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U.S. Unemployment insurance through the Covid-19 crisis

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ABSTRACT

The Unemployment Insurance (UI) system in the United States has played a decisive lifeline role in effectively mitigating the economic and social impact of the Covid-19 pandemic, which prompted the largest expansion of UI programs in history, one that is unprecedented in scope, scale and cost. However, the crisis has once again exposed some well-known challenges of the program, perhaps best epitomized by the steady decline since the 1980s of both the reciprocity rate and the wage replacement rate, which is partly related to the UI system's funding structure. As a result, on the eve of the pandemic less than one in three unemployed workers used to collect UI benefits – of lower amounts and often for shorter periods of time than before – despite that the average duration of unemployment had almost doubled in the aftermath of the Great Recession. The pandemic has also laid bare additional shortcomings – most notably in the effectiveness of the UI delivery infrastructure to provide timely and accurate payments – which have prompted further calls for modernizing the UI system. The objective of this paper is threefold: first, after a brief description of the main structural characteristics of the UI system, it compares the role played by UI in mitigating the impact of the 2008–09 Great Recession and the 2020 Covid-19 pandemic; second, it reviews the empirical evidence from the pandemic on potential demand-side (countercyclical stabilization) and supply-side (job-search disincentives) effects of emergency extensions of UI programs. Finally, it discusses the main lessons that the expansion of UI programs to respond to the pandemic can offer to inform – and enrich – the debate on whether and how to reform the UI system. The experience with the UI system provides fundamental lessons that can usefully inform the debate on whether and how to introduce – for example in Europe – a common unemployment insurance scheme for macroeconomic stabilization.

1. Introduction

The adequacy of a country's Unemployment Insurance (UI) system has taken on distinctive importance during the Covid-19 pandemic and the attendant unprecedented uncertainty surrounding the economic outlook at both the national and global level. In the United States, the UI system has once again played a decisive role in effectively mitigating the massive economic and social impact of the pandemic; the latter prompted the largest expansion of UI programs in history, one that is unprecedented in scope, scale and cost. By August 2021, UI benefits had provided a financial lifeline for 53 million workers while helping stabilize the economy with an injection of more than \$800 billion (U.S. Department of Labor-DOL, 2021c). As a result, UI was the most important single element of the fiscal response to the pandemic (Boesch et al., 2021).

The UI system was first introduced as part of the Social Security Act, signed into law by President Roosevelt on August 14, 1935. UI is a form of social insurance established as a federal-state partnership, based upon

federal law but administered by states under their own laws. The federal government sets a national institutional (legislative and administrative) framework – under the oversight of the U.S. Department of Labor; states (defined as the 50 states plus the District of Columbia, Puerto Rico and the U.S. Virgin Islands) establish most of the program's key parameters, namely eligibility criteria, benefit amounts and durations, tax rates and taxable wage bases.

The UI system has three main statutory objectives: 1) providing adequate but temporary income support to workers who become unemployed “*through no fault of their own*”; 2) automatic stabilizer for the macroeconomy, i.e., a countercyclical stimulus to mitigate recessions; 3) stabilization of employment through the UI “experience rating” system, which aims at discouraging layoffs by employers.

Against this background, even before the pandemic there had long been ample consensus among many scholars and policymakers alike that the UI system had not been adapted and modernized – notably at the federal level – to address the changes over the past few decades in the structure of the U.S. economy and the characteristics of the labor

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market. Ultimately, these changes have resulted in more and more unemployed workers – especially self-employed and part-timers – who often fail to qualify for UI benefits; a key reason for this unwarranted outcome is that the states' UI programs frequently set strict eligibility criteria based on employment history – e.g., minimum requirements in terms of work time and wage earnings.

The current UI system features a distinctive duality.

On the one side, the state-based regular UI system – with its “patchwork” of 53 different state programs and rules – is often faulted for falling short of providing in normal times adequate protection and income support to unemployed workers. As a result, well before the Covid-19 pandemic, many observers believed that the ability of the UI system to achieve its statutory objectives had been reduced: this is perhaps best epitomized by the fact that in 2019 – on the eve of the pandemic – less than one in three unemployed workers were receiving UI benefits. Coverage and adequacy of benefits – in terms of level and duration – as well as sufficiency of funding have long been identified as the overarching (and intertwined) issues of the regular UI system.

On the other side, as demonstrated in unprecedented ways during the Covid-19 pandemic, the federal-based emergency UI programs (financed by the general revenues), which in recessionary times complement the state-based UI programs, are usually remarkably effective. However, because most of these emergency programs need to be activated by discretionary legislative action, they are exposed to lengthy political negotiations and may thus suffer from implementation lags, which might also diminish their capabilities as (automatic) macroeconomic stabilization mechanisms. Besides, there are concerns that expanding UI benefits may generate job-search disincentives and moral hazard effects that unduly prolong unemployment.

