

# **Tackling Fossilflation**

A toolkit for price stability and a just transition

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## Contents

Executive summary	5
Structure of report	6
Conclusions	8
Recommendations	9
Introduction	11
1. Fossilflation and the Cost of Climate Breakdown	14
1.1. Fossilflation: fossil fuels as drivers of inflation	14
1.2. Climate breakdown as a driver of inflation	19
2. Resisting Shock Therapy	25
2.1. Friedman and Volcker's destructive legacy	25
2.2. There is an alternative	32
3. Price Stability for a Just Transition	42
3.1. Targeted price controls, expanded healthcare, and antitrust reform	46
3.2. Free public transportation, support for farmworkers, and a savings strategy	48
3.3. Fiscal policy as part of a full employment and price stability agenda	48
3.4. A new green monetary policy framework	52
Conclusion	57
Bibliography	

## **List of Figures**

Figure 1:	12-month percentage change, Consumer Price Index, selected categories, October 2022, not seasonally adjusted.	17
Figure 2:	Climate Risks, extreme events, and related impacts.	20
Figure 3:	Climate Change: the impact on humanity. Highlights of a landmark Intergovernmental Panel on Climate Change (IPCC) draft report on the effects of a warming planet on people 2021.	21
Figure 4:	Future warming pathways.	22
Figure 5:	Annual carbon dioxide emissions.	23
Figure 6:	Unemployment rates, by race, and Hispanic or Latino ethnicity, 1975-2010.	29
Figure 7:	Official vs supplemental poverty rates, 1976-2012.	30
Figure 8:	Rapid ramp-up in U.S. support. Cumulative U.S. pandemic relief, \$ trillions.	32
Figure 9:	Monthly poverty rates, U.S.	33
Figure 10:	Share of adults expressing that they have difficulty covering expenses, are not caught up on rent, and do not have enough to eat.	34
Figure 11:	Share of adults saying that their household sometimes or often did not have enough to eat in the last 7 days, October 2021.	35
Figure 12:	Share of adult renters saying their household is not caught up on rent, October 2021.	35
Figure 13:	Demand-driven contribution to inflation, percentage points.	37
Figure 14:	Supply-driven contribution to inflation, percentage points.	37
Figure 15:	Consumer Price Inflation, annualized percentage change.	38
Figure 16:	Share of workers with negative real wage growth rises rapidly post COVID-19.	40
Figure 17:	The C-suite significantly underestimates how much employees are struggling with their well-being.	40
Figure 18:	Electricity prices are less volatile than gasoline and utility gas.	43
Figure 19:	Electricity has a lower average inflation rate and smaller variation in prices than gasoline and utility gas.	44

## **Executive summary**

Climate change remains one the most pressing threats to humanity's safety and future existence. The scientific community has laid out a pathway for avoiding devastating consequences to planetary ecosystems and human civilization but it has yet to be taken up by the world's most powerful nations and biggest polluters. The window of time available for the necessary reductions in carbon emissions and environmental breakdown is guickly running out, yet in the United States, climate change is not the most influential political issue at the moment. Nonetheless, it is still possible and critically important to mitigate the most destructive of outcomes through a fundamental transformation of our energy systems and corresponding economic institutions.

After two years of pandemic-related public health crises and economic shocks, concern over inflation has come to dominate U.S. media headlines and political discourse. Several 2022 midterm election polls indicate the economy and price increases as the top priority on the public agenda. In response, many influential mainstream economists and political pundits have identified inflation as predominantly a problem of too high consumer demand and income, with conservatives emphasizing a supposed excess money supply or "money printing" from government responses to the pandemic, specifically the American Rescue Plan's fiscal stimulus.

Slowing down the economy with interest rate hikes is now underway and remains part of policy common sense. Consequently, U.S. inflation discourse has largely relegated the prospect of a full green energy transition to at best a compromised secondary concern to be dealt with more thoroughly at a later time. At worst, there are mounting political pressures framing a green agenda as actively obstructing the bigger priority of less government spending and more private fossil fuel production, thus placing the full scale of necessary climate action deeply in jeopardy.

This report rejects the narrative that post-pandemic inflation in the United States is mainly a problem of too much demand and public spending. Inflationary pressures are instead found in the structure of global supply chains and labor forces vulnerable to shocks, profiteering, and geopolitical conflict that are primarily driven by and dependent on the fossil fuel industry itself. The concept of "fossilflation" is used to empirically and theoretically identify and explain these interconnected relationships as part of a broader political problem for policymakers and democratic debate.

By doing so, this report demonstrates the inadequacy of conventional analyses that rely on interest rate hikes and fiscal austerity to manage inflation, and highlights their inability to effectively address the problem of price stability without significant social and environmental consequences. By rethinking inflation and debunking the many pernicious myths that have historically legitimized a natural state of socio-political scarcity, systemic abandonment and injustice, an alternative policy toolkit is proposed in the form of regulatory reforms as well as new approaches to fiscal and monetary policy. These shifts make ecological sustainability and climate justice a central aspect of securing both price stability and inclusive social well-being at present and into the future.

### **Structure of report**

**Part 1** lays out the current political and policy context around climate change and the impact of inflation in the United States noting that:

- 1. The U.S. remains far from the necessary changes needed to get on the path towards meeting climate goals.
- 2. Households are now spending more each month for goods and services than they were last year, including for many essentials that more heavily affect vulnerable and low income communities.

Price movements are traced as contingent on a series of events beginning with steep drops through the pandemic lockdowns followed by the appearance of inflation associated with economic reopenings that featured disrupted supply chains, unanticipated changes in consumer spending, a weakened labor force from the impact of COVID-19 variants, and the geopolitics of Russia's invasion of Ukraine. The disproportionately high spike in the Consumer Price Index for energy in relation to other areas demonstrates the powerful direct and indirect role of the fossil fuel industry and its externalities in driving inflationary pressures, or "fossilflation".

The report goes on to discuss the disruptive impact, current and future, of environmental breakdown, focusing primarily on climate change. The dangers of various planetary warming scenarios are considered in terms of the severity of consequences for human life and biodiversity, and the associated "costs" for complex modern economies that ripple across sectors.

Part 2 examines 1970s inflation and the consequential "Volcker shock" where interest rates, austerity, and "sound money" ideology proceeded to erode much of the New Deal's legacy in addition to foregrounding the intellectual foundations for fiscal and monetary policy thereafter. Contemporary ongoing decisions by the Federal Reserve and commentary in the media suggest a deep attachment to Volcker shock reasoning as a major guide to combating inflation. In contrast, this report finds interest rate hikes to be an inappropriate inflation mitigation and response policy, incapable of adequately securing price stability. Rather, they have long served as a political tool to legitimize social deprivation through the historic weakening of wages and unions as well as the use of unemployment as a disciplinary mechanism that has naturalized poverty and underinvestment, particularly for historically marginalized communities. An alternative explanation for the 1970s emphasizes the role of energy and the fossil fuel economy as well as speculative private finance and deregulation. Such factors were just as responsible for economic failure then as they are today.

The claim that the American Rescue Plan's fiscal stimulus is primarily responsible for today's postpandemic inflation is deeply flawed. While the American Rescue Plan provided crucial support to communities in crisis during the pandemic outbreak and subsequent lockdowns, successfully reducing poverty for a time, many Americans nonetheless remain economically insecure with incomes that have not kept up with the cost of living. This has occurred within a context of record corporate profits across supply chains, in oil, food, shipping, and more after decades of corporate consolidations and just-in-time logistics that have cultivated a vulnerable and precarious labor force and public infrastructure. Market power induced profit-spirals and a corporate friendly regulatory environment are therefore presented in this report as major contributors to inflation alongside pandemic shocks, and the resulting oil price increases from the war in Ukraine. A superior theory of inflation is thus put forward as a normative politics of resource coordination and cost administration within environmental and social contexts and constraints.

Part 3 elaborates on an inflation toolkit for a just transition first by looking at the benefits and compromises of the Inflation Reduction Act, mainly its green energy investments and lowering of healthcare costs. The report explores the qualitative dimensions of renewable energy that give them a higher level of cost effectiveness, as well as a resilience to price volatility and geopolitical conflict. The role of expanding public healthcare coverage and negotiating prescription drug prices with an ideal of a Medicare for All healthcare policy is emphasized as deflationary. A number of other policy alternatives for bringing down costs at present are proposed, including targeted price controls and regulations that discourage monopolistic price gouging.

Additionally, this section articulates a long term strategy for price as a rethinking of fiscal and monetary policy towards a new green industrial policy. It is a mistake to place the entirety of responsibility for price stability on the Federal Reserve's management of interest rates. We look instead to a shared responsibility that brings back the importance of proper fiscal policy and true full employment. This is accomplished by rethinking how Federal budgets are evaluated through a functional finance approach that replaces budget constraints with inflation constraints based on resource as well as business and industry specific analyses that reflect productive capacity and actual economy-wide space to absorb spending. The report also proposes a shift in thinking about taxation as a regulatory tool for combating excessive wealth accumulation and anti-democratic forces, social and environmentally harmful practices, and in some cases, a reduction of consumer demand as opposed to a "pay-for" source of revenue. Key green investments in housing, healthcare, education, transportation, and energy under an appropriate resource-based inflation constraint accurately depict our actual potential for building a more resilient economy that ensures a commitment to maintaining the planet within the bounds of acceptable warming. We also look to automatic stabilizers and a federal job guarantee as vital components of a full employment and price stability agenda. In light of involuntary unemployment's brutal obsolescence, we consider a living-wage based job guarantee to be a superior price anchor.

Lastly, this report reimagines the future of monetary policy as shifting from the destructive and blunt ineffective interest rate approach to one of qualitative and quantitative credit regulation. This missionoriented approach acknowledges the role that the for-profit financial sector plays in money creation. Instead, it offers the Federal Reserve discretionary tools that set standards on an inflation target through consumer credit and indebtedness, the quality of borrowers, the quality of sector, and the quality of activities, as well as the quantity of dollar values extended by the banking system with the normative reality of a climate emergency taken into account. The concept of non-fiscal "pay-fors" is introduced as a matter of productive capacity and the availability of resources that better credit regulation can expand for the purposes of prioritizing full employment and price-stability for a green economy. A short term and long term approach is offered applicable to the Build Back Better and Green New Deal agendas respectively. The report closes by discussing some institutional reforms and innovations required for the most effective of outcomes.

#### Conclusions

- 1. The fossil fuel industry has a driving role in reproducing volatile prices that are vulnerable to shocks within an inequitable global economy, while obstructing a green transition — a process represented by the term "fossilflation".
- 2. Failing to meet urgent climate goals that keep warming below 1.5°C will worsen inflation throughout the rest of the century.
- 3. The American Rescue Plan's fiscal stimulus is not the primary driver of inflationary cost increases.
- 4. Conventional inflation explanations consist of veiled ideological assumptions and myths that obscure market power, legitimize poverty, and offer no solutions to climate breakdown.
- 5. Interest rate hikes do not reliably manage inflation and instead cause social harm.
- 6. A just transition to a renewable energy economy that centers quality of life and meets social and environmental needs within the IPCC planetary warming limits and time frame will transformatively improve price stability and economic resilience.

#### Recommendations

- 1. Provide immediate cost relief by using targeted price controls, expanding healthcare, and moving towards antitrust reform.
  - Targeted price controls would manage the impact of costs and mitigate profit-spirals and price gouging while securing time and stability to strengthen economic and ecological resilience.
  - · Antitrust reform would address the state of price-setting and market power with the intent of reevaluating consolidations and mergers.
  - Passing the Protecting the Right to Organize Act would strengthen a depleted labor force with the bargaining power to protect the public from price gouging.
- 2. Strengthen essential goods and services sectors with free public transportation, support for farmworkers, and a savings strategy.
  - Sectors most impacted by bottlenecks and high energy prices such as new cars and gasoline would benefit from incentivizing quality public transportation for trains, buses, and subways with Federal support for local costs and improvements.
  - Passing the Farm Workforce Modernization Act would upgrade food production, allow for the hiring of temporary workers year-round, and continue investment in regenerative agriculture and training.
  - A savings strategy through public communications and government bond issuance would help to mitigate impacted goods and services sectors by delaying consumption without the destructive and blunt consequences of raising interest rates.
- 3. Leverage fiscal policy as part of a full employment and price stability agenda.
  - By reorienting the Congressional Budget Office, Office of Management and Budget, Congressional Research Service, the National Economic Council and other key agencies from a strict nominal budget constraint towards an inflation constraint, fiscal policy could better pursue price stability through targeted spending, decarbonization, automatic stabilizers, and true full employment.
  - Expanded public investments in housing retrofits, healthcare coverage, energy efficiency, research and development, regenerative agriculture and renewable energy would strengthen social and ecological infrastructure and bring about lower costs through agendas like Build Back Better, Medicare for All, a Federal Job Guarantee, or a Green New Deal.
  - The Congressional Budget Office, Office of Management and Budget, Congressional Research Service, and the National Economic Council among others should produce detailed reports and forecasts on the state of the economy and communities relative to spending proposals, highlighting infrastructural vulnerabilities, mounting bottlenecks and order backlogs, weather impacts, availability of labor and employment conditions, public health concerns and technical gaps and requirements.

- 4. Implement a new green monetary policy framework.
  - · Replace interest rate tinkering with mission-oriented qualitative and quantitative credit regulations that shift resource use away from unsustainable or predatory applications and overindebtedness towards an inflation target with explicit objectives in line with IPCC climate goals.
  - Introduce reform of federal chartering for non-financial and foreign corporations with stipulations on compliance with credit regulations as well as liquidity, reserve, and climate-calibrated capital requirements.
  - Implement a green lending scheme to accelerate the energy transition and complement the core of fiscal responses.
  - Introduce an Inter-Agency Council on Price Stability to share responsibility and strengthen coordination and communication across government and improve the public sector's administrative capacity.

## Introduction

As Summer 2022 and its record breaking heat waves came to an end, media images and stories of fallout from rain storms in Bangladesh, where over 70 million people now live in flood prone areas, have brought attention to the urgent reality that the climate crisis is here and only getting worse (Rahman, 2022). In the United States, concerns are increasing over prolonged droughts, the ability of energy systems in States like California and Texas to withstand extreme heat and cold, and an uncertain future for water security (UNEP, 2022). Further, within a span of 10 days, Hurricanes Fiona and Ian ravaged Puerto Rico and Florida resulting in dozens of fatalities and leaving millions without power (Donegan, 2022).

