falls more in the sectors with more zombies.*

The *AER* paper advocated amendments to the bankruptcy laws in Japan to allow zombie firms to be liquidated more easily, lessening their drag on the growth potential of profitable companies within these industries. **Gagnon** argues, however, that Japan's two decades of anaemic growth refute the *AER*'s contention that an economy would normally operate at or near its potential and that macroeconomic policy acts forcefully to keep it that way.

> *When the economy is operating below potential and the forces returning it toward potential are absent or weak, the costs of killing zombie firms are huge. Killing a zombie immediately wipes out the income its workers have to spend on goods and services throughout the economy. This decline in spending drags GDP down by potentially more than 100 percent of what the zombie firm used to produce via a Keynesian multiplier effect.*

What Gagnon seems to forget is how the zombies achieved such preeminence. If interest rates had not been artificially lowered – which in Japan's case, was in order to stem the appreciation of its currency – and governments had not sought to protect favoured companies and industries, these firms would have exited the gene pool long ago, making way for new, innovative, efficient competitors. As for spending and the multiplier effect, an Austrian analysis would argue that in order for there to be spending, there must first be saving.

Gagnon ends by proposing: –

> *The right way to kill zombies is to push the economy above potential, raising wages and interest rates higher than zombies can afford to pay. In this environment, workers let go by zombies quickly move to more competitive firms, boosting productivity and growth for all.*

This sounds beguilingly simple, yet without savings there cannot be sustainable investment. Of course, governments can borrow and spend, but, without real wealth creation, will they acquire the taxes to repay that borrowing?

The most expedient solution to excessive government borrowing is to engender inflation. This may support workers' demands for higher wages, but it could also lead to higher unemployment or higher interest rates. Higher rates will make government debt servicing more costly, unless quantitative easing is employed to keep funding costs low, in which case the stability of the currency will be gradually undermined: there is no *get out of jail free card.*

In September 2020 the **BIS – Corporate zombies: Anatomy and life** cycle analysed 14 advanced economies, finding that, over the past

three decades, the number of zombie companies has risen from 4% (late 1980s) to 15% by 2017. The author's found that whilst 25% of zombie companies exited the market, 60% recovered from zombie status. However, recovered zombies underperformed compared to healthy firms and were more likely to relapse. The authors concluded: –

> *A firm's viability should be an important criterion for its eligibility for government and central bank support.*

Not all hope is lost; productivity gains may be achieved despite the dangerously procyclical policies of governments and their central banks. Innovation will continue to enhance the quality of life for citizens of many countries around the world.

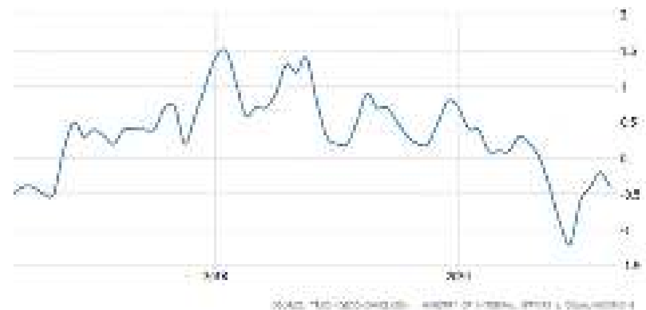
The Turbocharged Recovery

In the near term, economic data looks promising; this is partly due to the base effect of the sharp deterioration which occurred in Q2 and Q3 2020 and partly due to the *unprecedented* scale of the fiscal and monetary response. US Purchasing Managers Index (PMI) data, released last week, hit a record high of 61.5. Both Manufacturing and Services PMIs also beat forecasts, helped by the vaccine rollout.