The distinctive challenges brought about by the Covid crisis – and the unprecedented and innovative temporary expansion of the UI programs – have not only rekindled but also enriched the debate on how to reform the UI system to address its long-standing weaknesses. In this context, issues related to the equity of the UI system – primarily in terms of income, race, gender and age – are now playing a more prominent role that appropriately informs the design of the reform proposals.

With all due differences, the experience with the UI system in the United States provides fundamental lessons that can usefully apprise the debate on whether and how to introduce in Europe a common unemployment insurance scheme for macroeconomic stabilization. Since European countries have already in place national unemployment insurance programs, the debate mostly revolves around the case for setting up a European unemployment re-insurance scheme that would top up those national programs while including safeguards against risks of redistribution and moral hazard (Spadafora, 2019; O'Leary et al., 2020).

The objective of this paper is threefold: first, after a brief description of the main structural characteristics of the UI system in the United States, it compares the role played by UI in mitigating the impact of the 2008–09 Great Recession and the 2020 Covid-19 pandemic; second, it reviews the empirical evidence from the pandemic on potential demand-side (countercyclical stabilization) and supply-side (job-search disincentives) effects of emergency extensions of UI programs. Finally, it discusses the main lessons that the expansion of UI programs to respond to the pandemic can offer to inform – and enrich – the debate on whether and how to reform the UI system.

2. Structural characteristics of the UI system

As a federal-state partnership, the UI system subjects states to some minimal federal requirements to ensure both that the program provides a basic level of protection for eligible workers and serves as a macroeconomic stabilizer in economic downturns (Stone and Chen, 2014).

Within these basic safeguards, states pay for the actual benefits provided to workers and – critically – enjoy extensive flexibility in setting such key parameters as eligibility criteria, benefit levels and duration as well as the tax structure (e.g., state taxable wage base and

tax rates), which provides most of the funding to the UI programs. As a result, UI programs vary widely across states in terms of access, coverage, level of benefits and duration.

The federal government pays only for the administrative costs of UI; however, during recessions it has historically fully funded the emergency programs implemented to mitigate the impact on workers who lose their jobs

A key feature of the UI system is that it includes three main levels of benefits,¹ of both permanent and temporary (emergency) nature: 1) regular state UI benefits; 2) federal-state Extended Benefits (EB); 3) emergency federal benefits.

2.1. The state's regular UI program

Almost all wage and salary workers are covered by the state's regular UI program, which provides *partial* and *temporary* financial assistance to unemployed workers – replacing about half of their previous wages, up to a maximum benefit amount – while they *actively* look for another job. On the eve of the Covid-19 pandemic in February 2020, average weekly benefits were about \$385 nationwide, but ranged from a low of \$215–220 in Louisiana and Mississippi to \$550 in Massachusetts².

These differences reflect one of the most distinctive features of the UI system, namely the high degree of discretion given to states to set key requirements for UI benefits such as their level, duration and eligibility criteria. Despite the substantial variation of these parameters across states, commonalities do exist. Workers usually qualify if they: i) are unemployed “*through no fault of their own*”, as determined under each state law; ii) meet *monetary* requirements, i.e., state-specific minimum earnings and employment time during the so-called “base period” before becoming unemployed or partially unemployed; iii) meet any *non-monetary* requirements, notably the so-called “work search requirements”: ability and availability to work, actively seeking work.

While from the late 1960s to 2011, the duration of UI benefits in regular UI programs was at least 26 weeks in all states, in the aftermath of the Great Recession, nine states reduced the maximum number of payable weeks (or capped them based upon the state's unemployment rate), given exceptionally high amount of UI benefits paid during the

Table 1
UI Outlays by program (\$bn).

	Total	State UI	Extended Benefits	EUC08	PEUC	PUA	FPUC
2007	32.4	32.4	–	–	–	–	–
2008	51.0	43.1	–	7.9	–	–	–
2009	130.3	79.6	6.5	44.2	–	–	–
2010	138.0	58.5	9.3	70.2	–	–	–
2011	106.0	47.2	10.2	48.6	–	–	–
2012	82.9	43.1	3.0	36.9	–	–	–
2013	61.9	39.4	–	22.6	–	–	–
2014	34.9	34.9	–	–	–	–	–
2015	32.0	32.0	–	–	–	–	–
2016	31.7	31.7	–	–	–	–	–
2017	29.9	29.9	–	–	–	–	–
2018	27.5	27.5	–	–	–	–	–
2019	27.3	27.3	–	–	–	–	–
2020	539.3	143.6	4.2	–	28.6	79.7	283.2
2021	317.6	44.3	8.5	–	56.0	50.9	157.9
2022	24.5	24.3	0.3	–	–	–	–

Source: author's calculations on data from U.S. Department of Labor.³

¹ The system also includes a few special state and federal programs, for example unemployment compensation for federal employees (UCFE) and for newly discharged veterans (UCX), disaster unemployment assistance (DUA), and short-time compensation (STC).