Earlier that year the United Nations' Intergovernmental Panel on Climate Change (IPCC) released the third part of its 6th assessment report (IPCC, 2022) demonstrating that greenhouse emissions continue to rise and current plans are simply not enough to limit warming to 1.5°C and even 2°C above pre-industrial levels, which would be necessary to avoid greater catastrophic outcomes. Some in the scientific community have argued that these results have been largely ignored and watered down by the media and general public. In fact, findings from the latest UN Emissions Gap Report (UNEP, 2022) indicate that the world remains painfully distant from meeting these goals. Instead, the world is moving towards a 2.8°C increase with current pledges only reducing warming to 2.4°C by the end of the century. Only a few nations have the policies in place to even meet these less than inspiring targets.

Yet in the United States, passage of the biggest climate investment in its history does not even mention climate change or the environment by name. President Biden's signing of the Inflation Reduction Act (IRA) was touted as a monumental step forward towards the objective of bringing down emissions and building out a more sustainable economy. But as the legislation's name suggests, it is actually inflation that has dominated public discourse and political priorities. Last June, the Department of Labor reported that the Consumer Price Index (CPI), a proxy for what consumers pay for goods and services, was at a 40 year high of 9.1%, measured against the same month last year. August numbers remained high at 8.3% and were followed by a slight drop to 7.7% by October (Bureau of Labor Statistics [BLS], 2022a).

These price increases have been felt most viscerally and disproportionately by low income households and the most vulnerable through increases in their cost of living at the grocery store, at the gas pump, in the cost of their housing, and household goods such as appliances, cars, and more. According to Moody's Analytics economist Ryan Sweet (Barrabi and Lungariello, 2022), on average households are spending \$460 more each month for goods and services than they were last year.

The response thus far led by Federal Reserve Chair Jerome Powell, who was appointed by President Trump and then re-appointed by President Biden, consists of raising interest rates to make borrowing and credit more expensive with the objective of "cooling down the economy", reducing consumer demand, and loosening the labor market (Paul, 2022). In other words, the goal of this conventional monetary policy approach is to slow down the economy by raising unemployment and lowering wages to what are perceived to be acceptable or tolerable levels. The more conservative perspectives recommend accompanying monetary tightening vis-à-vis interest rate hikes with contracted fiscal conditions through reductions in public deficits and the implementation of austerity (Varadarajan, 2022).

In anticipation of the midterm elections, the Republican party rallied around talking points that blamed inflation on irresponsible and excessive spending or "money printing" from Democrats and in particular President Biden's American Rescue Plan (ARP) (Subramaniam, 2021). This position overlaps with the thinking of Democratic Senator Joe Manchin who was instrumental in defeating the Build Back Better agenda and curtailing the green and progressive ambitions of the IRA based on fiscal concerns (Klein, 2021; Snell, 2022). The importance of energy independence or the "drill baby drill" narrative has been revitalized due to rising energy costs and oil and gas prices. Some have even gone on to accuse efforts to expand renewable energy sources of causing inflation or "greenflation" through "climate mania" by constraining fossil fuel supply (Arnold, 2022; Freeman, 2021).

In contrast, progressive and heterodox economists and policymakers reject this framework and instead support approaches focused on identifying inflation sources that most impact working and low income communities, strengthening supply chains, regulating price-setting, and most importantly, ramping up investment in renewable energy and green public infrastructure (Mason and Melodia, 2021; Bernal, 2021; Weisenthal and Alloway, 2022). The IRA was passed by the administration and democrats in congress as a complementary response to interest rate based monetary policy (Yamouth, 2021). But ultimately it contains a mix of perspectives and objectives that are at times outright politically contradictory. For example, the IRA lowers the cost of healthcare and pharmaceuticals but also depends on restrictive "pay-for" budget reasoning and conservative deficit reductions. It also invests in clean energy but contains provisions that commit to fossil fuel expansions. These compromises have led many in the environmental justice (EJ) movement to point out that frontline communities and those most vulnerable to environmental racism and injustices will continue to face an all too familiar burden and sacrifice (Stewart et al., 2022; Sirna et al., 2022; Hersher, 2022).

Nevertheless, many affirm that the IRA is a vital and historic step forward for inflation reduction and climate action, including environmental groups like the Sunrise Movement (Propp, 2022) and economists like Lindsay Owens (Groundwork Collaborative, 2022), former Economic Policy Advisor to Senator Elizabeth Warren. Ambivalence over the IRA has resulted in headlines such as from In These Times (2022) stating, "After President Biden's signing of a "historic" climate bill, environmental organizers have plenty of work ahead to undo the IRA's worst provisions while keeping fossil fuels in the ground". What is therefore clear is that how one understands and explains inflation determines whether or not solutions will slow down, obstruct, or even threaten to derail the prospect of a successful green and just transition.

With this context in mind, this report provides an analysis of the relationship between the fossil fuel industry and inflation, which we refer to as "fossilflation", in addition to outlining the logic and importance of appropriate policy responses and the transformational reforms these insights make possible. Although an international lens is essential, we will focus on the case of the United States. Specifically, the report looks at how fossil fuels are driving both climate and price instability in the U.S. and how the shocks of ongoing environmental breakdown exacerbate inflation vulnerability directly and indirectly. The report offers a comprehensive review of the evidence and theory that dispels the many prevalent myths and consequences behind conventional reasoning and policy recommendations. Once the socio-political and economic dangers of mistaken yet dominant solutions are examined, an inflation toolkit is proposed based on a just energy transition, including requirements and innovations for a macroeconomic vision and necessary institutions. In essence, this report offers a toolkit to overcome fossilflation and its consequences.

### 1. Fossilflation and the Cost of Climate Breakdown

#### 1.1. Fossilflation: fossil fuels as drivers of inflation

To best understand the fossil fuel industry's link to inflation, it is helpful to map out how post-pandemic price increases were triggered, where they are in the economy, and what inflation is. As explained by the Roosevelt Institute (Mason and Melodia, 2021), inflation provides a useful summary of the general trend of prices. What we call "headline" inflation represents an average of price changes over a given amount of time for a basket of goods and services such as those included in the Consumer Price Inflation (CPI) or the Personal Consumption Expenditures Price Index (PCE). In the United States, inflation is measured by the Bureau of Labor Statistics and the Bureau of Economic Analysis (BEA) collected through price data from consumers and businesses. Some analysts and economists are critical of reliance on CPI and CEP as a measure of a currency's "value" over time given qualitative changes in technology and goods and services that are difficult to quantify. For example, our Iphones have more technological sophistication than much of what NASA did in the 1960s (Wray, 2016, pp. 248-250). In this sense, CPI and similar measurements are more of an art than a science as we attempt to place prices on things that did not exist in the past and account for qualitative aspects of safety, comfort, health, wellbeing, and ecological sustainability.

Moderate levels of inflation consistent with rising wages and productive capacity are understood as a sign of economic development and protection against depressions or deflation, which was common during gold standard dominance. John Maynard Keynes for example believed that moderate inflation helped encourage investment by increasing nominal returns and making it easier to service debt (Wray, 2016, p. 252). Inflation becomes problematic and dangerous, however, when the rate of price increases accelerates and becomes persistent across the board. It becomes a problem when inflation outpaces wages and elevates cost of living for working class and low income communities to levels indicative of economic hardship. This is not to be confused with hyperinflation, commonly defined as inflation increases of more than 50% in one month (Kenton, 2019) and prices spiral such that the value of a currency completely collapses. But as Law Professor Rohan Grey (Real Progressives In Action, 2017) and others explain (Montier, 2013), there has never been a case of hyperinflation in a democracy with a floating non-convertible exchange rate, a point even inflation hawks like the CATO Institute (Hanke and Krus, 2022) implicitly admit to.

The story of today's inflation begins with the event that shocked the world almost three years ago. In the decades leading up to 2020, US inflation remained low, typically averaging under the Federal Open Market Committee's (FOMC) target of 2% year over year in PCE (BLS, 2022b). But once a deadly pandemic emerged and rapidly spread across the world, a major public health crisis ensued and was followed by a massive economic shock. To avoid the likelihood of even greater mortality and debilitation than has been experienced over the last two years, governments around the world enforced lockdowns and quarantines. Mass layoffs and economic contractions were necessarily met by emergency fiscal stimulus in response to what Nathan Tankus (2020) dubbed "the three concurrent crises of the Coronavirus Depression": a "Keynes" crisis of falling demand and employment; a "Minsky" financial crisis of payments from dried up cash flow, and a "Means" crisis of needed resource re-allocation towards public health infrastructure.

Between February and May of 2020, many prices for goods and services dropped, some steeply. The annual rise in prices in part looks so dramatic because of this initial drop. For example, CPI in May 2020 for energy fell to -18.9% and all items less food and energy were at a low of 1.2% (BLS, 2020c) As the Roosevelt Institute (2021, p. 8) notes, over half of today's inflation reflects depressed prices from a year ago. And almost all the causes of high inflation throughout 2021 were directly linked to the pandemic.

Whether or not the various national responses were successful or even fully understood the scope of the problem is debatable. For instance, some in the U.S. advocated for a far more robust and justicebased approach, such as through the Automatic Boost to Community Act (Brett, 2020). Nevertheless, a combination of lockdowns, abrupt shifts in consumption patterns, inequitable and uneven vaccine and gear (such as masks and PPE) distributions and usage, and chaotic economic reopenings reactivating businesses, deeply destabilized global supply chains. A lack of preparation, effective planning, and a weakened and at-risk labor force brought about a cascade of industry bottlenecks, shortages, shipping delays, and dysfunctional warehouse processing and ports. The resulting increases in costs went on to impact the price of goods like cars and apparel, which have been falling since their peak in February 2022, and services, which were on a steady rise up until October 2022. Other indirect impacts of supply chain disruptions on goods and services included shortages of shipping containers for the transportation of cargo, semiconductors for computers, cars and autoparts, aluminum, and lumber, which quadrupled in price over a year's time affecting wholesale prices for plywood, home improvements and renovations (BLS, 2022d; Goodman and Chokshi, 2021; Tong, 2021; McDaniel, 2022).

In February 2022, Russia invaded Ukraine and the West responded by implementing an embargo on oil imports to disrupt their economy and war effort. As it turned out, cutting off Russian oil exports would have an even greater impact on an integrated global energy system dependent on fossil fuels. Last year, 8% of oil imports to the United States came from Russia. As one of the major oil producers in the world, the war caused a major supply shock with reverberating effects. Crude oil rapidly moved from the very low 2020 pandemic lockdowns levels of -\$37.63 per barrel to its peak in March 2022 of \$119.65. The CPI 12-month percentage change for gasoline prices peaked in June at 60%. That month, some U.S. cities saw gas prices reach \$5 a gallon (Gaffen, 2022; Egan, 2022).

President Biden (2022) addressed the nation in April stating, "Putin's invasion of Ukraine has driven up gas prices and food prices all over the world". These energy supply disruptions have brought into focus the interwoven relationship of fossil fuels with the rest of the economy. Beginning with vital food systems. Russia and Ukraine together account for almost 30% of wheat exports, which were essentially cut off from the rest of the world (Aizenman, 2022). Additionally, the International Energy Agency (2022) reports that there are critical indirect spillover effects through the costs of inputs such as fertilizers, agrochemicals, fuel, and the necessary energy required in electricity for water irrigation, farm machinery and various stages of food processing, packaging, transportation and distribution. Pesticides and fertilizers are large quantity consumers of indirect energy as they are highly energy intensive to manufacture and inevitably translate into higher production costs and thus higher food prices.

By October 2022, the Organization of the Petroleum Exporting Countries (OPEC) announced it would sharply cut production by 2 million barrels per day (Lenthang and Wile, 2022). This put a major strain on relations between the U.S. and Saudi Arabia in which both sides have threatened the other with consequences that could further exacerbate tensions that could lead to higher economic costs and uncertainty.

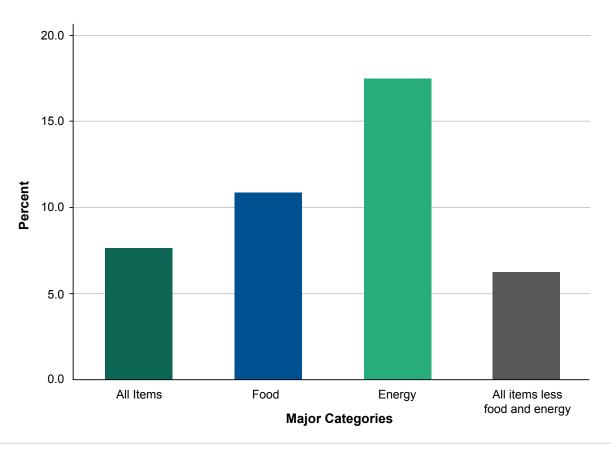
A report from Rewiring America (Calish et al., 2021) found that over the last 20 years, families in the U.S. have seen a 75% rise in what they pay for gas. Prices for heating homes have fluctuated by 50% over the last 20 years with a price increase of 99%. For families living at the margins from paycheck to paycheck, these fluctuations can be brutal. As an example, in February of 2021, the state of Texas' power plants failed to perform under extreme cold putting pressure on the rest of the power grid. This resulted in the Electric Reliability Council of Texas (ERCOT), the entity that operates the state's power grid, ordering a massive reduction in power demand, which cut power to parts of the natural gas supply chain. The fallout from the crisis saw mass power outages, food and water shortages, infrastructure breakdowns, and major environmental health concerns leading to 246 deaths.

Some customers who were able to retain power based on wholesale pricing plans faced bills of up to \$5000 for a few days of service during the freeze. The governor of Texas initially blamed the crisis on wind turbines and solar panels (Svitek, 2022; Halkias, 2021). Since then, Texas faced skyrocketing home and energy bills, up to 70% higher in some cases, as the state's electricity cost is tied to natural gas, where prices have shot up more than 200% since Russia's invasion of Ukraine. Billions were made by Texas energy firms during 2021's freeze and since the state began to increase its export of natural gas supporting Europe's efforts to wean off Russian gas (Ferman, 2022).

Inflation spikes in the United States are multi-dimensional. They includes food at home, which peaked at 13.5% year over year in August 2022. October's 12-month food at home CPI remained high at 12.4%. The categories most impacted are bakery goods and cereals, dairy products, poultry, oils and fats, and vegetables. Food at work and school has also seen a major spike in cost as well as roasted coffee and pet food (BLS, 2022e; Swenson, 2022a; lacurci, 2022). Although gas prices have begun to come down, this year's June increases, topping \$5.00, was the highest in decades. Energy services remain high including natural gas and electricity at 20% and 14.1% 12 month CPI. Out of the top 3 largest shares of average consumer budgets, energy stands above food at number 2 (lacurci, 2022).