US inflation was also raised, breaching 4%. Even the Eurozone managed inflation of 1.6% – high when compared to the deflation of H2 2020. Debate rages among the economic fraternity as to whether this recent price spike is transitory or structural; consensus is for the former. Regardless of the outcome, the Federal Reserve has made its position clear; their emphasis will be on ***outcomes rather than the outlook.***

Turning Japanese

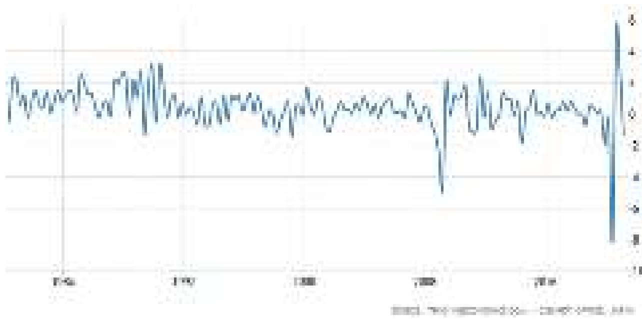
Japan, with its policy of Yield Curve Control (holding 10yr Japanese bond yields around zero) and Quantitative and Qualitative Easing (QQE – including the purchase of Japanese common stocks via ETFs) has been pursuing a policy of outcomes *rather than outlook* the longest. The chart of Japanese inflation below supports the argument for a *transitory inflationary blip*: –



Source: Trading Economics, Japanese Ministry of Internal Affairs

A study from 2019 found that 21% of small to medium-sized Japanese firms were zombies, notwithstanding twenty years of government policy to resuscitate them. Despite QQE and concerted fiscal largesse, the headwinds of an aging population, low levels of inward migration and a financial boom, fueled by an artificially weak exchange rate during the boom years, has forced Japan to endure two decades of relative stagnation. The economic problems of their overinvestment boom, fueled by artificially low interest rates, has not been solved but shifted, from the private to the public sector.

Interestingly, the **Federal Reserve Bank of San Francisco – Fiscal Multiplier at the Zero Bound: Evidence from Japan** – finds the stimulus effect of government spending to be significantly larger and much more persistent at the Zero Lower Bound (ZLB) – a state in which Japan has languished since 1995. They also find that, in a sustained ZLB environment, fiscal stimulus is especially effective during recessions. Yet this chart of Japanese GDP suggests that, since 1995, economic growth has remained anemic, despite the substantial fiscal stimulus: –



Source: Trading Economics, Japanese Cabinet Office

Unfortunately, policies adopted by many advanced economies, prior to and in the wake of the Covid pandemic, look remarkably similar to those adopted by Japan. If a cocktail of monetary and fiscal stimulus did not work for Japan, why should it work for others? Of course, the fastest way to reduce unemployment in the short run is to keep the zombies on life support, but what is not seen amidst the spectacular *apparent* recovery is the long-term damage to the productive growth of the real economy. Reversing fiscal and monetary policy is politically difficult for democratic nations. So long as inflation does not become structural, the Japanification of Europe and the US appears inevitable.

Is this time different?

The short answer is yes, but only insofar as the scale of the fiscal and monetary expansion has stopped, what would have been a catastrophic recession, from running its course. The recovery we are witnessing today is built on the crumbling foundations of the serial malinvestments which resulted from previous attempts to avoid the recessionary pain caused by the GFC. If structural inflation can be engendered, an escape from the worst ravages of overindebtedness may be nigh, but, until markets clear and zombies die, what economic growth there is will remain suboptimal.

– May 27, 2021

Will 2020 Prove to Be the Beginning of the End of Modernity?

DONALD J. BOUDREAUX
Senior Fellow

Daniel Hannan – Lord Hannan of Kingsclere – is today among Britain's wisest and most articulate champions of classical liberalism. He's also today very pessimistic about the future of liberalism. This pessimism is on full display in this recent video. Hannan predicts that the post-Covid-19 world "will be poorer, colder, grayer, more pitched, more authoritarian."

I ardently wish that I found his stated reasons for pessimism to be unpersuasive, but this wish is not granted. Hannan's pessimism, to me, seems warranted.