² Department of Labor, Monthly Programme and Financial Data.

long downturn (GAO, 2015; Table 1; Isaacs, 2019). As a result, on the eve of the Covid-19 pandemic, in eight states the duration was fewer than 26 weeks – to as low as 12 weeks in Florida and North Carolina in times of low unemployment – with 20 weeks being the new maximum in six of such states. However, the trend was reversed in response to the Covid-19 pandemic, as in 2020 some states increased the maximum number of weeks payable in regular UI programs. Currently, twelve states provide less than 26 weeks and two states (Massachusetts and Montana) provide more (30 and 28 weeks) (CBPP, 2023).

The state regular UI program is almost totally funded by taxes on employers, something that is hailed as one of the system's key unique features; only three states (Alaska, New Jersey, and Pennsylvania) collect taxes also from workers (DOL, 2020b, p. 2–4). More specifically, the regular UI program is financed primarily by state payroll taxes under the State Unemployment Tax Act (SUTA) and, to a lesser extent, by federal payroll taxes under the Federal Unemployment Tax Act (FUTA).

2.2. The extended benefits (EB) program

The permanent Extended Benefits (EB) program was enacted by Congress with the Federal-State Extended Unemployment Compensation Act of 1970 (EUCOA) to provide – during recessionary periods and in high-unemployment states – additional weeks of benefits to workers who have exhausted their regular state UI benefits before they find another job.

The EB program is normally co-financed by the federal government and the states on an equal 50–50 basis. However, beginning with the Great Recession, and more recently during the Covid-19 pandemic, the federal government stepped in to fully finance the EB program.

A key feature of the EB program is its automatic activation, which depends on a few statutory and optional “triggers” (Isaac and Whittaker, 2014b; Bauer et al., 2020) that allow states to provide up to 13 or 20 weeks of EB when the state *insured unemployment rate* (IUR) or the *total unemployment rate* (TUR) reach some thresholds high.

EB triggers have well-known drawbacks, with implications for income support and countercyclical capabilities of UI. A long-standing flaw is the so-called “triggering off” problem, i.e., the fact that the triggers may result in an automatic premature deactivation of the EB program in times when the unemployment rate remains high and sustained but not increasing, (Isaacs and Whittaker, 2014b).

This problem was magnified in the aftermath of the Great Recession, which featured a sluggish recovery and large numbers of states simultaneously experiencing a protracted period of very high unemployment, notably its long-term component. In fact, long-term unemployment in the aftermath of the Great Recession didn't begin declining until 2012, well after the end of the recession. Against this background, Congress had to step in twice, in 2010 and again in 2013, to keep EB in place, by giving states the option of temporarily extending from two to three years the “lookback” period for the IUR and TUR triggers (Bauer et al., 2020).

The triggering off problem resurfaced – with somewhat new nuances – in the recent recession caused by the Covid-19 pandemic. Because of the swift and severe nature of the economic shock from the pandemic, the TUR and IUR triggers have automatically activated the EB program in nearly every state, in some cases less than one month after the passage of the CARES Act (Bauer et al., 2020). By June 2020, 52 states had EB on (the only exception being South Dakota).

Despite this unusually responsive triggering on of EB, the requirement that the IUR be rising remained problematic throughout the pandemic crisis, although it was mitigated by the fact that unemployment declined more rapidly than during the Great Recession. The unemployment rate peaked at a record level of close to 15 percent in April 2020, but by March 2022 had virtually returned to the pre-pandemic level (3.5 percent in February 2020). As a result, by December 27, 2020, EB was active in 24 states (from 52 in June 2020) and by April 2022, no state had EB on.

2.3. Temporary UI programs

The recognition that, because of design flaws, the EB program has been unable to respond rapidly and effectively to recessions, has led federal lawmakers to enact temporary federally funded supplementary programs on an *ad hoc* basis in every recession since 1958. Before the pandemic-driven recession in 2020, Congress had acted eight times – in 1958, 1961, 1971, 1974, 1982, 1991, 2002 and 2008 – to establish temporary UI programs to provide additional weeks of benefits to individuals who had exhausted state UI benefits (Isaacs and Whittaker, 2014b).