The cost of housing, the largest share of average consumer budgets, is one of the biggest uncertainties for 2023. Back in February 2021, the price of shelter, including rents and homeowners' housing costs, hit a low CPI of 1.4% but since then has been steadily on the rise hitting a CPI of 6.9% by October. After falling by as much as 20% at the height of the pandemic, rents have been skyrocketing, exacerbating a homelessness and affordable housing crisis as wages have not caught up. In 2021, home values increased 17% thus pricing many out of the housing market and driving up demand for rental units. The cost of rent, however, has been rising 4 times faster than income since 1985. Meanwhile, median home prices have increased at 4 times the rate of household incomes since 1960 (Dunaway-Seale, 2022). Housing was responsible for more than half of the October's 0.4% monthly CPI increase (Tepper, 2021).

**Figure 1:** 12-month percentage change, Consumer Price Index, selected categories, October 2022, not seasonally adjusted.



Source: U.S. Bureau of Labor Statistics

Even as they have begun to come down, energy prices still dominate headline inflation in the United States and have for over a year. 41% of overall inflation is directly attributable to fossil fuel prices and even more to the indirect effects of high energy prices on consumer goods. Over the last year, gasoline prices have been specifically responsible for 75% of energy inflation and two thirds of all excess inflation has come from energy and cars alone (Goldmann et al., 2022). Some economists ignore energy prices altogether and focus on "core inflation", which excludes energy and food prices due to their volatility. However, this volatility is precisely why energy and food prices require attention. Moreover, ignoring energy prices fails to account for the direct and indirect foundation of all economic inputs on energy for production, transportation and shipping, waste management, storing, heating and cooling indoors, and feeding communities and animals. Many of the consequences of high energy prices take time to fully express themselves in the form of shortages, bottlenecks, or slowdowns, which result in an increase in costs passed on to consumers.

More to the point, U.S. oil producers have been unwilling to increase production to bring down prices. In late 2021, 60% of surveyed oil executives cited "pressure from investors" as the main reason driving their decision making. Major oil companies have instead chosen to enjoy short-term profits by returning money to shareholders through \$38 billion in stock buybacks, \$50 billion in dividends, and paying down corporate debt (Ivanova, 2022). In the era of pandemics and climate politics, oil companies are becoming riskier for equity holders. In the Summer of 2020, it was projected that assets of the U.S. shale industry could be marked down by \$300 billion with 30% of operators insolvent at \$35 dollars per barrel (Stevens, 2020).

Underlying these abrupt shortages, shifts in demand, record profits, and supply chain disruptions is the common element of an economy activated, mobilized, and fed by the fossil fuel industry. And as we will continue to see, the economy's outcomes are shaped by the political influence the fossil fuel industry wages on society and its resources. As Moody's chief economist Mark Zandi was quoted in Vox, "Invariably, it's the high cost of oil and fossil fuels in general that drive big fluctuations and overall inflation... Every recession since World War II has been preceded by a jump in oil prices" (Leber, 2022).

The United States is stuck in a toxic energy relationship. The close link between fossil fuel prices and the rest of the economy demonstrates the industry's tight grip over the present and future. When oil and gas prices rise due to shocks and geopolitics, political and industry leaders with tremendous power and wealth clamor towards creating new ways of expanding fossil fuel production. This is evident in the growing reliance on liquified natural gas (LNG) and fracking along with the destructive social and environmental impacts they bring, such as ignoring the shrinking carbon budget we have left, air pollution, habitat loss, earthquakes, fluid leakage, water contamination, noise pollution, and race, gender, and class-based health inequities.

The dominance of fossil fuel energy puts securing a sustainable future on our planet in direct opposition to economic prosperity. The carbon economy requires expensive and largely inefficient infrastructures to store, refine and transport its commodities. They are highly vulnerable to disruptive shocks with massive direct and indirect spillover effects as well as incentives for violent military and often imperialist escalations for control of scarce but highly sought after resources. It is here that we see the core of contemporary price instability and what European Central Bank (2022) executive board member Isabel Schnabel termed "fossilflation, the legacy cost of the dependency on fossil energy sources" (Matusiak, 2022; Woolley, 2022).

#### 1.2. Climate breakdown as a driver of inflation

There are lessons to be learned from pandemics and war. They are costly and have serious impacts on quality of life. This is instructive for how we think about the future of climate politics. The 2021 Production Gap Report (SEI, et al. 2021) declared that the world is on track to produce double the amount of fossil fuels than what is necessary to keep warming below the Paris Agreement framework target of 1.5°C. Scientists are urging the world to treat the climate crisis like a "Code Red for Humanity". The 2021 Glasgow Climate Pact put the world on track for a devastating 2.7°C warming world.

The pandemic gave us insight into what can happen to a globally interconnected economy following major disruptions as well as how intertwined industry is with socio-ecological systems. For starters, pandemics and public health in general are inseparable from the consequences of climate breakdown. As noted by the Harvard T.H. Chan School of Public Health (2020), climate change alters how we relate to other species and this is relevant to our health and the risk of infections. Due to human influenced global warming, animal species on land and water have been pushed towards cooler regions where they are coming into close contact with other animals they normally do not encounter, therefore creating opportunities for pathogens to enter new hosts. Additionally deforestation, the largest cause of habitat loss worldwide, forces animals into closer contact and germ sharing with others, including humans. Lastly, poorly regulated industrial farming to serve increasing meat consumption has led to higher risks associated with public health and the spreading of infectious diseases.

Climate change is already creating the conditions to spread the risk of Lyme disease, waterborne diseases such as vibrio parahaemolyticus which causes vomiting and diarrhea, and mosquito-borne diseases such as malaria and dengue fever. While it is difficult to predict disease scenarios into the future, changes in temperature and rainfall patterns challenge our ability to prepare for where and when new pathogens may appear.

Furthermore, the environmental consequences from the fossil fuel economy and its "externalities" include hazardous impacts on our air and water. Living in areas with poor air quality increases the likelihood of death from COVID-19, even when accounting for other mortality factors such as pre-existing medical conditions, socioeconomic status, and access to healthcare (Harvard T.H. Chan School of Public Health, 2020). As we learned with COVID, this is deeply relevant to the cost of healthcare, and supply chain and workforce stability.

There is reliable scientific evidence that offers a roadmap for what overshooting 1.5°C would be like. Human-induced climate change has already had multiple impacts on the planet including higher land and ocean temperatures, an increase in the frequency, intensity and amount of heavy precipitation events, water acidification, an increased risk of drought, and a dramatic decline in biodiversity many are calling a great extinction event. Although there is no one single predictable overshoot scenario, evidence from the IPCC is strong that it likely involves irreversible outcomes, such as deadlier and more pervasive heat waves, sea level rise that puts coastal regions at serious risk, an increase in dangerous and more erratic wildfires, higher mortality rates from severe storms like floods, hurricanes and tornadoes, and even more devastating losses to biodiversity. The irreversibility and intensity of such events depend on how fast and by how much 1.5°C is surpassed. But what we do know is that further breakdown could result in hundreds of millions of displaced refugees fleeing from ecological devastation, crop failures from drastic biosphere changes, food and water insecurity, entire coastal cities submerged, damage to critical infrastructure like bridges and roads, and a collapse of marine life on which fishing industries depend (US EPA, 2022; NOAA, 2021; IPCC, 2022).

Figure 2: Climate Risks, extreme events, and related impacts.



Source: World Meteorological Organization

**Figure 3:** Climate Change: the impact on humanity. Highlights of a landmark Intergovernmental Panel on Climate Change (IPCC) draft report on the effects of a warming planet on people 2021.

## Humanitarian assistance

Around **166 m** people In Africa and Central America needed aid (2015-2019) due to climate-related food emergencies Hunger
Between 8 and
80 m more
people
at risk by 2050\*

Some 1.4 m more children with severe stunting in Africa due to climate change in 2050

Crop production

4-10% drop
globally in last
30 years

Marine fisheries

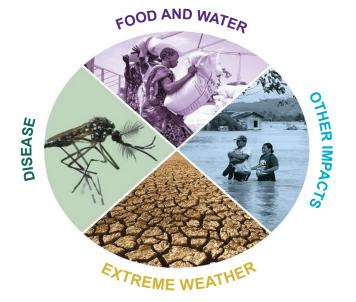
40-70% drop in
catch potential for
tropical regions
under high
emissions

Wild fish populations
✓ 4.1% drop in maximum
sustainable yield
between 1930 and
2010, some regions at
15-35% losses

#### Dengue fever 2.25 b more people at risk across Asia, Europe and Africa under high emissions scenarios

# Vector-borne diseases Half the world's population at risk of dengue, yellow fever

and Zika virus by 2050



#### ↑ Internal migration

Six-fold increase between 2020 and 2050

#### ↑ Water stress

At 2.7°C warming: 122 m people affected in Mesoamerica, 28 m in Brazil, 31 m in rest of South America

#### ↑ Natural disasters

Some **12.8 m** displaced yearly by natural disasters such as storms and floods since 2008

#### ↑ Severe heat

1.7 b more people exposed, and 420 m people subjected to heat waves, subject to temperature increases from 1.5°C to 2°C

#### ↑ Deadly heat

Hundreds of millions of city dwellers in sub-Saharan Africa and South/ Southeast Asia affected by at least 30 days of "deadly heat" per year by 2080

#### Flood

displacement 2.7 m people displaced annually in the future in 2050

#### **↑** Flooding

At 1.5°C warming, 100-200% increase in population affected by floods for Colombia, Brazil and Argentina, 300% for Ecuador, 400% for Peru

## ↑ Water scarcity due to severe

droughts
At 2°C warming.
Over 400 m more
people living
in urban areas
exposed

## Physical work capacity

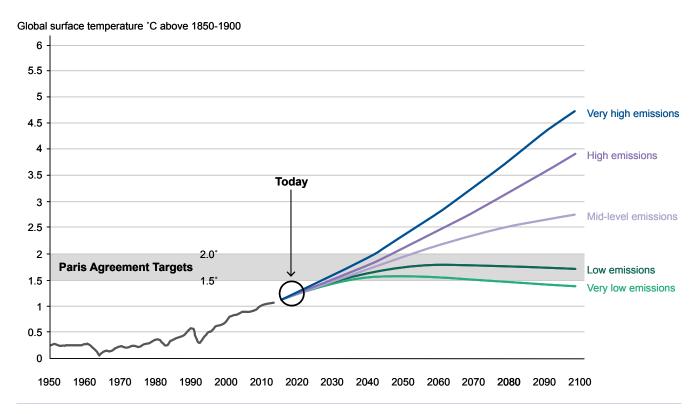
Up to **250** lost work days/year by 2100, in much of South Asia, sub-Saharan Africa, parts of Central/South America

Note: \*Depends on levels of emissions / extent of development Source: IPCC WG II Sixth Assessment Report / AFP Photos

Research from Deloitte (2022) shows that insufficient action on climate change could cost the United States more than \$14 trillion over the next 50 years, with close to a million jobs lost annually by around mid century. The Swiss Re Institute's stress-test analysis (2021) found that the United States is poised to lose up to 10% of its GDP by 2050 due to climate disasters. These financial costs do not consider the incalculable loss of life and biodiversity as well as the disproportionate suffering that will be faced by those in the most unequal and poverty-stricken regions of the world. Keeping warming below 2°C, and even 1.5°C, is still possible but it will take immediate and sustained cuts to carbon emissions.

The IPPC (2021) offers five climate scenarios, two with low emissions, one with intermediate or midlevel emissions, and two with high emissions. The very low emissions category keeps the world under 1.5°C, and the low emissions category keeps the world under 2°C by 2100. IPCC Working Group I co-chair Valérie Masson-Delmotte explains that the mid-level emissions scenario most resembles the pledges made by countries to plateau emissions until around 2030, and the highest emissions scenarios represent futures without any climate mitigation.

Figure 4: Future warming pathways.



Source: IPCC [2021], Credit Jenessa Duncombe (2021) for Eos of American Geophysical Union

The two low emissions scenarios necessary to maintain warming under 2°C require carbon capture, and the most aggressive decarbonization pathway that keeps warming under 1.5° requires carbon neutrality by 2050 with a 90% decrease in carbon dioxide relative to 2020.

Carbon dioxide emissions per year (GtCO<sub>2</sub>/yr) Very high emissions 120 Only one scenario is net-zero by 2050 100 High emissions 80 Today 60 40 -13% 20 -33% -43% -56% Mid-level emissions -74% 0 Percent decrease compared to Low emissions 2020 CO, emissions Very low emissions -20 **Negative emissions** from CO, extraction -40 2020 2030 2040 2050 2060 2070 2080 2100 2090

Figure 5: Annual carbon dioxide emissions.

Source: IPCC [2021], Credit Jenessa Duncombe (2021) for Eos of American Geophysical Union

Climate-related crises are already causing ripple effects across the global economy, and will continue to exacerbate supply shocks in the future. We can notice these consequences in shortages of key inputs and commodities, the slowing down of production, distribution, and logistical systems, and in debilitated work-forces. For many producers, it may be reasonable to permanently raise prices rather than having to anticipate the frequency of abrupt changes in their supply chain (Ali, 2022). This is already happening to food prices — for example the U.S. Department of Agriculture (USDA, 2022a) noted back in July that orange production was expected to drop 13 percent to the lowest level in 55 years due to California's severe drought. The price of oranges has been rising over the last two years. Global droughts have also exacerbated a fall in the availability of wheat already impacted by the war in Ukraine (Swenson, 2022b). Displacement and disaster responses driven by climate breakdown will abruptly shift consumption patterns in unpredictable ways, which may increase the need for new or rebuilt infrastructure, thus increasing demand for raw materials and labor that may already be running against higher costs and shortages (King, 2022). As Andrew Freeman (2022) points out in Axios, we simply haven't built for this kind of climate.

Housing would also become more expensive if, for example, wood no longer grows well where traditionally harvested due to changes in weather and pine-beetle infestations that collapse wood fiber supply (Meyer, 2022). Under climate change conditions it becomes more difficult to make and ship heavy bulk material. Weather related claims will push insurance premiums up or insurers may simply deny coverage. Local utilities will be pressured to pass on costs from weather disasters, fire prevention, and grid resilience (Cho, 2022; Uja, 2020) to consumers. Transportation costs will rise for cargo and could end up costing the shipping industry billions annually (Van Houtven et al., 2022), and impacting the public at large as costs trickle into the price of goods and services which depend on efficient on-time movement and transportation.