I urge you to watch the entire video. At under seven minutes, it's short. But I believe that my summary here of Hannan's point is accurate:

We humans are evolved to put our trust in hierarchy, for hierarchical methods of decision-making were quite effective at protecting the small tribe, as it roamed the countryside, from predators and privation. And our deep past was in fact fraught with dangers that, when not quickly avoided, killed us. In that long-ago era, anyone refusing to follow the leader's commands was indeed a threat to the survival of the tribe. As a result, fellow tribe members turned on renegades. 'Renegadeness' was thus largely drained from the gene pool and replaced with the instinct to conform, especially whenever there was a perception of danger, which there was quite often.

Confidence in hierarchy, hair-trigger alarm, and fear of strangers (who back then usually were sources of real danger) helped our ancestors to survive. And survive they did for 300,000 years, nearly all of which time was spent hunting and gathering in small tribes. But these genetically encoded instincts that are so useful to members of the always-imperiled tribe do not support a liberal, open society of the sort that arose in the West over the past few centuries.

We humans have been around for at least 300,000 years. Nearly all – 97 percent – of this time was spent as hunters-gatherers in a perilous world. Yet only in the past two or three centuries have we stumbled upon a set of beliefs and institutions that suppressed many of our primitive instincts in a way that encouraged the emergence of modernity. By historical standards, the world that we know today is freakishly abnormal.

And while the material blessings of modernity – the likes of indoor plumbing, endless supplies and varieties of food, dwellings with solid floors and roofs, artificial lighting, faster-than-galloping-horses transportation, and miracle medicines – are easily noticed, all of these blessings as we know them today require a deep and globe-spanning division of labor. This division of labor is more unlikely and (hence) more of a marvel than are any of its most stupendous fruits, such as antibiotics, airplanes, and astronauts.

Modernity is not normal; it has been around for a paltry 0.1 percent of humans' time on earth. And the reason modernity is not normal is that liberalism – the source of the division of labor and, thus, of modernity – is not normal. We humans are not genetically encoded to be liberal. Therefore, Hannan argues, there is every reason to expect that we humans will revert to our historical norm – the norm that is in our genes.

The reaction to Covid-19 is powerful evidence that our primitive instincts remain alive and ready to reestablish their dominance over the happy accident that is the culture, and resulting institutions, of

liberalism. The hysterical fear that Covid stirred in so many people – including in many who are highly educated, of a scientific mindset, and, until Covid, of a liberal bent – and the sheepishness with which people followed the "leaders" who promised protection from Covid prompts Dan Hannan to worry that 2020-2021 is the beginning of the end of modernity.

Chances are high that he's correct. And if he is, civilization as we know it will end.

Modernity Is Not Natural

My Hannan-like pessimism on this front is only furthered by reading Notre Dame philosopher James Otteson's remarkable new book, *Seven Deadly Economic Sins*. This must-read work is not about Covid; nor is Otteson himself especially pessimistic. But in his luminous explanation of some of the foundational features of modern society, Otteson identifies the thinness of the reed upon which modernity rests. His Chapter 4 ("Progress Is Not Inevitable") is worth quoting at length:

> *What has changed over humanity's recent history is not biology, psychology, physiology, ecology, or geography. What has changed, instead, is their attitudes. As economic historian Deirdre McCloskey has demonstrated in her magisterial three-volume investigation under the general title The Bourgeois Era, the most salient factor distinguishing the post-1800 era from anything that went before is the attitudes people held toward others. Before that period, the standard background assumption people had was that some people are superior to others – more specifically, one's own people are superior to those other people – and hence people believed they were under no obligation, moral or otherwise, to treat all human beings as their moral equals. What began as an inkling in the sixteenth century, gained some traction in the seventeenth century, and then began to spread in the eighteenth century was the idea that cooperation was not only allowable, but morally appropriate; and not only with some people, but with ever more people and ever more groups of people. As that idea spread, more and more cooperative behavior was engaged in, leading to mutually beneficial exchanges and partnerships, which launched world prosperity on the precipitate upward slope we have seen since.*
>
> *If people are to engage in voluntary transactions and partnerships with one another, however, they also need to trust one another….*
>
> *[C]ulture is critically important for growing prosperity, but culture can change – and quickly. The culture that enabled the growth in worldwide prosperity we have experienced over the last two centuries is not only recent but rare. And it is fragile…..*
>
> *People have gone from a default of regarding people different from them with suspicion and as likely enemies to a default of viewing them at least neutrally and even as opportunities. They have gone from viewing trade, commerce, and mutually voluntary and mutually beneficial exchange as unworthy of virtuous human beings, to viewing it neutrally, to, finally, viewing it as at least possibly worthy of dedicating one's life to. They have gone from viewing human beings as fungible atoms in undifferentiated masses to seeing them as unique and precious individuals possessing moral dignity and deserving both liberty and respect. They have gone from viewing violence and torture as acceptable, even natural, ways to treat and engage with others to believing that violence should be a regrettable last resort – and that torture is inhumane and should be*

minimized, if not abandoned altogether. And they have gone from automatically distrusting everyone they meet but do not know to increasingly being willing to extend to others, even strangers, the benefit of the doubt.

Modernity is impossible without widespread peaceful engagement with strangers. And such engagement is impossible without mutual trust. Yet abruptly starting 16 months ago, we were told to abandon our modern, liberal sensibilities.

Abruptly starting 16 months ago we were warned not to trust strangers and not to engage with them commercially or socially. Abruptly starting 16 months ago, we were instructed to see strangers – indeed, to see even members of our extended families – as being chiefly carriers of death. Abruptly starting 16 months ago, we were initiated into the cult of pathogen avoidance; we were urged to behave as if avoiding a headline-grabbing virus is not only the main responsibility of each individual, but a responsibility that should be pursued at all costs.

Abruptly starting 16 months ago, modern men and women were not only given license to revert to atavistic dread of strangers, but positively encouraged to harbor such dread and to act on it. Such atavistic attitudes and actions came all too naturally.

Abruptly starting 16 months ago, humanity was encouraged to hold in contempt – even to censor – the relative few persons who refused to abandon liberal sensibilities.

Abruptly starting 16 months ago, we prostrated our panicked selves before our "leaders," begging that they use their god-like knowledge and powers (called "the Science") to safeguard us from one particular source of illness, believed to be demonic.

Abruptly starting 16 months ago, there quite possibly began the end of liberal civilization.

– May 17, 2021

Lockdowns Need to Be Intellectually Discredited Once and For All

ETHAN YANG
Editorial Assistant

On May 19, 2021 the LA Times published a column that is representative of the basic arguments for endorsing lockdowns going forward titled "The evidence is clear — COVID lockdowns saved lives without harming economies."

The column proclaims in large italic font,

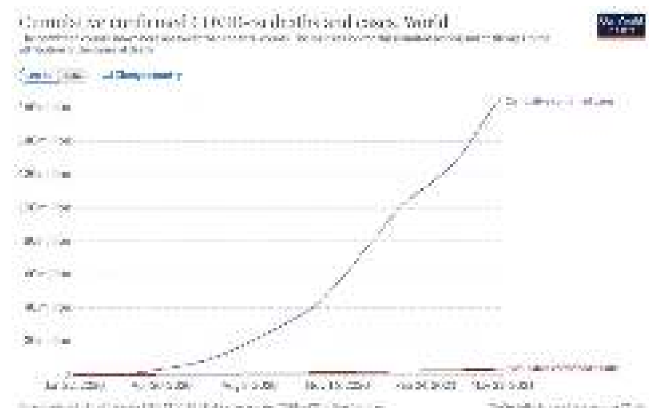
> "Lockdown should be considered as an effective public health intervention to halt epidemic progression."