It is important to note that unemployed workers usually qualify for EB and temporary emergency programs only if they are initially found eligible for state UI benefits and are not disqualified during the time they receive regular benefits. These requirements may undermine the coverage of UI programs as a source of income support insofar as states that restrict access to regular UI benefits might make ineligible workers unable to receive benefits of any type (i.e., not only regular, but also extended or emergency ones).

2.3.1. The 2008 emergency unemployment compensation program

The Emergency Unemployment Compensation (EUC08) program was created on June 30, 2008 to provide benefits to individuals who had exhausted regular state UI benefits. Although the EUC08 program shared many features of previous emergency programs, an important innovation was that the EUC08 was initiated much earlier in the recession than were previous emergency programs, thereby providing it with a potentially greater stabilization role (Nicholson and Needels, 2011).

The EUC08 program was fully funded by the federal government and was modified 11 times (Isaacs and Whittaker, 2014a). It stood up in comparison to other emergency UI programs in that it lasted more than 5 years, until December 28, 2013 – as last extended by the American Taxpayer Relief Act of 2012 – mirroring the unprecedented length of the Great Recession.

At its peak, between November 2009 and September 2012, the four “tiers” of EUC08 provided up to 34 weeks of emergency federal benefits in all states and up to 53 weeks in states with a Total Unemployment Rate of 8.5–9.0 percent or higher (up to 63 weeks between February 2012 and May 2012 in states where EB was not active). As a result, in states with high unemployment rates and where all four tiers of EUC08 benefits were available, eligible unemployed workers could receive a total maximum of 99 consecutive weeks of UI: 26 weeks of regular, 53 weeks of EUC08, and 20 weeks of EB (Isaac and Whittaker, 2014a; Table 1; Needels et al., 2016).

The extension by up to 73 weeks of federal benefits payable under EUC08 and EB combined represented the longest potential duration of benefits in the history of the UI system (Needels et al., 2016), far exceeding prior extensions of federal benefits: in fact, before the Great Recession no temporary federal program had provided more than 33 weeks of benefits (Weidinger, 2020b, p. 7). The extension reflected the fact that – as noted before – the Great Recession and its aftermath were characterized by the longest average unemployment duration since World War II, which exceeded 40 weeks for 7 months in 2011 and 2012, almost twice as high as the average unemployment duration at any other point since that War (Needels et al., 2016).

³ State UI: Monthly Programme and Financial Data <https://oui.doleta.gov/unemploy/claimsum/5159report.asp>; EB: UI Data Summary https://oui.doleta.gov/unemploy/data_summary/DataSum.asp; EUC08: ET Financial Data Handbook 394 <https://oui.doleta.gov/unemploy/hb394/hndbkpt.asp>; PEUC-PUA-FPUC: Unemployment Insurance Data, CARES Act funding to States https://oui.doleta.gov/unemploy/docs/cares_act_funding_state.html

2.3.2. The pandemic UI programs in the 2020 cares act

The Coronavirus Aid, Relief and Economic Security Act (CARES Act), passed by Congress on March 27, 2020, took some of the boldest actions to mitigate the human hardship and economic damage caused by the Covid-19 pandemic; it resulted in an unprecedented expansion of UI programs, eligibility and level of benefits.

The legislation has three major UI components, which were initially set to expire on December 31, 2020 (DOL, 2020c):

- 1 Additional weeks of federally funded benefits (i.e., an extension of the potential benefit duration-PBD) provided by the *Pandemic Emergency Unemployment Compensation* (PEUC), which was the current version of the extra weeks of emergency federal benefits (like EUC08) that policymakers had enacted in past recessions. Importantly, PEUC was not linked to a state's unemployment rate. It originally provided 13 weeks of federally funded UI to workers who had exhausted their regular state benefits, to be paid ahead of any EB (in line with previous emergency programs). The December 2020 Continued Assistance Act (CAA) extended the maximum number of PEUC weeks a worker could receive from 13 to 24. The March 11, 2021 American Rescue Plan Act (ARPA) further increased the maximum number of weeks to 53 and extended PEUC's duration through September 6, 2021.
- 2 A federal supplement to UI benefits: the *Federal Pandemic Unemployment Compensation* (FPUC) provided \$600 a week to supplement the weekly payments determined under state UI laws for all programs (regular UI, PEUC, EB, and PUA). FPUC initially expired on July 31, 2020. Given the lack of political agreement on extending the FPUC, the "Lost Wages Assistance" program, authorized by then President Trump's memorandum of August 8⁴, introduced a temporary \$300 weekly supplement for 5–6 weeks after July 31. The FPUC applicability gap lasted until December 26, when it was re-established by the December 2020 CAA and extended through March 14, 2021, with a reduced supplement of \$300. The March 2021 ARPA further extended this \$300 supplement through September 6, 2021.
- 3 An expansion of coverage to extend unemployment assistance to the many workers who normally are not eligible for regular state UI benefits: the *Pandemic Unemployment Assistance* (PUA) applies primarily to the self-employed, independent contractors ("gig" workers), workers seeking part-time work, those who do not have a long enough work history, and those who must leave work for compelling family reasons. The December 2020 CAA increased the maximum number of PUA weeks a person could receive from 39 to 50 and extended the program's duration through March 14, 2021. The March 2021 ARPA further increased the maximum number of weeks to 79 and extended PUA's duration through September 6, 2021.