A world of mass displacement and refugees will likely exacerbate pre-existing bigotries, nationalism, and geo-political tensions promoted through zero-sum scarcity mindsets. This can generate instability which, coupled with major drops in productive capacity, can lead to severely negative political outcomes such as a rise in authoritarianism, human rights violations, or colonial indebtedness. To truly and fully take inflation seriously, it is critical to understand the integral relationship that prices and costs have with socio-ecological systems. Developing the most effective response to current inflationary pressures that can prepare us for the future, means uniting our sustainability and decarbonization efforts with equity and quality of life.

## 2. Resisting Shock Therapy

#### 2.1. Friedman and Volcker's destructive legacy

Shock therapy is a term commonly used to describe a political strategy whereby price liberalization and strict austerity policies, specifically tight monetary and fiscal policies, are rapidly and aggressively imposed on a nation (Weber, 2021). Traditionally, this approach has been associated with the transition of former command economies towards market economies. However, shock therapy has been applied far more broadly to transform the world from one of social democratic welfare states to the more recent market fundamentlist consensus. From the New Deal and Great Society programs of the mid 20th century to the conservative revolution of the 1980s, the U.S. underwent a shock therapy transformation of its own.

Today's conventional central bank responses to inflation such as the U.S. Federal Reserve's interest rate hikes are premised on a number of assumptions. Many economists, pundits, and politicos believe that very high interest rates are what successfully brought down the inflation of the 1970s. That story often begins in the late 1960s as a response to President Lyndon Johnson's War on Poverty policies, which resulted in what the New York Times called, "a lot of government money pouring into the economy" (Matthews, 2022). For followers of economist and conservative ideologue Milton Friedman, an excess money supply was simply debasing the value of U.S. currency. Throughout his career Friedman was repopularizing the quantity theory of money (Friedman et al., 2017), which argues that the "price level" of goods and services is directly proportional to the money in circulation.

The approach is representative of, and consistent with, what has been called a "sound money" doctrine for public finance and macroeconomics. It has become a pervasive and often mainstream view that follows the economic concept of the Phillips Curve, which posits an inverse relationship between unemployment and inflation, and the Non Accelerating Inflation Rate of Unemployment (NAIRU), which asserts that there is a natural market rate of unemployment under which inflationary pressures inevitably arise (Investopedia, 2019a; Investopedia, 2019b). Friedman and followers believe that the purpose of monetary policy is to target and control the growth rate of the money supply, an approach referred to as monetarism.

The notion of a wage-price spiral is when workers demand excessively high wages that pushes the inflationary feedback loop forward (Mankiw, 2014). Under this view, when workers have too much leverage, they continue to demand pay increases that are then passed on to consumers. By the 1970s, conservatives in the U.S. believed that throughout the post-war era, labor had become too powerful at the expense of private investors and owners. In 1977 Congress amended the Federal Reserve Act which set forth what is now commonly referred to as the Fed's dual mandate to "effectively promote the goals of maximum employment, stable prices" (Zhu, 2013). By 1978, the Full Employment and Balanced Growth Act was signed into law. The Act established the general economic policy and a monetary policy paradigm under which the U.S. government has since operated. It instructs the nation to pursue the four goals of full employment, growth in production, price stability, and balance of trade and budget (Steelman, 2013).

The influence of the "sound money" doctrine and the quantity theory of money was clear in the Act's shift away from the language of its predecessor, the Employment Act of 1946, which focused on promoting maximum employment, production, and purchasing power. Instead, the new Act deemphasized full employment and reframed it through the lens of the Phillips Curve and the natural rate of unemployment, setting the ideal and "natural" unemployment rate at a target that varies from 3-5% and inflation at an original target of 4% and then 2% (Fraser, 1978).

Paul Volcker became chair of the Federal Reserve in 1979. He came of age professionally during the lead-up to these policy shifts. It was a time of political conflict over the role of the Treasury and Federal Reserve in regards to monetary policy and inflation management. Throughout the early 1950s Federal Reserve officials were waging a public fight against the legacy of the New Deal and the Employment Act of 1946 during which the Treasury was responsible for setting interest rates. The dominant view ultimately shifted course and ushered in the modern era of monetary policy dominance and an implicit assumption about the Federal Reserve's total independence and separation from public budgets and taxation, which greatly reduced fiscal policy's scope and role for achieving macroeconomic objectives (Grey, 2019).

Volcker believed that the prosperity of the 1950s and 1960s was an illusion and insisted that for most of the American public, standard of living had to decline. During the Reagan administration, he pushed the idea that inflation would not permanently be tamed until labor unions "got the message and surrendered". He also disapproved of environmental regulations, seemingly blaming them in part for inflation stating, "we simply cannot afford regulatory or other policies that inhibit competition, add unnecessarily to costs or prices, or excessively shelter some groups from economic risks of their own making" (Stoller, 2019).

In 1980, the United States was facing stagflation. Not only were there high prices and interest rates, but there was also high unemployment. It resulted in the triumph of Friedman's monetarism and even stricter monetary tightening as Volcker introduced the tool of a targeted reduction in the "money supply". Like Ronald Reagan, Milton Friedman, Margaret Thatcher and other thought leaders of what came to be dubbed "neoliberalism", Volcker defended his positions on the premise that there is no alternative. But as heterodox economist Randall Wray (2018) explains, the money supply approach was ultimately abandoned when targets could not be hit and it became evident that there was a complete disconnect between the money supply and the rate of inflation. This resulted in the end of formal monetarism as the dominant approach by the early 1990s, when the overnight federal funds rate became the primary tool for interest rate management. Nevertheless, monetarism's legacy has carried over well into present day including a lasting influence on the "New Consensus", or new-Keynesianism, in macroeconomics, a school of thought that downgrades fiscal policy to a passive role that stays out of the way of the central bank's management of the macroeconomy and strictly adheres to its budget constraints (Arestis and Sawyer, 2002).

The monetarist story of 1970s inflation is not universally accepted, especially among heterodox economists and progressives. While excess demand and high wages can plausibly lead to an increase in costs and shortages, the narrative was weaponized to attack labor unions and public spending. Furthermore, it ignores major contributors to 1970s inflation that involved resource governance factors, such as surges in the prices of primary commodities like energy and food due to financial speculation, exchange rates, geopolitics, and environmental conditions impacting supply side costs, just like today.

In the post-war period, the U.S. had buffer stock policies in primary commodities like grains. The government would purchase and stock surplus supply as a price stabilizing tool in times of low demand. These policies were modified and largely replaced in the 1960s. In 1972 there was a failed harvest in the Soviet Union that led to large grain and wheat purchases that likely impacted global supply, an event that some argue the U.S. could have mitigated had it maintained its commodity buffer stock policies. Moreover, the end of the Bretton Woods system in 1971 resulted in an end to the tight regulations of cross-border financial flows, thereby contributing to imported inflation due to exchange rate fluctuations and deregulated international financial markets (Kaldor 1976, pp. 224-229).

Lastly, and most importantly, an oil shock resulted from OPEC's oil embargo in 1973. By the early 1970s, Saudi Arabia had become the swing oil producer, replacing the Texas Railroad commission, and was thus able to increase or decrease commodity supply at minimal additional internal cost. The embargo targeted a number of countries including the U.S. for supporting the state of Israel during the Arab–Israeli War. As a result, the retail price of gas in the U.S. skyrocketed by 43% from May 1973 to June 1974, leading to rationing. The 1970s was, in fact, also a clear case of fossilflation. Analysts have pointed out that it was not negative economic growth nor the 20%+ interest rates that ultimately brought down inflation in the 70s but rather a combination of the overlooked Carter policies in 1978 that triggered massive increases in the supply of natural gas and the fall in demand for Saudi oil, which eventually brought down and stabilized prices for the next 20 years. However, it was Volcker who was glorified by the media as the man who brought down inflation (Mosler, 2008, 2013).

Many look to Volcker today as the "policy genius" that brought inflation to heel the last time it was a problem. Sheila Blair, former chair of the US Federal Deposit Insurance Corporation and a senior fellow at the Center for Financial Stability, made her case this Summer in the Financial Times (2022) arguing that while Chairman Powell expresses deep admiration for Volcker, he is deviating from his methods and therefore failing to stop inflation from accelerating. Powell pointed to a "soft landing" in his March 2022 remarks to Congress when the interest rate hikes began. This emphasized an approach mindful of avoiding a recession as a consequence of interest rate policy. But that trepidation largely shifted towards a more aggressive approach over the summer and into September and beyond as Powell's Fed continues to raise interest rates and indicates it will keep doing so with the objective of bringing inflation down to 2% (Reuters, 2022a; Cox, 2022). Influential economists associated with the Democratic Party are also invoking a return to Volcker. Larry Summers, for example, claims that "[w]e need five years of unemployment above 5 percent to contain inflation — in other words, we need two years of 7.5 percent unemployment or five years of 6 percent unemployment or one year of 10 percent unemployment" (Weissmann, 2022).

Thus far, the Fed's actions mark the most aggressive monetary tightening since the overnight funds rate became the Fed's main policy tool in 1990. There is now an indication of far greater willingness to tolerate and accept a recession in order to get the job done. The Fed's August retreat featured blunt remarks by Powell stating, "We must keep at it until the job is done", invoking Volcker's autobiography Keeping At It (Timiraos, 2022). Nathan Tankus (2022a) draws on FOMC transcripts to make the case that Volcker's money supply target was mostly a public relations strategy so that the Federal Reserve would no longer need to take responsibility for unpopular and destructive interest rate hikes. By focusing attention on money supply targets through bank reserves that capped liquidity, rates could fluctuate across a much broader range and were allowed to dramatically rise across the economy. It was a form of implicit and hidden interest rate policy that attempted to spin political backlash in other directions. Nevertheless, the legacy of Volcker and Friedman remain strongly imprinted on monetary policy and economic policy more broadly.

The reason rate hikes are politically unpopular is clear in the consequences of what has been labeled "the Volcker shock". The shock led to a double dip recession that dismantled U.S. farming, manufacturing, and the quality of working conditions — consequences we are still reeling from today (Barker, 2019). The era's high interest rates created the deregulated and destabilizing financial conditions that led to the rise of shadow banking and, ultimately, the global financial crisis of 2008. They made refinancing debt prohibitively expensive and induced mass bankruptcies among firms and households (Grey, 2019). Unemployment peaked at almost 11% in 1982 and never fell below 4% until the year 2000 (BLS, 2022f). This impact was unevenly and disproportionately felt by racial minorities with Black unemployment rising to 19.5% in 1983 and Hispanic unemployment to 15.6% that same year (BLS, 2011).

In terms of poverty, after steadily falling in the 1960s, real poverty rates peaked in 1983 at 15.1% (Gabe, 2015), with women experiencing 4% higher poverty levels relative to men and children, clearing a rate of 20% (US Census Bureau, 2019).

20 **Black** 16.0 15 Percent 10 Hispanic 8.7 White 5 **Asian** 0 1975 1980 1985 1990 2000 2005 2010 1995

Figure 6: Unemployment rates, by race, and Hispanic or Latino ethnicity, 1975-2010.

Source: U.S. Bureau of Labor Statistics

Furthermore, the "real" poverty rates are criticized for under-reporting poverty levels and the impact of social services given an outdated methodology that relies on generalized living standards from the 1950s. The superior Supplemental Poverty Measure (SPM) differs in: 1) its poverty threshold, in which it accounts for the 33rd percentile of expenditures on food, clothing, shelter, utilities (FCSU) of consumer units with exactly two children multiplied by 1.2; and 2) what it includes as income, which adds non-cash benefits like food stamps, subsidized school lunches, housing assistance, and so forth. It then takes taxes (including both payroll taxes and refundable credits) into account, and subtracts out necessary expenses like work-related costs, child care, child support, and out-of-pocket medical expenses (Matthews, 2015). The difference indicates a steeper decline in poverty before the 1980s and a higher poverty peak in 1982-83.

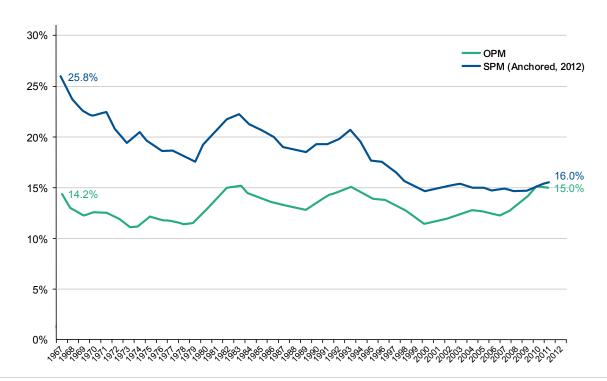


Figure 7: Official vs supplemental poverty rates, 1976-2012.

Source: Wimer et al., 2013

Like so many advocates of monetary tightening and the myth of sound finance, there is a fixation on reducing public deficits and public debt, which drives the belief that fiscal solvency must be secured mainly through cuts to social services, welfare, and public employment (Sargent and Silber, 2022.). Furthemore, 1980s monetary policy pushed Latin America and the Global South into a series of debt crises, starting with Mexico in 1982, which were followed by structural adjustment programs resulting in a decade of skyrocketing poverty and inequality in Latin America & Sub-Saharan Africa — still ubiquitous to this day (Roos, 2019). In the context of worsening climate breakdown, replicating these consequences would be morally indefensible and socially disastrous both domestically and internationally.

Another common justification for interest rate hikes to combat inflation is that they incentivize household saving. But Douglas W. Elmendorf's (1996) comprehensive literature review for the Federal Reserve found at best mixed evidence as to the magnitude and reliability of these claims. Yet another claim is that interest rates are supposed to leave consumers with less money by increasing debt payments. This effect has been found to be muted by a number of factors including the prevalence of fixed rate mortgages in the U.S., the largest form of consumer debt that changes with interest rates (Garriga, et al., 2015). It is also muted by high APRs from credit card debt that are rather inelastic to rate changes and tend to remain high given annual fees and other "bells and whistles" to make up for costs (Stavins, 1996; Wilson, 2022).

One potential outcome that is often overlooked is that rate increases can actually raise inflation. The interest cost channel refers to the prospect of businesses, especially small businesses, facing higher operating expenses when interest rates rise and therefore passing those costs onto consumers (Gaiotti and Secchi, 2006). Raising rates also increases government payments to the private sector for interest on bonds, known as the interest income channel (Kelton, 2019). The more important point, however, is that, as Randall Wray (2015) points out, raising and lowering the interest rate has an indeterminate effect on the economy. Without knowing institutional specifics, such as debt ratios, the marginal propensity to consume out-of-interest income, and who actually owns government debt in terms of class and income levels, we simply cannot make generalizable statements about what interest rates may or may not do.