The piece certainly puts forward a case that may be somewhat plausible on its face but after further investigation might be able to pass as scholarly malpractice. The column lays out two major points. The first being that lockdowns played an important role in reducing caseloads. The second point is that the economic damage of lockdowns was relatively inconsequential as the voluntary actions of individuals were largely responsible for the economic downturn.

These are not novel or fringe arguments but talking points that have been parroted throughout the pandemic. The column itself rightly notes that there has and will continue to be a heated debate about the efficacy of lockdown policies for the foreseeable future. Although Covid-19 lockdowns are behind us, the precedent has been set for lockdowns to be a new shiny tool to be used against future pandemics. This horrifying reality is exactly why lockdowns as an idea must not be forgotten. They must be thoroughly discredited, starting with this column.

Do Lockdowns Reduce Caseloads?

It should first be said that reducing deaths is a far more important objective than simply reducing cases, especially when it comes to a highly contagious but relatively mild disease like Covid-19 which only severely affects vulnerable populations. With this in mind, it seems that taking precautions to shield the vulnerable while allowing healthy individuals to live their lives with common sense would be a far better policy. Just look at this graph



However, let's bite and say that it's best that caseloads remain as low as possible if it is within our power to do so.

The column relies on a series of studies that demonstrate a correlation with lockdown policies such as stay-at-home orders and business closures with drops in the daily increase of cases. It asserts,

> "It makes sense, therefore to examine the evidence — or rather, gather ammunition for the coming debate.
>
> Numerous studies from across the world have found that lockdowns succeeded in suppressing transmission rates."

One of the first issues that arise is that studies the column uses to make its point are clearly

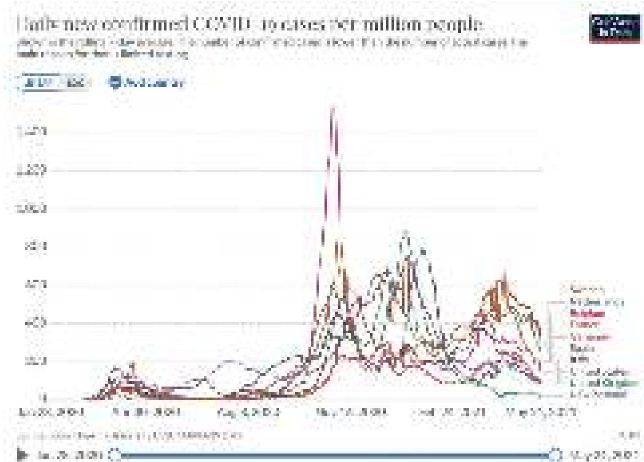
cherry-picked as they're not only dozens of studies saying the contrary, but clear methodological shortcomings. The first one is titled "The Efficacy of Lockdown Against COVID-19: A Cross-Country Panel Analysis." The study asserts that lockdowns were effective in reducing caseloads after running an average of the performance of 202 countries from January 10, 2020, to May 10, 2020. This study was one of the first attempts at piecing together empirical evidence at the very start of the pandemic, which should tell you all you need to know. The study even has a disclaimer that reads,

> "For these reasons, we highlight the importance of and need for further investigations on this topic, which may focus on more specific territorial or climatic subsamples, or on how governments have implemented lockdown policies."

Plugging in hundreds of countries without any regard to context whether it be timing, geographic location, or even the types of policies involved at what would be just the beginning of the pandemic is a quick way to start a conversation, but nothing further. We now know much more.

A similar issue comes up in the second study the author uses to prove his point. The study is titled "Is Lockdown Effective in Limiting SARS-CoV-2 Epidemic Progression?—a Cross-Country Comparative Evaluation Using Epidemiokinetic Tools." It's already off on the wrong foot as its timeline runs from February 23, 2020, to June 14, 2020. Furthermore, the study simply notes the initial fall in daily new cases in a number of countries that implemented lockdowns with Sweden and the United States as a comparison as a non-lockdown country and variable lockdown country respectively.