While the PEUC closely resembles the expansion of federal emergency unemployment benefits enacted in previous recessions, the expansion of UI eligibility and generosity resulting from the PUA and the FPUC is noteworthy in scope, scale and cost.

3. UI performance during the great recession and the Covid-19 pandemic

The Great Recession – officially lasting from December 2007 to June 2009 – was the longest and most-severe one since World War II. Between December 2007 and October 2009, the unemployment rate doubled to 10 percent and did not fall below 5 percent until late 2015; by February

2010, nonfarm payroll employment had fallen by about 8.7 million jobs from its pre-recession peak of January 2008, which was regained only in the spring of 2014. Because of this sizable and long-lasting adverse impact on the labor market – which raised concerns of a "jobless" recovery – the Great Recession prompted the first major expansion of UI programs (Nicholson et al., 2014, p. 188).

Total weekly UI recipients – including both regular state and emergency federal programs – started rising in late 2007, from around 2.2 million on average in September-October, and accelerated substantially in the summer of 2008, hitting 7 million by year-end (Fig. 1). UI recipients kept increasing in 2009, remaining above 10 million per week between November 2009 and May 2010 and reaching a record-high of 12 million in January 2010.

Regular state UI programs borne the brunt of the assistance through the summer of 2008, covering 3.1 million unemployed per week in the first three quarters of that year (referred to as "insured unemployment" in the statistics of the Department of Labor and measured by the so-called "*continued UI claims*"). The EUC08 program began operating since June 2008 and was the key vehicle for the federal government to provide supplementary unemployment assistance, covering up to 50 percent of total UI recipients in 2010 – 5.4 million weekly at its peak between January and May – and close to 30 percent (1.3 million) when it expired in December 2013.

It is noticeable that by the time the EUC08 program expired at end-2013, total weekly UI recipients were still twice as much higher – 4.4 million on average in December – than on the eve of the Great Recession; they would go down to below pre-recession levels only by the third quarter of 2015.

The EB program covered weekly about 1 million unemployed workers at its peak in September-October 2009. Overall, between July 2008 and September 2013, nearly 24 million unemployed workers benefitted from the EUC08 and EB programs (Council of Economic Advisers, 2013).

The impact of the Covid-19 pandemic led to an expansion of UI programs that is unprecedented in scale, scope and cost, despite that the recession lasted only two months and was thus the shortest in history. Between February and April 2020, nonfarm payroll employment fell by almost 22 million jobs; however, by June 2022, employment had broadly regained the pre-pandemic peak of February 2020.

On the eve of the pandemic, regular state UI programs – the first line of defense – had been covering 2 million unemployed workers per week (Fig. 2). The number of workers receiving state UI benefits ("*continued UI claims*") increased from 2 million in the first week of March 2020 to 8.3 million in the last week of the same month, reaching a record-high of 23 million in the second week of May. Because of the distinctively rapid and unprecedented nature of the Covid-19 shock, at the very beginning regular state UI programs had to bear the brunt of the sudden spike in unemployment that followed the widespread introduction of lockdowns in spring 2020.

Even more striking is the increase of unemployed workers receiving both state and federal UI support. Following the activation of federal emergency programs (EB, PUA, PEUC) by early April 2020, total UI claims peaked at over 33 million weekly in June 2020 (from 2 million in the first week of March) and remained above 15 million until May 2021, more than one year into the pandemic.