To more deeply understand the link between monetarist sound money ideology and interest rates, we can look no further than the late 19th century advocate of the quantity theory of money, economist Knut Wicksell (Ahiakpor, 1999). Like a natural rate of unemployment, Wicksell believed in a natural rate of interest that directly impacts investment decisions. And like similar economic claims, it is rooted in the market fundamentalist notion that society emanates from self-interested exchange that denotes some kind of fundamental property or value to things. Wicksell believed that hitting the natural rate of interest with a monetary interest rate would thus match a sort of market equilibrium with investment decisions, and stabilize the economy.

Empirical evidence over almost a century of actual business leader interviews has demonstrated that price-setting is completely irrelevant to models comparing marginal costs to marginal revenues (Shackle, 1942). Further as Nathan Tankus (2017) explains in a lecture on interest rates, A.W.H. Phillips, of the Phillips Curve, even admitted that we simply do not know the time lags between changes in interest rates and investment decisions, nor how much investment interest rate changes would generate, and we therefore cannot use it as a reliable stabilization tool. The evidence instead suggests that investment decisions are far more complex and dependent on a number of qualitative institutional factors and considerations than a simple market-equilibrium model could provide (Sharpe and Suarez, 2015). It is therefore important to have this far more adaptive and structural approach in mind when devising an alternative, because in fact there is one.

#### 2.2. There is an alternative

In order to articulate a more accurate and effective analysis and response to price instability, it is worth noting what often gets ignored in today's inflation discussions, the social impact of the ARP. COVID-19 was a public health emergency that brought about an enormous crisis in human suffering from hospitalization, death, job loss, and precarity (Badalov et al., 2022; CBPP, 2021). The world was faced with the challenge of protecting public health through quarantining and social distancing while keeping the economy from collapsing. The ARP built upon emergency funding from the Families First Coronavirus Response Act (FFCRA) and the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Its impact was far-reaching and involved stimulus payments that included income for children and adult dependents, expanding the child tax credit, expanding and extending unemployment benefits, disability support, healthcare subsidies, food assistance, emergency rental assistance and housing vouchers; homelessness assistance programs and supportive services; homeowner assistance; rural housing; fair housing activities; housing counseling; and utilities assistance (Ross et al. 2022).

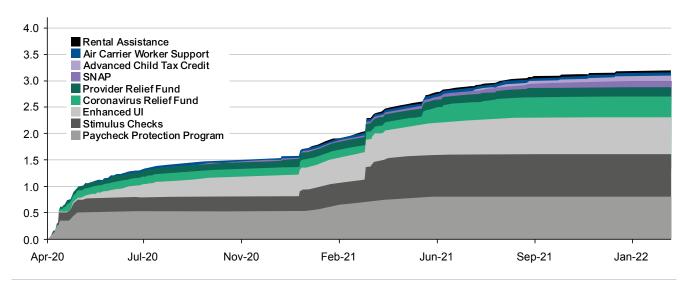


Figure 8: Rapid ramp-up in U.S. support. Cumulative U.S. pandemic relief, \$ trillions.

Source: BEA, CRFB, HHS, SBA, U.S. Treasury, Moody's Analytics

The full impact of the ARP cannot yet be calculated as not all federal funds allocated have yet been spent by state and local governments and some of these benefits will be realized over the long term. But we do have data that indicates a 22% drop in poverty from 2020 to 2021 and a 39% drop in poverty among children (Burns et al. 2022; Boghani, 2021). Over 45 million people were lifted out of poverty in 2021 during a national/international emergency (US Census Bureau, 2022). Unemployment peaked in April 2020 at 14% and as of October stands at 3.7%. As a result of emergency response policies, frontline essential workers in some of the most vulnerable and low-paid service sectors, such as retail and hospitality, saw modest wage increases for the first time in decades. It is undeniable that suffering as a consequence of COVID-19 was significantly reduced and curtailed thanks to a robust fiscal response.

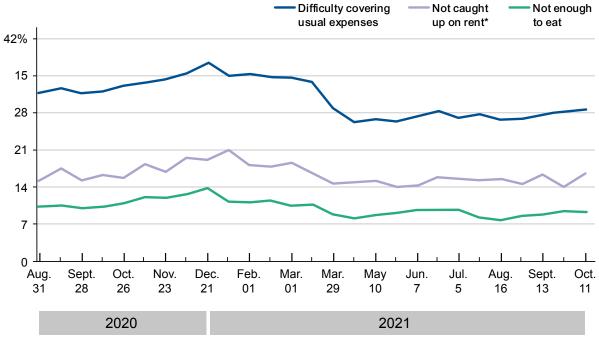
40 38 36 34 32 Pre-30 Tax/Transfer 28 26 24 22 20 Without 18 16 Relief With 14 \$600 per week unemployment COVID 12 supplement expires Relief 10 Large share of EITC,CTC and stimulus checks distributed Large share of EITC/CTC transfers 8 6 delivered 4 2 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug 2022

Figure 9: Monthly poverty rates, U.S.

Source: Center on Poverty and Social Policy at Columbia University

Nonetheless, the consequences of the pandemic have been deep and far-reaching. According to the Center for Disease Control, 1 in 5 adults who survive COVID-19 may develop long COVID with an overall death count of 1.09 million as of November 22nd 2022 (Bull-Otterson, 2022; The New York Times, 2021). There is evidence that the U.S. economy remains in a precarious and vulnerable state. While poverty declined, over 60% of Americans are living paycheck to paycheck. In the lead-up to rising inflationary pressures in food and housing, 1 in 8 adults with children lacked sufficient food and 1 in 5 renters living with children were not caught up on rent. Both of these statistics disproportionately impact communities of color (CBPP, 2021).

**Figure 10:** Share of adults expressing that they have difficulty covering expenses, are not caught up on rent, and do not have enough to eat.

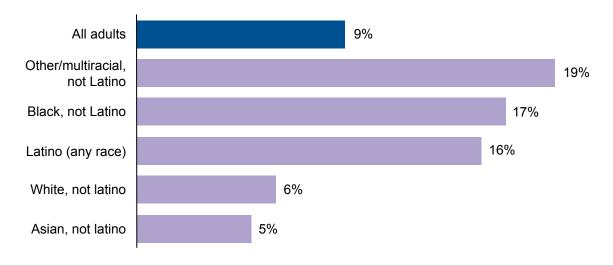


\*Percent of adults in renter households

Note: Dates shown are the last day of each 13-day data collection period. Data collection was paused between December 21, 2020, and January 6, 2021, between March 29 and April 14, 2021, and between July 5 and July 21, 2021. Percentages exclude individuals who did not respond to the question.

Source: Center on Budget and Policy Priorities

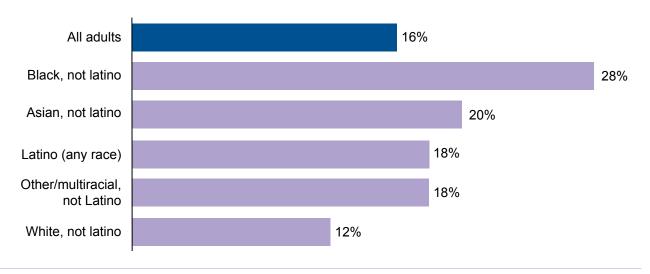
**Figure 11:** Share of adults saying that their household sometimes or often did not have enough to eat in the last 7 days, October 2021.



Note: Other/multiracial, not Latino = people identifying as American Indian, Alaska Native, Native Hawaiian or Pacific Islander, or more than one race. Percentages are based on reporting distributions and do not include individuals who did not respond to the question.

Source: Center on Budget and Policy Priorities

Figure 12: Share of adult renters saying their household is not caught up on rent, October 2021.



Note: Other/multiracial, not Latino = people identifying as American Indian, Alaska Native, Native Hawaiian or Pacific Islander, or more than one race. Chart excludes renters who did not respond to the question.

Source: Center on Budget and Policy Priorities

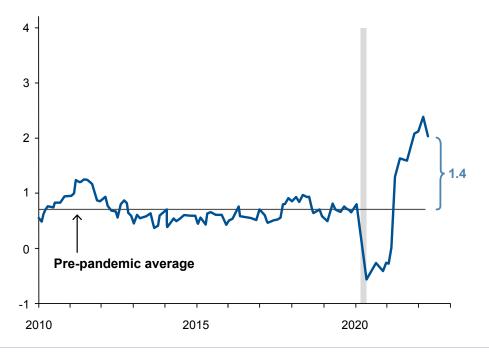
Since President Biden took office, influential economists like Jason Furman and Larry Summers, both of whom were top advisors to President Obama, have been vocal critics of the ARP (Uhlfelder, 2022; Williams, 2021; Powell, 2022). They blame the legislation's spending for "overheating" the economy, pushing demand to unsustainable levels, and triggering a wage-price spiral. This hawkish response to fiscal stimulus and a few years of low interest rates through the pandemic certainly echoes monetarism and "sound money" austerity. And although Summers, Furman, and many others of similar inclinations supported the IRA as a moderate response to inflation mitigation, in contrast to most in the Republican Party, they are nonetheless committed to the idea that the only real way to solve the issue is by significantly bringing down demand through interest rate hikes. Their solution is, therefore, to drag down overall demand to realign it with available supply (Sheffey, 2021).

Not only does this approach risk kneecapping the pandemic recovery (Kelton, 2022a), but as evidenced by the Volcker shock and recent warnings from the International Monetary Fund, the World Bank and the United Nations, interest rate hikes risk provoking a domestic and international recession (Martin, 2022; UN News, 2022; Guenette et al. 2022). The inadequacy of interest rate policy to address supply chain problems and the geopolitics of oil prices points to the possibility of another period of stagflation with recessionary unemployment and high prices combined. Furthermore, as Skanda Amarnath (2022) points out in Employ America, high interest rates actually risk making supply problems worse particularly in housing and energy, two key industries that today face shortages. Due to their capital intensity, renewable energy projects are particularly at risk of being held back by rising interest rates (Voldsgaard et al., 2022).

By October 2022, the Secretary-General of the UN Conference on Trade and Development (UNCTAD) made her position clear stating that, "if you are trying to get inflation down by only using one policy instrument, interest rates, you have no other choice but to bring the world to recession" (Farge, 2022). By insisting on a wrong-headed misdiagnosis of the problem, conventional monetary and fiscal policy tightening can push millions of people out of work and yet still fail to address the core of inflationary pressures. This is a case where the alleged medicine would be worse than the disease, or as Stephanie Kelton (2022b) writes, the Fed's rate hikes are the Hydroxychloroguine of treating inflation.

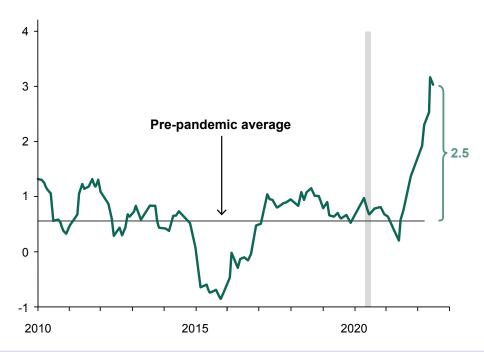
While multiple variables, including changes in demand, are contributing to U.S. inflation, the task for designing the best response is to determine what factors matter the most. Research from The Federal Reserve Bank of San Francisco (2022) suggests that demand has contributed to one third of recent elevated inflation, or 1.4 percentage points, compared to two thirds from supply side factors.

Figure 13: Demand-driven contribution to inflation, percentage points.



Source: Federal Reserve Bank of San Francisco

Figure 14: Supply-driven contribution to inflation, percentage points.



Source: Federal Reserve Bank of San Francisco

The team at Moody's Analytics (Yaros et al., 2022) argued that the ARP, while expensive, helped the country avoid a double dip recession that would have been more costly to the public. They go on to write, "Inflation only became uncomfortably high when the Delta wave of the pandemic hit in late summer last year. Delta [...] also severely disrupted supply. Global supply chains were badly scrambled, as this wave of the pandemic was especially hard on Southeast Asia, which was lightly vaccinated at the time, and where most supply chains begin."

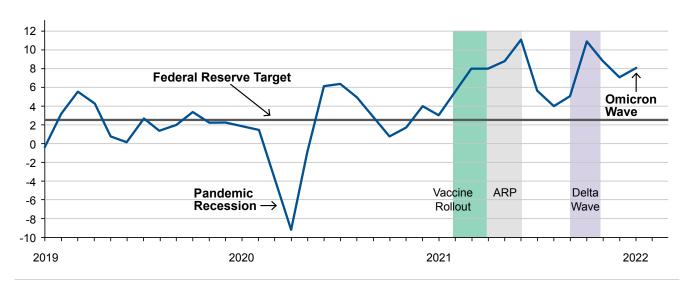


Figure 15: Consumer Price Inflation, annualized percentage change.

Source: BLS Moody's Analytics

The distinction between the experience of rising prices and expenses on one hand and job loss and recession on the other is often blurred, suggesting it is best to think about them holistically rather than in opposition. An important insight linking the economy's vulnerability in general with price instability in particular lies in better understanding supply chain problems. As David Dayen and Rakeen Mabud (2022) write, "Almost none of these [mainstream inflation] stories will explain how these shortages and price hikes were also brought to life through bad public policy coupled with decades of corporate greed." They describe U.S. and global supply chains as consisting of worn-down physical infrastructure lacking a well-compensated, stable labor force.

Today's dominant form of globalization has left supply chains ill-equipped to handle bottlenecks in supply. Deregulation in trucking and rail, for example, pulled back federal standards that have pushed workers into erratic schedules, low pay, and even wage theft, leading to shortages of drivers (Roosevelt, 2021; Cavanaugh and DeLacy, 2018). This is also the consequence of the just-in-time logistics (Moody, 2021) production model whereby supply chains attempt to virtually eliminate the need to keep reserve inventory to keep down the costs of production and distribution.

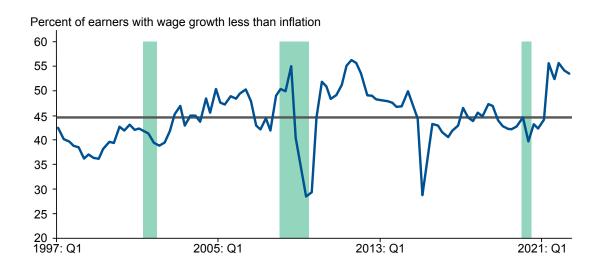
Labor conditions as a result of the dominant supply chain model have clashed with carbon emission reduction efforts. The prevalence of independent contractor classifying and misclassification across the transportation industry has become a barrier and jeopardizes efforts to adopt zero emission vehicle retrofitting, exposing drivers and urban residents to toxic air pollutants that significantly increase the risk of cancer and other severe health challenges (Appel and Zabin, 2019). As a whole, these practices lead to a depleted workforce that exacerbates the impact of disruptions, whether they be earthquakes, super storms, droughts, or pandemics.