Again no consideration for context when it comes to timing, social behavior, or government policy. Furthermore, as we all know the pandemic and the use of lockdowns didn't end in the summer of 2020. Here is an expanded timeline with the countries included in the study alongside the addition of Belgium which I added as another example of a European country with strict lockdowns but a poor performance in mitigating Covid-19.



This brings us to the most important point regarding lockdown policies and what seems to be captured in these studies but not properly acknowledged, which is voluntary behavior to reduce the spread of Covid-19. The following data was pulled from a comprehensive analysis published by the *Heritage Foundation* that examined key statistics compiled throughout the pandemic.

As we can see, regardless of the implementation of stay-at-home orders, people voluntarily reduced their activity. States that implemented stay-at-home

orders and other lockdown policies clearly saw greater (and unnecessary) reductions in movement. However the reductions in movement are nearly identical during peak spikes in cases and deaths. In other words, people voluntarily practiced social measures in response to spikes in deaths and cases.

This is congruent with a study published by a team of Stanford researchers that compared 8 lockdown countries with two counterfactuals, South Korea and Sweden. The study found that there are certainly benefits to implementing policy interventions but the benefits of aggressive policies such as lockdowns compared to less intrusive policies undertaken by South Korea and Sweden are minimal. This is without factoring in the collateral damage and the fact that in some contexts, lockdown policies may actually increase caseloads because they force people to gather in private residences, which are often less well-ventilated and more cramped.

This brings us to what is hopefully an emerging consensus that lockdowns, for whatever isolated marginal benefits they provide, are essentially swinging a sledgehammer to kill a spider.

Are Lockdowns Safe for the Economy?

The second major point in the column, that lockdowns are not a major contributor to economic damage, may seem ridiculous at first glance but is actually a relatively common argument. Jack Nicastro and I co-wrote an article for AIER arguing against this assertion in detail here. Our main conclusion was that the past economic downturn was the largest recession in modern history. The one major thing that was different this time was lockdowns, which actively work against economic recovery. We quoted the *International Monetary Fund* by writing,

> "Under the assumption that the pandemic and required containment peaks in the second quarter for most countries in the world, and recedes in the second half of this year, in the April *World Economic Outlook* we project global growth in 2020 to fall to -3 percent. This is a downgrade of 6.3 percentage points from January 2020, a major revision over a very short period. This makes the Great Lockdown the worst recession since the Great Depression, and far worse than the Global Financial Crisis."

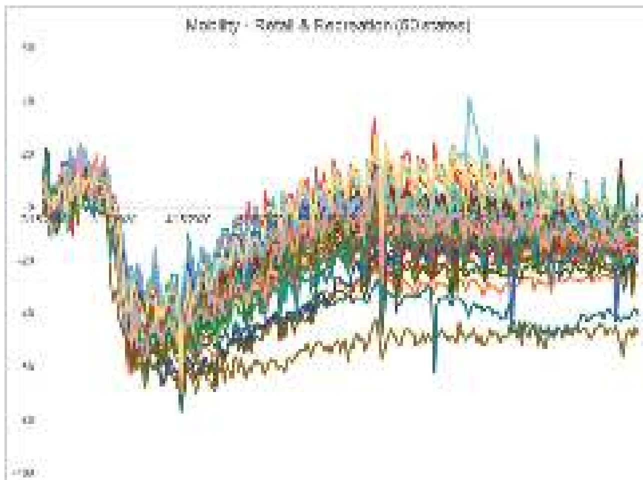
The main assertion that supports the idea that lockdowns are not responsible for the economic downturn is that voluntary behavior is largely the main causal factor in the recession. If you remember the mobility data I referenced previously to challenge the idea that lockdowns were necessary to contain the spread of Covid-19, you will have remembered that people voluntarily reduced activity.

In order to support its case the column cites a working paper published by *NBER* titled "Fear, Lockdown, and Diversion: Comparing Drivers of Pandemic Economic Decline 2020."