The federal "pandemic" programs brought about an unprecedented expansion of UI coverage: since November 2020, PUA and PEUC covered around 70–75 percent of total unemployed workers receiving UI benefits, with a peak of almost 17 million in August 2020. When they expired on September 6, 2021, over 8.5 million workers were still receiving benefits from PUA and PEUC, as opposed to only 2.4 million from the regular state UI (Fig. 2). These pandemic programs are the driving reason why the UI system has been able to deliver such wide assistance during the Covid-19 downturn, overcoming the narrow eligibility of traditional UI benefits. In the same vein, the FPUC added a substantial increase in the level of benefits. Reflecting the expiration of the

⁴ Memorandum Authorizing the Other Needs Assistance Program for Major Disaster Declarations Related to Coronavirus Disease 2019.

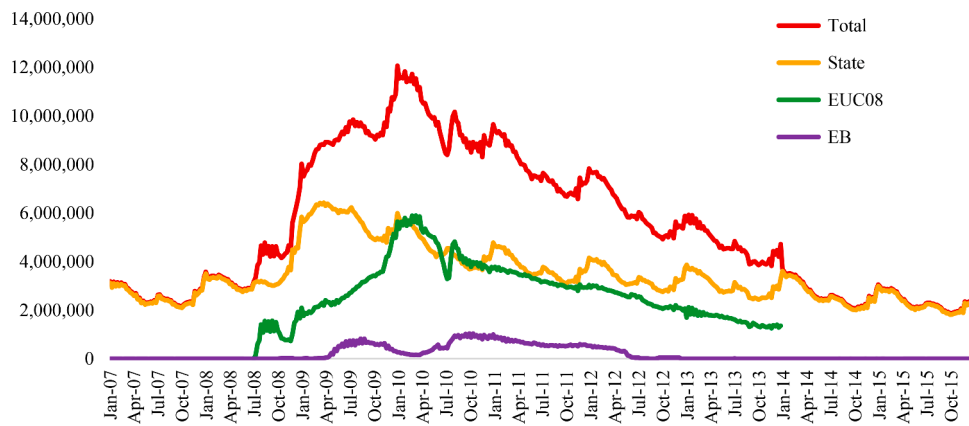


Fig. 1. UI recipients by programme 2007–15. Source: author's elaborations on DOL data: <https://oui.doleta.gov/unemploy/DataDashboard.asp>

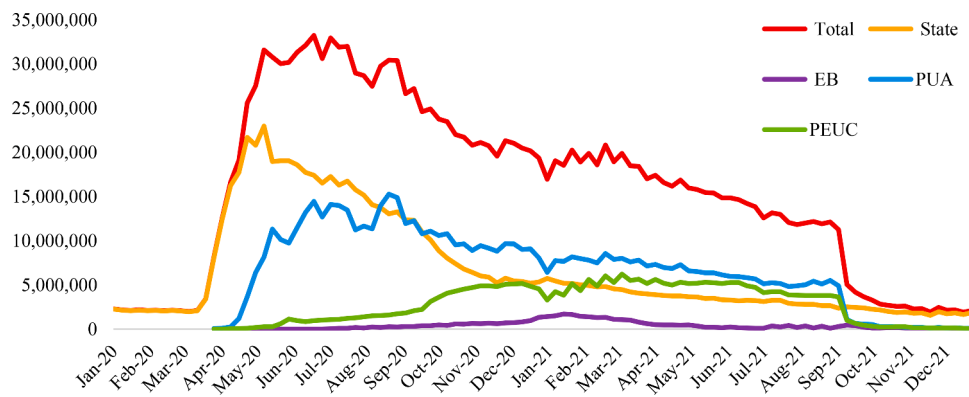


Fig. 2. UI recipients by programme 2020–21. Source: author's elaborations on DOL data: <https://oui.doleta.gov/unemploy/DataDashboard.asp>

pandemic emergency programs in September 2021, the number of workers receiving UI benefits dropped abruptly to a low of about 2 million weekly by December 2021, 90 percent of which from the regular state UI.

3.1. Costs of the pandemic UI programs

The unprecedented expansion of coverage, eligibility and level of UI benefits in response to the Covid-19 pandemic is mirrored by the massive increase of outlays. In 2020–21, total UI programs cost a cumulative of \$857 billion, of which about \$656 billion from the emergency pandemic programs (PUA, PEUC and FPUC), which expired on September 6, 2021. Regular state UI benefits cost \$188 billion, while EB outlays were limited to less than \$13 billion only (Table 1).

The scale of the exceptional pandemic support is best epitomized if one considers that the total cost of all UI programs in response to the Great Recession amounted to \$570 billion over six years (2008–2013); a key difference is that the largest share of the total cost (\$311 billion) was accounted for by the regular UI program; like during the pandemic, payments under the EB program were rather limited (\$29 billion) and a substantial share of the total cost derived from the emergency federal program – the EUC08 – whose price tag hit \$230 billion.