Decades of neoliberal globalization have resulted in waves of corporate consolidations increasing market power and vastly concentrating the shipping and transportation of inputs into fewer companies that further magnify the impact of shocks. In freight, shipping conglomerates are likely to surpass last year's profits by over \$256 billion (Murray, 2022) while 80% of global merchandise relies on the 3 major shipping alliances (Holt, 2022) with on-time delivery rates of a lackluster 40%. But like the oil industry, there is little incentive from shipping and retail to fix these problems and bring prices down. Over the last 6 years, the 5 biggest railroad freight lines have cut their workforce by 29% as part of the just-in-time model (Semuels, 2022). A major railroad strike looms over the U.S. economy as grueling working conditions, a rejection of paid sick leave, and concerns over quality of life pushes workers to their limits.

Corporate profits are at their highest in 70 years with reports of CEOs boasting about their profits on earnings calls, accelerating consolidations through market power, and engaging in share repurchases (Reuter and Kiersz, 2021.). For some of the most powerful companies, inflation has meant a "once in a lifetime opportunity" to raise prices (Serwin and Zahn, 2022). ExxonMobil, for example, the U.S.' largest oil company, set a profit record for a third straight quarter of \$20 billion (Partridge, 2022). In food and agriculture, the largest privately held corporation in the United States, Cargill Incorporated, has come to dominate the food economy over the last century. 2022 marked Cargill's highest annual profits in its 157 year history at \$6.8 billion (Reuters, 2022b). As Errol Schweizer (2022) writes in Forbes, at-home food prices increased 13.1% since July 2021, the biggest jump since March 1979 with producer costs up in the double digits in eggs, flour, butter, crackers, bread, milk, and chicken. Tyson Foods, the world's second largest processor and marketer of chicken, beef, and pork, saw their net income up 47% to over \$3 billion and spent \$700 million on share buybacks while 30,000 COVID-19 infections and 151 deaths occurred at their facilities. This same trend can be seen in retail and consumer packaged goods.

While the logic of interest rate hikes assumes the need to bring down allegedly bloated wages, workers find themselves facing the most severe drop in purchasing power in 25 years. In July 2021, a study from Primerica and Change Research (2022) showed that 75% of middle income earners report their wages are falling behind inflation. Workers' share of corporate income has fallen almost 9% since 2010 and earnings for non supervisory workers have been declining. Yet the average CEO to worker pay ratio stands around 324 to 1, up 23% from 2019, nearly twice the rate of inflation (Bivens and Kandra, 2022). CEO earnings grew 18%, 4 times the rate of wage growth, with a growing discrepancy in perception of well-being between C-suite executives and employees (Hatfield et al., 2022).

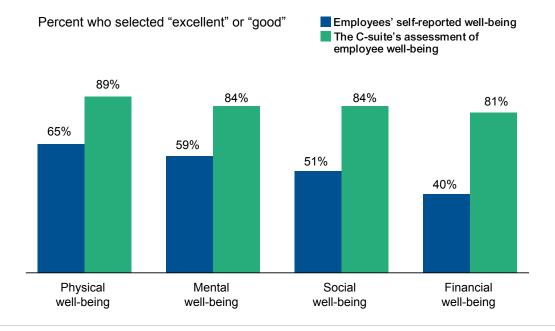
Figure 16: Share of workers with negative real wage growth rises rapidly post COVID-19.



Note: Monthly portions of earners with wage growth below inflation are averaged to construct a quarterly measure. Shaded areas indicate National Bureau of Economic Research-designed recessions. The red line indicates the average number of workers whose wages failed to keep up with inflation over the period examined.

Source: Federal Reserve Bank of St. Louis

**Figure 17:** The C-suite significantly underestimates how much employees are struggling with their well-being.



Source: Deloitte Analytics

Profit-price spirals across industries are thus a more likely culprit driving price increases than a working class recovering from a traumatic public health disaster and economic shutdown. Moreover, as Joe Weisenthal has argued, many supply chain issues have their origin in the collapse of demand resulting from 2009's Great Financial Crisis and corresponding housing crash, stating on the Notes on the Crises podcast, "The economy is filled with an unexpected connection between a housing bust causing a decline in wood production and sawdust production, causing a place where you can't rest your cows and then you don't have as many cows so the price of milk goes up." (Tankus, 2021). On the issue of housing, ProPublica recently reported on the use of software to help landlords push the highest rents possible on tenants. According to the investigation, YieldStar uses an algorithm to gather client data and remove the need for negotiations with apartment building staff, bargaining with renters, and will even recommend accepting a lower occupancy rate in order to raise rents higher and make more money (Vogell, 2022).

One of the algorithm's developers admitted to ProPublica that leasing agents had "too much empathy" compared to software-based pricing. The origins of YieldStar are associated with price-setting software in the airline industry that the Justice Department said may have artificially inflated airfares, costing consumers more than a billion dollars between 1988 and 1992. In NYC, Investigative reporting from The City obtained an internal state housing agency memo showing that over 60,000 rent-stabilized apartments are vacant, nearly doubling between 2020 and 2021. Tenant advocacy groups are claiming that landlords are intentionally withholding availability in order to keep prices high through artificial scarcity as a form of political ransom (Rabiyah, 2022).

We currently sit at a crossroads where decisions and policies made today and over the next 5-10 years will set the stage for the remainder of the century. If we are to reject the idea that a world of price stability requires sacrificing people and the planet, then bold proposals that shift the dominant "expertise" and articulate a new toolkit must take precedence. Instead of fixating on simplistic analyses claiming that persistent inflation exists because of excess demand, we must examine the more fundamental dynamics at play. Fossilflation not only drives price instability but it carries with it a global economy of deep inequality, burnout, greed, and exploitation. Ultimately, we need a better theory of inflation that rejects mechanistic economic laws that postulate zero-sum binaries between inflation and employment, supply and demand, good wages and affordable goods and services, an approach that obscures a hidden market fundamentalist ideology. A more sophisticated theoretical approach is found in a working paper published by the Global Institute for Sustainable Prosperity, which describes price stability as "a politics of coordination [...] that must manage and administer "costs" while responding to socially mediated needs and desires within particular constraints and contexts" (Bernal, 2021). This means embedding costs into normative questions of ecological sustainability and social well-being.

## 3. Price Stability for a Just Transition

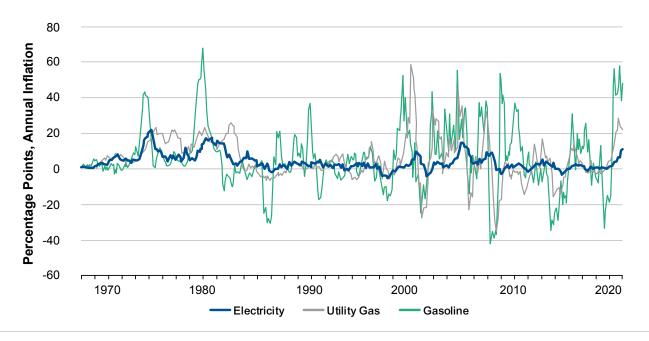
The IRA is a significantly less ambitious legislation than the Biden administration's previously proposed Build Back Better plan, which earmarked over \$500 billion for climate-related programs. It was also deeply watered down from its original version. Nevertheless it represents action during a time when the public expected nothing more from fiscal policy following the ARP. The IRA rightly acknowledges the need to act on climate and price stability concurrently. It also marks a shift, however small and accidental, from the narrow market-first approach of the Clinton and Obama eras that relied on carbon pricing and cap and trade schemes (Roberts 2022). Instead, the IRA moves towards \$369 billion in tax credits, grants, and loans as stimulus for the development of renewable energy, battery storage, electric vehicles, green jobs, pollution reduction, retrofits, community and ecological restoration and more (Badlam et al, 2022). It is the biggest effort to address climate change in U.S history.

On the other hand, passing the IRA involved a compromise that brought with it approvals for increasing fossil fuel infrastructure and mandatory auctioning of oil and gas drilling leases on federal lands, in an attempt to stabilize fossil fuel prices (Bittle, 2022). There are a number of climate "red flags" including biogas or "renewable natural gas", biofuels, and a lack of restrictions on carbon sequestration repurposed for "enhancing oil recovery" (Westervelt, 2022; Jenkins, et al. 2022). As Charles Harvey and Kurt House (2022) have explained, more than 90% of the commercial carbon capture and storage (CCS) projects are intended for this purpose, making CCS tax credits another fossil fuel subsidy.

The reality is that the faster we develop and scale renewables, the more we will lower energy costs. In 90% of the world, solar and wind are the cheapest form of electricity, surpassing oil and gas. Furthermore, solar panels and wind turbines consist of "experience curves", whereby every new doubling in deployment reduces costs by 30% and 16% respectively (Mills, 2022). Models of the likely future prices of solar panels from Oxford University predict a drop in price to \$10 per MWh by 2050, noting that the faster renewables are deployed, the faster the costs will fall (Way et al., 2021). As explained by the Roosevelt Institute's issue brief (Melodia and Karlsson, 2022) on Energy Price Stability, electrification of the country with renewables will significantly improve price stability given that electricity prices are less volatile and have a lower inflation rate and smaller variation in price than gasoline and utility gas.

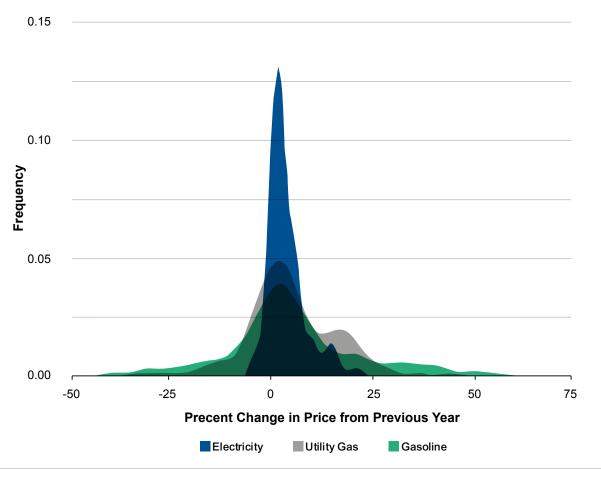
Moreover, renewable energy sources like solar and wind have qualities that make them more stable and cost effective, such as their natural replenishment capabilities and lack of fuel costs. Renewable energy production comes with long-term fixed price contracts, which is not possible in the fossil fuel economy resulting in near zero marginal costs. Additionally, the sun, wind, tidal power, and geothermal energy have non-excludable and non-rivalrous public good qualities that create opportunities to change the geopolitics of the fossil fuel industry.

Figure 18: Electricity prices are less volatile than gasoline and utility gas.



Source: Roosevelt Institute

**Figure 19:** Electricity has a lower average inflation rate and smaller variation in prices than gasoline and utility gas.



Source: Roosevelt Institute

Nonetheless, it is important to note that the geography of minerals and raw materials required for the massive upscaling of renewables, such as Lithium, brings critical attention to matters of equity and social impact. As Thea Riofrancos (2019) argues, "it's vital that the low-carbon world that we need to build doesn't reproduce the inequalities, dispossessions, and exploitations of fossil capitalism or the colonial capitalism on which fossil capitalism is built, where some lives are valued more than others and some pay the costs, social and environmental, for the wellbeing of others."

There are opportunities present with the deployment of the IRA regarding zoning and fiscal policy focus on state and local policy. Here, a political fight is gearing up about how exactly to ensure equity and scale from land use laws to utility ownership to local banking and credit (Tankus, 2022c). Across the U.S., movements for social and environmental justice are making efforts to link renewable investments and green energy to social solidarity economies, involving cooperatives, municipal ownership of utilities, mutual aid, participatory budgeting and public power campaigns — efforts which can be replicated internationally (Menser and Le Strat, 2022; ILO, 2022). Perhaps most importantly, expansion of renewables and decarbonization will reduce the risks posed by climate breakdown, resulting in fewer energy disruptions and less energy price volatility. It's also the case that given a lack of fuel costs, climate disruptions to the energy system would be much more localized and not accelerate international price spirals. Lastly, a holistic understanding of green energy linked to price stability can significantly reduce the disproportionate price burden that falls on low income and marginalized communities both in the form of prices and environmental harms (Melodia and Karlsson, 2022) .

The ideal inflation toolkit anticipates and prepares for potential price instability beforehand as much as possible. This entails abandoning any remnants of monetarism and "sound finance" budgeting for a contemporary functional finance approach. Functional finance, a macroeconomic framework developed over the 20th century, "evaluates budgetary policies on their ability to obtain the goals they were designed to achieve and not on any particular relationship between government revenue and expenditures or the size of the national debt" (Nell and Forstater, 2005). The approach distinguishes between currency issuers and users making the critical point that currency issuing governments are not like households. It views money as ultimately a creature of the state, in the neochartalist tradition (Wray, 2000), and thus a boundless public utility to shape resource use and social provisioning as opposed to a scarce commodity to be balanced like a household budget. Rather than examining inflation as solely a matter of excess money supply and excess demand, the functional finance approach calls on societies to evaluate the outcomes of spending based on the quality of investment. This involves considering full employment and availability of resources, the political structure of trade and exchange rates, and the quality of inputs and output. In the same way that you can run out of land but you cannot run out of acres, you can run out of available goods and services but you cannot run out of dollars.

#### 3.1. Targeted price controls, expanded healthcare, and antitrust reform

In the case of today's pandemic and war-induced fossilflation, that luxury of anticipating inflationary pressures no longer exists. Nevertheless, there are a number of things we can do right now that would be preferable to rate hikes. An accomplishment of the IRA is that it expanded the Affordable Care Act by eliminating caps on subsidies and increasing those that qualified for free coverage until 2025. The IRA also allows Medicare to negotiate prescription drug prices and requires pharmaceutical companies to offer rebates when they raise the price of a drug at a rate higher than inflation for Medicare beneficiaries. (Stewart et al., 2022) These are, of course, steps in the right direction to mitigate price increases in healthcare but do not go far enough. The exceedingly high cost of healthcare per capita in the U.S. as well as the high numbers of uninsured is an unnecessary inflationary pressure. Moreover, as explained by a report from Employ America, healthcare goods, services, and insurance comprise approximately a quarter of the Fed's preferred PCE Index. Because healthcare costs include services purchased out of pocket and services paid for by third parties on behalf of consumers, like employers, public policy's authority over medicare in the form of adjusting medicare reimbursement rates, prescription drug negotiations, and better ways to subsidize drug development can have major disinflationary impacts (Skand and Arnab, 2021).