The paper notes that people voluntarily reacted to Covid-19 by reducing foot traffic before the lockdowns were implemented and did not increase significantly once lockdowns were lifted. This is congruent with the mobility data I referenced above. This would suggest that lockdowns had a minimal economic effect because people voluntarily stopped patronizing businesses. Of course, a closer look at the data reveals that some non-lockdown states had foot traffic return to normal as the summer came.

The problem with this particular study is of course its timeline, which only measures data from March 1 – May 16. This is when fear and uncertainty about the virus were at an all-time high, which is why voluntary reductions in foot traffic were also high with or without lockdowns. If the timeline is expanded, voluntary behavior and state-mandated behavior begin to diverge, only reaching parity

during spikes in deaths and transmission. We can see this divergence after May 16 when many states lifted their stay-at-home orders and saw increases in mobility. During major spikes in transmission and deaths, people voluntarily reduced mobility to parity with states that issued lockdowns. This is most observable during the past Winter season.



To further demonstrate the negative economic consequences of lockdowns, a working paper published by *NBER* in January of 2021 examines the effect of California's nonessential business closures on sales data up to Q2 of 2020. The paper notes

> "The results suggest that local implementation and enforcement of lockdown restrictions and voluntary behavioral responses as reactions to the perceived local COVID-19 spread both played a role, but enforcement of mandatory restrictions may have had a larger impact on sales losses."

Furthermore, Covid-19 is a less deadly disease than the 1957-1958 Asian Flu and especially the 1918 Spanish Flu which like all pandemics were handled without lockdowns. The late and great doctor Donald Henderson and colleagues published a paper on the US response to the Asian Flu which notes,

> "Despite the large numbers of cases, the 1957 outbreak did not appear to have a significant impact on the U.S. economy."

An article published by two economists in *VOX-EU*, a policy portal of the Centre for Policy Research, notes that during the 1918 Spanish Flu the economy actually grew slightly. This was of course due to World War I and forced labor for the war effort but they ultimately conclude,

> "What lessons can we glean from the 1918 pandemic for today? Obviously, we are not advocating for another war, or that workers be encouraged to work in unsafe conditions that may heighten their exposure to the virus. But it is useful to remember that a global pandemic doesn't inevitably lead to a grave economic recession or depression. More specifically, a large expansion in government demand can go a long way in softening the economic impact of a crisis that clearly threatens to reduce consumption and private investment."

So perhaps the government can help by providing financial aid to struggling businesses and families to soften the blow of a pandemic. Government after all does know how to cut checks. However, there is absolutely no reason to believe that the government can shut down the entire economy without catastrophic consequences. The Covid-19 pandemic is associated with the worst economic downturn in modern history, worse than the Spanish Flu and the initial stages of the Great Depression. It shouldn't be that difficult to see that lockdowns were responsible for that.

Key Takeaways

This has essentially been a very long-winded way

of saying what AIER has been saying since day one. Lockdowns do not provide any meaningful benefit and they cause unnecessary collateral damage. Voluntary actions and light-handed accommodations to protect the vulnerable according to comprehensive analysis, not cherry-picked studies with overly short timelines, provide similar, if not better, virus mitigation compared to lockdown policies. Furthermore, contrary to what many keep trying to say, it is lockdowns that are the causal factor behind the unprecedented economic and social damage that has been dealt to society. On top of that, we haven't even addressed the role of inflammatory and counterproductive messaging to sow unnecessary fear into American society. Of course, that's a topic for another day.

Humans for our entire existence have lived alongside diseases. Society has become increasingly healthier through improvements in living standards and advancements in technology. Unilaterally and arbitrarily shutting down all of economic and social life was never part of the solution, nor should it ever be. Covid-19 has been the first test for these experimental lockdown policies and no rational observer should look back at the results and conclude that this is all worth trying again.

– May 26, 2021

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