As previously noted, at its peak in February–March 2010 EUC08 was covering 5.9 million unemployed workers; at their peaks in August 2020, PUA and PEUC were covering 17 million such workers.

While the PEUC closely resembles the expansion of federal emergency unemployment benefits enacted in previous recessions – and its cost has been relatively contained (\$85 billion) – a key feature of the federal pandemic programs is that the largest sources of additional costs are the Federal Pandemic Unemployment Compensation (FPUC) and, to

a lower extent, the Pandemic Unemployment Assistance (PUA): these facilities brought about an unprecedented expansion of both UI eligibility and the level of benefits, at an overall cost of \$440 billion and \$130 billion, respectively, over 2020–21.

To appreciate the unprecedented generosity of the FPUC – initially set at \$600 weekly and then reduced to \$300 since December 2020 – it suffices to recall that in the 2009 ARRA stimulus package, weekly UI benefits were increased by just \$25 (Burtless, 2020). Another comparison points to the fact that, in January 2020, the nationwide average UI weekly benefit was about \$385: adding \$600 to this amount yields an average weekly benefit of \$985, an increase of about 155 percent (Burtless, 2020).

The overall cost of the three new federal pandemic facilities – \$656 billion – has greatly exceeded early estimates by the CBO (2020, p. 9), which in April 2020 had estimated that outlays for UI would increase “by a total of \$263 billion in 2020 and 2021 as a result of these provisions”, of which \$176 in 2020 for the FPUC alone. Given its extension from December 2020 through September 6, 2021, the cost of FPUC has grown because of the rising share of individuals exhausting the regular state UI benefits.

It is also remarkable to note that the CBO had estimated that the PUA program would be claimed by 5 million people at a total cost of \$35 billion in 2020 and 2021: in the event, about 15 million workers were receiving the PUA at its peak in August 2020, while the total cost of the program amounted to \$130 billion.

3.2. Financial impact of the great recession and the Covid-19 pandemic on state trust funds and UI taxation

State trust funds are used to pay UI benefits to eligible recipients of

the regular state UI programs. Each state deposits its SUTA revenues into its individual state UI trust fund account within the federal Unemployment Trust Fund (UTF) held at the U.S. Treasury. Although there are no federal requirements for the level of funds that should be kept in a state trust fund, states operate on a so-called “forward funding” basis, i.e., they build up reserves in expansionary years in anticipation of paying higher amounts of benefits during recessionary times (DOL, 2020a).

This notwithstanding, during deep or prolonged recessions SUTA taxes and UTF account balances may be insufficient to cover the states’ legal obligation to pay UI benefits: federal law thus provides a loan mechanism – through the Title XII program – whereby states may borrow funds from the Federal Unemployment Account (FUA), which is the federal loan account within the UTF.

As of June 2008 – on the eve of the Great Recession – state trust funds had an aggregate balance of \$40 billion and a negligible amount (less than \$180 million) of Title XII loans (Fig. 3). The impact of the Great Recession is dramatically visible in the fact that these loans peaked at \$47 billion in the first quarter of 2011, when the aggregate balance of state trust funds hit a low of \$7.6 billion (the net trust fund balance was thus close to -\$40 billion). It took more than two years for the net aggregate trust fund balance to go back into a small surplus (\$1.7 billion) in the second quarter of 2013. Moreover, in the aftermath of the Great Recession, states’ borrowing needs for their UI programs far exceeded the available federal UI trust fund reserves, forcing the FUA itself to borrow funds from the U.S. Treasury between 2008 and 2015 to finance loans to the state accounts (Whittaker, 2018).

The steady replenishment of the state trust funds since 2013 is visible in the fact that by the end of 2019 – on the eve of the Covid-19 crisis – these funds had a sizable aggregate balance of about \$76 billion (DOL, 2020a). The amount of outstanding Title XII loans stood at only \$63 million (owned by the U.S. Virgin Islands), down from a peak of \$47 billion in March 2011 (DOL 2020a). It is important to note that the solvency of state trust funds is a critical factor in determining the overall performance of the UI system in terms of coverage, duration and level of UI benefits.

The outbreak of the Covid-19 pandemic implied a massive spike in regular UI benefit payments by states, which in 2020 alone reached an all-time record of almost \$144 billion (Table 1), an amount close to half the entire cost of regular UI benefits during the six years of the Great Recession and its aftermath (2008–2013) and almost twice as much as the \$76 billion aggregate trust funds balance at the start of 2020. Similar to what happened in the aftermath of the Great Recession, the massive increase in UI benefits triggered by the Covid-19 pandemic forced states to begin borrowing again from the Federal Unemployment Account: in 2020, 22 states took Title XII advances (DOL, 2021a).