When inflation is no longer understood as a quantity of money issue or as Milton Friedman once said, "always and everywhere a monetary phenomenon", a legislative victory on Medicare for All becomes a superior deflationary alternative as it greatly reduces costs across the board and frees up resources to be repurposed into a more stable green economy. Notably, improved public health infrastructure and prevention policy would have mitigated inflation spikes as a result of new variant outbreaks.

For decades, the idea of strategic price controls have been suppressed and caricatured by mainstream economists. But that has begun to change. As Isabella Weber points out in her book on Shock Therapy (2021a) and in The Guardian (2021b), strategic price controls during the second world war played a key role in maintaining price stability by preventing prices from shooting up while establishing the base and gaining the time for policies that could address structural supply and or resource constraints. Today, price controls could play an important role in addressing corporate price gouging especially in sectors like housing, energy, and healthcare. Weber writes, "Price controls would buy time to deal with bottlenecks that will continue as long as the pandemic (or war in Ukraine) prevails."

Strategic price controls could also contribute to the monetary stability needed to mobilize public investments towards economic resilience, climate change mitigation and carbon-neutrality. The reality is that selective price management coupled with targeted investments is a vital policy approach for strengthening economic resilience and curtailing exploitative profiteering during periods of economic and environmental volatility. Moreover, the wholesale ending of price controls after the war was publicly discouraged in the New York Times by some of the most important and even mainstream economists of the time (NYT, 1946). Yet the view that would ultimately represent today's orthodoxy won out and prices surged. The now orthodox view fails to account for market power and the incentive to use pricing authority to raise profit margins once controls are suddenly dropped (Tankus, 2022c).

Critics point to the Nixon administration's use of price controls as clear evidence of its failure. But this too is loaded with generalizations by orthodox economic thinking. For starters, this critique erroneously assumes that price controls are temporary responses to a problem of excess demand and thus must somehow successfully regulate every price in the economy and "return them to normal". President Nixon's use of price controls actually represented a carefully calculated and politically cynical maneuver for reelection that resulted in Dick Cheney, Donald Rumsfield and about a dozen staffers literally pulling an all-nighter to design the entirety of the policy's core phase. Besides this political maneuvering, the difference between approaches is a framing that sees markets as inherently separate from social institutions to be controlled when volatile and returned to equilibrium versus a view that acknowledges the need to manage and shape excess pricing power and market structure on an ongoing basis (Tankus, 2022c; Cheney and Cheney, 2011, pp. 59-61).

Comparisons with the second world war make sense given the reality of overlapping emergency conditions. The pandemic is not over, a major war is ongoing, and geopolitical tensions are at disturbingly elevated levels. The reality of climate change only emphasizes the importance of thinking at the level of emergency response and preparedness. In Germany, where energy inflation is a much deeper crisis given Russian oil exports are cut off, a dual-track pricing scheme was proposed by Isabella Weber and Sebastian Dullien (2022), which has gone on to be adopted by the governing Social Democratic Party. Under this approach the government would set up a gas cap on essential consumption allowing consumers to cover their basic needs at a stabilized price, and then pay market prices for any additional consumption. In the United States, Congressman Jamaal Bowman has introduced the Emergency Price Stabilization Act which would expand President Biden's supply chain task force's abilities to monitor and stabilize essential prices (H.R. 8658, 2022).

Under the Federal Trade Commission's (FTC) Chairwoman Lina Khan and scholars like Sanjukta Paul (2021) and Sandeep Vaheesan (2017), a new era of antitrust legislation and thinking may be on the horizon, increasing scrutiny and action against recent waves of corporate mergers and consolidation. Antitrust is an important and underused tool to limit the ability of companies with market power to raise prices. And as antitrust scholars Steve Salop and Fiona Scott Morton (2020) argue, economic disruptions, from an epidemic for example, will "lead to a larger [...] price impact than if there were more diversity". Hal Singer (2022) proposes automatic antitrust probes into industries that meet three criteria: (1) highly concentrated; (2) rising margins; and (3) year-over-year price hikes in excess of 10 percent.

Lastly, the nascent contemporary labor movement is showing a growing influence on public perception, with struggles in air travel, freight, and at Amazon, Starbucks, and more. Unions have an important role to play in the public relations fight over profit-price spirals and inflation reduction policy, including the prospect of mandatory worker representation on corporate boards. Passing the Protecting the Right to Organize (PRO) Act would secure vital amendments to labor laws, such as the National Labor Relations Act and the Taft-Hartley Act among others, to expand labor protections and begin to undo the damage of decades of deregulations that exacerbated our supply chain and workforce vulnerabilities (Gonyea, 2021).

#### 3.2. Free public transportation, support for farmworkers, and a savings strategy

When California was facing a grueling heat wave that weakened the state's power grid, facing rolling blackouts, the Governor's Office of Emergency Services issued a text message asking residents to "conserve energy to protect public health and safety". Ultimately, operating reserves were restored and broader energy disturbances were averted (Swan, 2022). Such is the power of coordinated public communications. Nationally, a similar strategy could be used periodically to promote conservation in specific areas. The administration can and should follow this up by urging Governors, Mayors and elected officials to offer periods of free public transportation like trains, buses, and subways to all riders that could have costs covered with Federal grants. This could build upon existing programs, such as Mayor of Boston Michelle Wu's free bus routes pilot (Slater, 2022). The administration could also offer tax incentives for companies that allow and accommodate working from home and therefore reduce demand for gasoline.

Demand management can also involve the targeted selling of government savings instruments or Green Bonds to incentivize saving and reduce demand in sectors facing bottlenecks, shortages, or high energy prices. In terms of food prices, the United States Department of Agriculture (USDA) has already announced \$400 million in funding for essential local and regional food systems coordination, technical assistance, and capacity building services through USDA's new Regional Food Business Centers (USDA, 2022b). It is important to follow this up by expanding support for farmers and passing the Farm Workforce Modernization Act, which would not only further update food production systems, but also allow for the hiring of temporary workers year-round. This is a necessary step forward in reaching comprehensive and humane immigration reform and therefore extending worker protections, stabilizing working conditions, addressing agricultural labor shortages, and bringing down food prices (Bustillo, 2022; Canales, 2022).

#### 3.3. Fiscal policy as part of a full employment and price stability agenda

With these immediate emergency responses in mind, we can better articulate a broader and long-term inflation strategy through a macroeconomic framework that rethinks fiscal and monetary policy. Relying on Federal Reserve interest rate tinkering to prevent and address a phenomenon as complex as price stability is a lost cause. Instead, recognizing the power of fiscal policy, government spending and taxing, as a vital tool for capacity building and demand management towards a rapid green transition is especially crucial amidst a climate emergency and geopolitical uncertainty.

To accomplish this we must first rethink how fiscal policy is evaluated. Currently, congressional budgets and spending proposals are scored by the United States Congressional Budget Office (CBO) and the Office of Management and Budget (OMB) through a budget constraint based on increases to the federal deficit and national debt. On their own, these provide little guidance about inflationary risks and instead incentivize misguided and obstructive debates about "tax payer money" and government solvency, with a long history of dog-whistle politics and political leverage for the privatization of public goods (Walsh, 2021; Hayes, 2019). This approach consistently undershoots the Federal government's actual available pre-inflationary fiscal space and leads to an underperforming economy of lost output and dire social and environmental consequences.

The institutional responsibilities of the CBO, OMB, as well as the Congressional Research Service and the National Economic Council among others, should be repurposed to focus on an inflation target, achieved through assessments of macroeconomic impact and most appropriate inflation offsets given social and environmental contexts. For example, rather than solely tracking a general price level, a more effective inflation analysis would examine the potential for industry specific bottlenecks, shortages, large and sustained rises in unfilled orders for specific goods and services, industry capacity, technological breakthroughs and limits, labor conditions, and availability of necessary resources including vocational expertise. Advisory agencies would need to provide detailed reports evaluating how specific spending and lending proposals would increase demand, and providing information about the sectors, regions, and resources most affected (Fullwiler et al., 2019). Such an approach would also bring about necessary increases in, and the transparency of, knowledge and cooperation between government agents, unions, investors, consumers, social and environmental advocacy groups, and the public at large. Switching to an inflation constraint for budget evaluation therefore expands fiscal space, sometimes significantly, but by no means suggests unlimited spending.

With a more accurate understanding of fiscal space, obstruction against agendas like Build Back Better or the Green New Deal based on nominal cost lose their intellectual grounding. The case for deflationary policy ultimately aligns with major investments into the areas we most need to scale supply, such as rapid decarbonization and renewables. Fiscal stimulus into housing, which remains one of the only sectors not showing signs of falling prices as of November 2022, would do a great deal to retrofit buildings towards major increases in energy efficiency, and expand the housing stock as is laid out in the Green New Deal for Public Housing Act and the Homes for All Act to drive down the cost of housing (H.R. 5244, 2019; H.R. 2664, 2021). Furthermore, by coordinating national and local policy according to a social housing model that features cooperative and municipal ownership as well as "limited-profit housing" development similar to the city of Vienna's social housing model (CHPC, 2021) important rent controls need not restrict supply and together could overcome the affordability crisis. Similar investments into regenerative agriculture, healthcare, higher education, inter-state high speed rail, decarbonization and the rest of the Green New Deal agenda would fundamentally transform the costs of energy while addressing the climate crisis at the pace and level urgently needed.

Another important aspect of fiscal policy worth rethinking is the dominant approach to taxation which currently prioritizes crude "pay-for" reasoning and the federal government's tax revenue over social and environmental outcomes, quality of life, and addressing the deficits that actually matter in education, medical care, access to mental health services, and life expectancy itself (Kelton, et al., 2018), More to the point, we've spent valuable political capital and allowed critical time to slip through our fingers not acting on climate to instead focus on public deficit reduction and taxes as a funding mechanism while we lose biodiversity, fresh water, and the capacity of our environment to absorb any more carbon. As Carrillo et al. (2019) write in Business Insider, "the emphasis on (federal) profitability perversely shifts our attention toward a perpetually renewable resource (money) and away from currently bottlenecked resources (labor, natural resources, green technology)". Instead, scholars like Mat Forstater, Research Director of the Global Institute for Sustainable Prosperity, advocate for integrating an ecological tax reform strategy with the functional finance approach to federal budget management. Ecological tax reform translates to taxing what we want to discourage rather than we want to encourage. For Forstater, this involves reducing taxes on income and employment when desirable while increasing taxes on polluting industries, energy inefficient practices, and exhaustible resource depletion (GISP, 2019).

Lastly, under this rethinking of taxation, a wealth tax is helpful not as a source of revenue to "pay for" spending, but as a control on wealth accumulation and anti-democratic power. Taxation can also be one of several methods for reducing demand by draining income from the economy. That is, in certain cases of legitimately overwhelming demand and high incomes (unlike today), taxes could have a role to play in inflation control. For example, Nersisyan and Wray (2019) propose a 4.6% surcharge on the employee portion of the payroll Tax in their inflationary cautious version of a fully resourced Green New Deal that includes decarbonization as well as Medicare for All, student debt cancellation, and tuition free higher education.

Another key aspect of inflation management is the role of automatic stabilizers. These are features of budgetary policy that rise and fall depending on socio-economic outcomes without the need for day-today discretionary decision making, like is currently the case with the Fed's management of interest rates. For example, universal healthcare such as Medicare for All would function as an automatic stabilizer, increasing spending to meet needs during public health crises and reducing spending as people get healthier and less healthcare services are required (Bivens, 2020). Another example could be indexing taxes to an inflation target coupled with more upper level tax brackets that progressively tax a higher percentage of income if and when incomes rise faster than the inflation target (Fullwiler et al., 2019).

One of the most effective automatic stabilizers for price stability is the buffer stock. Buffer stock policies involve the government purchasing and selling surpluses or excess inventory depending on economic conditions, such as manufacturing delays, supply chain disruptions, or unexpected increases or decreases in demand (Tcherneva, 2020, pp. 64-70). As mentioned, the U.S. government and countries around the world had grain and other commodity buffer stocks across the post-war economy. A number of essential goods in various industries and their associated workforces benefit from buffer stock policies that mitigate cyclical periods of low demand and offer reserves in periods of scarcity or shortages. A current policy working like a buffer stock is the Biden Administration's ongoing release of Strategic Petroleum Reserves (SPR) to help bring down retail gas prices amongst the oil shortages and the OPEC decision to cut production.

But perhaps the most important automatic stabilizer for a green transition takes partial inspiration from a buffer stock mechanism while radically transforming its potential. As advocates of Modern Monetary Theory (MMT) have long argued, a true commitment to full employment requires a legally enforceable right to a good job. Politically rooted in the New Deal and the Civil Rights Movement (Nolan, 2021), advocates of a federal job guarantee emphasize both the rights-based nature of the guarantee, echoing Roosevelt's Economic Bill of Rights, and the price stabilizing aspects of a countercyclical public option consisting of a living wage floor. That is, the program increases or decreases spending on its public employment and payrolls as an offset to changes in private sector demand for work, acting as a shock absorber during periods of recession, or as a hiring and training pool during economic booms. A federally financed job guarantee program with local administrative features would replace unemployment, or an effective minimum income of \$0 prior to means tested insurance payments, as today's wage anchor. This is a vital component of a just transition (Tcherneva, 2021).

Unemployment is a costly and brutal condition that disproportionately impacts historically excluded and marginalized communities. It deskills workers and treats humans as largely disposable causing them to 'yo-yo' in and out of economic security in ways that can break down families even across generations. Yet think tanks and economists work tirelessly to pinpoint the natural rate of unemployment and the causal mechanism by which unemployment and inflation will inversely cancel one another out. This is the thinking that drives conventional inflation policy, with interest rates attempting to fine tune the economy to this imaginary equilibrium.

The reality is that economists have been unable to provide much evidence for what the relationship between unemployment and inflation even is, let alone if it is a causal one. Meanwhile, the job guarantee secures employment, with benefits, for anyone willing and able to work while setting an economy-wide living wage that serves as a superior price anchor. But unlike conventional buffer stock schemes for commodities, the job guarantee actively decommodifies work. Because people and labor are not merely inventories, the job guarantee program is a creative and politically transformative structural reform that contributes to necessary changes and improvements to the nature of work and workforce development, bringing together non profit and municipal infrastructures to foster low-to-no carbon sustainable care economies within local communities (Tcherneva, 2020, pp. 37-62). In 2021, Representative Ayanna Pressley, a member of the House Financial Services Committee, introduced a Federal Job Guarantee Resolution that builds upon the legacy of civil rights movement leaders such as Coretta Scott King and Sadie Alexander (H.RES. 145, 2021).

#### 3.4. A new green monetary policy framework

An acknowledgement and (re)turn to fiscal policy as an effective means for combating both unemployment and inflation significantly expands the methods available to the U.S. government for leading the public through an era of fossilflation and an urgently necessary energy transition. This repudiates the notion that the Federal Reserve can on its own actually manage the economy through interest rate policy in the public's best interest. That said, it's also important to acknowledge that the Fed nonetheless contributes to vital administrative operations like securing a safe and stable payment system by clearing the daily payments that go through the banking system. By reframing inflation as a politics of qualitative resource coordination, creation and constraints, as opposed to a crude quantity theory of money, the Federal Reserve can also be provided with a different and more effective set of tools to develop a green monetary policy.

First, it is important to address the common debate over "central bank independence" which is one of the common push backs against the suggestion that monetary policy should be reformed. The claim stems from the notion that monetary policy, or interest rate management and the selling and purchasing of assets, is a pure technical responsibility of the Federal Reserve that must be separated from the political process. It is commonly believed that the outcomes of good monetary policy precisely rely on this independence. However, a detailed history (2014) of Federal Reserve governance describes the Fed as an independent government agency much like the Federal Trade Commission (FTC), the National Labor Relations Board (NLRB), and the Securities and Exchange Commission (SEC).

Interpretation and execution of Federal Reserve policy and governance, including its auditing, have been heavily debated and modified over history, especially in periods of big mobilizations and emergencies, with much of today's consensus set by the Treasury-Fed Accord of 1951. Yet as a response to the financial crisis, The Dodd-Frank Act created the Financial Stability Oversight Council, chaired by the Treasury Secretary and including heads of agencies and the Fed, to oversee the financial sector. Moreover, Dodd-Frank extended regulatory authority and responsibility to the Fed over the financial system as a risk management protocol. It also now requires prior approval by the President, the Treasury Secretary, and or Congress for various Fed interventions. Regardless, Presidential administrations have been largely reluctant to criticize the Fed's decisions on monetary policy (Wray, 2014).

One of the common misconceptions is that discretionary authority over monetary policy tools and targets as well as insulation from day to day politics equates to absolute separation and or privatization from government. In reality, the Federal Reserve was created by Congress through the Federal Reserve Act of 1913 and its tools and targets are accompanied by policy goals set by Congress, specifically its dual mandate for full employment and price stability. The President appoints the Reserve Board members and the Chairperson and ultimately, its authority and delegated policy powers are subject to review and accountability by Congress. As Bruce MacLaury, former President of the Federal Reserve Bank of Minneapolis, says of the Federal Reserve's independence:

"Let's be clear on what independence does not mean. It does not mean decisions and actions made without accountability. By law and by established procedures, the System is clearly accountable to congress—not only for its monetary policy actions, but also for its regulatory responsibilities and for services to banks and to the public. Nor does independence mean that monetary policy actions should be free from public discussion and criticism [...] Nor does it mean that the Fed is independent of the government. Although closely interfaced with commercial banking, the Fed is clearly a public institution, functioning within a discipline of responsibility to the "public interest." It has a degree of independence within the government—which is quite different from being independent of government." (MacLaury, 1977)

Importantly, the Federal Reserve is not and cannot be operationally independent from the Treasury. As Scott Fullwiller (2008) has demonstrated, there is always overlap between monetary and fiscal policy processes. MacLaury (1977) also reiterates this saying, "The central bank is in constant contact with the Treasury Department which, among other things, is responsible for the management of the public debt and its various cash accounts." In other words, the Fed and Treasury are in an ongoing state of coordination between one another and with the financial system to ensure the stability of payment system operations. And while monetary policy is typically associated with interest rate and asset purchase and sale policy, the Treasury plays a key role in monetary policy's implementation by deciding what type of securities it issues. Moreover, congress has always had the authority to grant new instruments to different or additional administrative agencies to accomplish or facilitate the goals of monetary policy (Wray, 2014).

The reality is that much of today's debate about central bank independence comes down to what Wray (2014) calls "vague hand-waving". There is no reason to believe that how we do monetary policy now is the only feasible way or that it is even efficient or ideal. By putting that into context, the importance and usefulness of rethinking monetary policy in the age of fossilflation and climate breakdown becomes clearer. Despite helpful and important national and international regulatory reforms and new standards set after the great financial crisis, the U.S. has nonetheless largely repressed and forgotten the importance of direct financial regulation as a set of primary monetary policy options.

These reforms have still done little to help shift the allocation of physical resources or labor power in accordance with broader public purposes, such as distributive justice and environmental sustainability. Moreover, lending and credit remains predominantly allocated towards sectors like the fossil fuel industry due to perceived profitability, in spite of the uncertainties of climate breakdown and collapse. This will likely remain the reality and involve an allocation of resources that will utterly fail to put us on track with promises by world leaders to keep the world from heating beyond a certain level.

Yet the financial system enjoys the special privileges afforded by public law in the form of bank charters and direct access to the Fed's lender of last resort public monetary power (Hockett and Omarova, 2017). In essence, the power of money creation has been predominantly franchised away from the democratic process and public purpose towards private banks and other for-profit financial institutions. This is relevant for climate change given JP Morgan Chase's Jamie Dimon's recent declarations to congress that stopping oil and gas funding would be the "road to hell for America" (Beals, 2022). The billionaire chairman and CEO oversees the largest procurement of loans and other capital to traditional energy sources. Reorienting the limits to public budgets through the idea of fiscal space centers resource and productive capacity as a matter of socially and qualitatively determined inputs and outputs. Therefore, the private for-profit financial system is contributing to the usage of valuable fiscal space required for environmentally sustainable ends.

A detailed and comprehensive report produced by Our Money, U.S in partnership with Public Money Action (Tankus, 2022) lays out a new monetary policy agenda drawing on the concept of non-fiscal "pay fors" as a method for maintaining price stability amidst the need for a green and just transition. The report proposes a mission oriented approach to financial regulation in order to make "explicit normative judgments about resource allocation that are different from the ostensibly "technical" or "riskfocused" judgments regulators make now". By leveraging financial regulation, monetary policy can more effectively offset any inflationary pressures from urgently necessary expansionary fiscal policy.

In practice, financial regulation as budgetary pay-fors are proposed through direct qualitative and quantitative credit regulation. Direct qualitative credit regulation is divided into: 1) the quality of borrower, which includes the quality of collateral the borrower has to offer, intended to reduce the prevalence and level of personal overindebtedness and asset price inflation; 2) the quality of sector regulations, which set standards on specific industries such as restricting bank credit to the fossil fuel industry amidst a climate crisis; and 3) the quality of activity regulations, which sets standards on activities from bank lending such as mergers and acquisitions in order to limit inflation from market concentration and power (Tankus, 2022, pp. 19-21).

Direct *quantitative* credit regulations allow for a more precise control over lending than the qualitative type in that they "limit the dollar value of deposits or other money equivalents created by individual banks or bank-like financial institutions, either in absolute terms or in relation to total or average credit outstanding". The use of credit ceilings prevents individual banks from taking too many risks and potentially becoming undercapitalized as well as stabilizing the level of demand consistent with the dual mandate of full employment and price stability.

Tankus (2022) custom designs this new monetary policy framework for the scope of viable political possibility, such as the Build Back Better agenda proposed by the Biden Administration or the more ambitious Green New Deal program of the Markey-Ocasio Cortez resolution. The Build Back Better strategy would not need to embrace the full suite of credit regulatory tools nor be required to integrate non-fiscal pay-fors into the budgetary process, such as through inflation targeted CBO scores. Instead, it would focus on regulating consumer credit, such as personal debt, to finance household goods and services like housing, cars, education, and more. While not internalizing credit controls into the budgetary process, it would reframe the inflationary offset debate away from neutralizing or reducing federal deficits coupled with interest rate hikes and instead towards tighter financial regulation.

The more ambitious (and ultimately necessary) Green New Deal strategy explicitly problematizes the framing that Federal Reserve determined low interest rates are the only time it is viable and worth pursuing big climate investments. So long as the Federal Reserve is given discretion over demand management through the lowering and raising of interest rates, it is likely to render important climate investments unlikely. Relying on interest rate hikes would threaten financial stability by increasing personal debt burdens. As a blunt tool, it is simply unlikely interest rate led monetary policy will contribute to accelerating the needed energy transition. Interest rate hikes may even hurt competitors in green energy to the benefit of the fossil economy. Lastly, given a world economy driven by dollar denominated debt, interest rate hikes would significantly obstruct the scale of decarbonization required internationally.

Instead, the Federal Reserve can be given discretionary authority to draw on a number of demand management regulatory tools in order to more effectively meet its dual mandate and climate targets. This can be achieved by: 1) encouraging saving through liquidity requirements on non-financial entities; 2) reforming the federal chartering of non-financial and foreign corporations with specific stipulations on liquidity, reserves, and climate-calibrated capital requirements; 3) expanding the Federal Reserve's collateral schedule and discount window to allow non-banks access to Fed borrowing; and 4) regulating credit extended by "Financial Net-Worth Pools" — like pension funds, endowment funds, and insurance companies — through qualitative and quantitative lending standards on asset choices (Tankus, 2022, pp. 23-31). Non-bank access to Fed borrowing should be subject to appropriate collateral and stringent quantitative and qualitative standards, in order to avoid the instability that can come from the shadow banking system under conditions of restricted bank credit.

In lieu of these recommendations, the New Monetary Policy Framework recommends that the short term interest rate target of the Federal Reserve be permanently set at zero. Interest-bearing government instruments could still be carefully designed to fit specific purposes, such as savings bonds or semi-illiquid interest-bearing accounts intended for households to boost savings. Providing interest-earning safe assets to institutional investors, like pension funds or insurance companies, could nevertheless continue although be explicitly acknowledged as a subsidy and include tighter portfolio regulations. Critics have characterized permanent zero interest policy as "excessively loose" monetary policy. But as argued, it is important to look beyond the short term interest rate target, or yield curve of government liabilities, to make an accurate judgment. Specifically, the claim risks ignoring the role of credit and financial regulations altogether as a more careful and intentional tool for mitigating risk and volatile financial speculation (Tankus, 2022, p. 32).

Coupled with the right fiscal and legislative reforms, tighter regulations that accelerate the scaling down of bloated, dirty, and predatory industries such as mass incarceration, defense, shadow banking, realestate monopolies, and fossil fuels, ultimately free up resources to be repurposed towards strengthening more cost-effective sustainable industries. In the case of fossil fuels, this would require careful planning given immediate energy needs but nonetheless offers an important medium to long-term strategy (Fullwiler et al., 2019). For this reason, there are growing calls for the nationalization of fossil fuel production to immediately lower prices, secure energy services, and ultimately phase out fossil fuels as rapidly as possible (Pollin, 2022).

As a way of accelerating a green transition that complements the core of fiscal investments, a green lending scheme would align with a dual mandate of full employment and price stability in today's era of climate crises. Various proposals have been put forward in Europe that are worth considering for U.S. application (van't Klooster and van Tilburg, 2020). Positive Money's Green Central Banking Scorecard (Eames and Barmes, 2022) emphasizes the importance of recognizing environmental breakdown as relevant to monetary policy, and taking steps to green central banks' market operations and collateral frameworks, and account for climate-related financial risks in the Basel Framework. Another report by Reclaim Finance (Schreiber et al., 2022) integrates a clean energy transition into the central bank price stability mandate and lines up operations with broader climate goals, which in the U.S. context could include the IPCC's goals or a hemispheric agenda across the Americas.

Comprehensively shifting the federal government's price stability framework in a way that spreads authority beyond the Fed as the sole holder of the price stability mandate would require introducing some institutional innovations. An important first step would be establishing an Inter-Agency Council on Price Stability (Stewart, 2022; Tankus, 2022, pp. 35-36), which would include labor representation, that would enable preemptive inflation mitigation policy measures, such as anticipating port and infrastructure vulnerabilities or potential supply chain bottlenecks. A further expanded role for labor unions in corporate governance and industrial planning would do well to increase the accuracy of information on economic conditions and workforce capacity. Moreover, fiscal policies, including automatic stabilizers, should be strengthened by a higher yet reasonable level of discretionary authority provided to the Treasury, or another agency, that would be deployed towards targeted investments in capacity building for inflation mitigation and prevention.

In addition to the mentioned repurposing of advisory agencies and offices towards appropriate use and dissemination of expertise, the public sector's administrative capacity must be adequately supported through the necessary staffing and funding to carry out the public interest. Lastly, federal legislation to support and enable the democratization of economic life at municipal levels through various forms of participatory governance and deliberation would go a long way to providing more accurate society-wide institutional knowledge and trust. Ultimately, for the U.S. to take price stability seriously in the context of a rapidly worsening ecological crisis, it must boldly remake both fiscal and monetary policy for a 21st century green industrial policy that can secure quality of life and contribute to maintaining a habitable planet.

### Conclusion

Looking back over the last two years of pandemic politics and looking forward into an increasingly uncertain future can certainly invoke a sense of dread. This is only compounded by the increasing international resonance of disturbing conspiracy theories, pervasive misinformation on social media, and authoritarianism impulses mainstreamed in a way not seen since before the second world war. But taking a holistic perspective that recognizes the inherent constitutive and interdependent nature of society, economy, and ecology, provides us with a clear path towards a better way. Continuing to obscure the political nature of economic policy under a veil of orthodoxy that posits false antagonisms between good jobs and the environment and between a basic guaranteed level of dignity and stable prices simply cannot provide an adequate response to the challenges we face.

For democracy to survive, improve, and thrive, the United States must do its part and hold itself accountable by being honest with the public about what drives the costs they face, who has benefited and holds power, and how accelerating climate breakdown would make things infinitely worse. But most importantly, we must be honest about the options available to us and how they can improve quality of life for the vast majority of communities. By exposing the many myths of conventional inflation analysis and policymaking, this report has laid out a better way that brings normative questions about what we choose to invest in and care for as well as what kind of relationship we want with the various ecosystems we inhabit squarely to the forefront of our attention. In this sense, not only is there an alternative, but it is here for us to take the reins and champion.

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