As a result, by December 2020 the aggregate balance of state trust funds (net of Title XII advances) had turned into a deficit of \$21 billion (DOL, 2021a); outstanding Title XII federal advances hit \$45.5 billion. The financial situation further deteriorated in the first quarter of 2021, when the net deficit peaked at \$27 billion.

At end-2020, five states (California, Illinois, Massachusetts, New York and Texas,) had a combined deficit of \$37.7 billion in their trust funds, a major turnaround from an aggregate surplus of \$11.5 billion at end-2019⁵.

However, contrary to what happened during the Great Recession, financial conditions of state UI trust funds have improved much faster in the aftermath of the Covid-19 pandemic. Reflecting the economic recovery and the attendant improvement of the employment situation, UI outlays declined to \$44 billion in 2021, compared to almost \$144 billion in 2020, and further down to only \$24 billion in 2022 (Table 1). As a result, the balance of state trust funds began to improve as early as the second quarter of 2021 and by end-2021 had increased to \$39 billion (from \$25 billion at end-2020) and further up to \$54 billion by the third

quarter of 2022; the net balance turned in a small surplus by the first quarter of 2022, which increased to \$27 billion by the third quarter of that year. Title XII advances peaked at close to \$55 billion in the second quarter of 2021 and were down to \$27 billion by the third quarter of 2022.

Similar to the impact of the Great Recession, the deterioration of state trust funds’ balances and the attendant borrowing from the federal unemployment trust fund raise the risk that states will respond to the binding financial constraints by reducing UI benefits and/or increasing taxes, also considering that in some states additional contributions are required by law when trust fund balances drop to specified points.

In fact, it is important to emphasize that most – if not all – states have trust fund balance targets written into their state law, with triggers built in to adjust the tax rates annually according to the state’s trust fund balance (GAO, 2010, p. 7; DOL, 2020b, p. 2–18). In the past, periods of elevated UI benefit outlays have historically been followed by higher taxes to restore the solvency of state trust funds (Weidinger, 2020a; Towson, 2020). For example, average state UI tax rates increased from a low of 2.3 percent in 2008 to a post-Great Recession peak of 3.5 percent in 2012, before declining over the next eight years – to a low of 1.72 percent by end-2020. The impact of Covid is visible already in 2021, when the average rate increased to 1.89 percent. Preliminary estimates by the Department of Labor suggest that, for the United States as a whole, the average UI tax rate would increase to 2.3 percent for 2022 as a whole.⁶ However, the rapid improvement in the state UI trust fund balances mitigates the risk of UI tax increase; moreover, states are authorized to use federal Fiscal Recovery Funds to replenish UI trust funds to pre-pandemic levels.

Finally, it is worth noting that the links between UI tax rates and financial conditions of state trust funds may result in both automatic stabilization of trust fund balances and procyclical effects on the business cycle, which may erode at least some of the stabilizing macroeconomic effects of paying UI benefits (GAO, 2010, p. 24).

4. Demand- and supply-side effects of pandemic UI programs

UI benefits face policymakers with a rather standard tradeoff that characterizes any form of insurance, in this specific case: how to effectively provide income support in the face of involuntary unemployment while avoiding disincentives to work and broader moral hazard effects.

The emergency UI programs adopted in response to the pandemic have provided an opportunity to reassess – under admittedly unique circumstances – two long-standing issues highlighted in the literature about the impact of UI benefit extensions (i.e., duration and/or generosity). On the demand side, the focus has been on assessing the countercyclical capabilities of emergency UI programs, their possible Keynesian effects and the size of the fiscal multipliers; on the supply side, empirical research has paid most attention to evaluate the potential impact of UI benefits on job-search incentives (i.e., willingness to accept a job) and ultimately employment.

The fact that, in the early summer of 2021, 24 states opted out the pandemic UI programs before their legislated expiration date of September 6 has provided a unique setting for testing empirically the demand- and supply- side effects of UI benefit extensions.

4.1. UI’s demand-side effects and countercyclical capabilities

Macroeconomic stabilization is one of the key functions of the UI system, which is generally believed to be highly cyclical and responsive to distress in the U.S. economy. Furthermore, temporary extensions of the duration of UI benefits (as well as increases of their level) are usually seen as a most effective instrument for countercyclical macroeconomic stabilization in downturns (Yang et al., 2010), when the insurance value

⁵ Author’s elaborations on data from DOL (2020a and 2021b).

⁶ https://oui.doleta.gov/unemploy/avg_employ.asp.

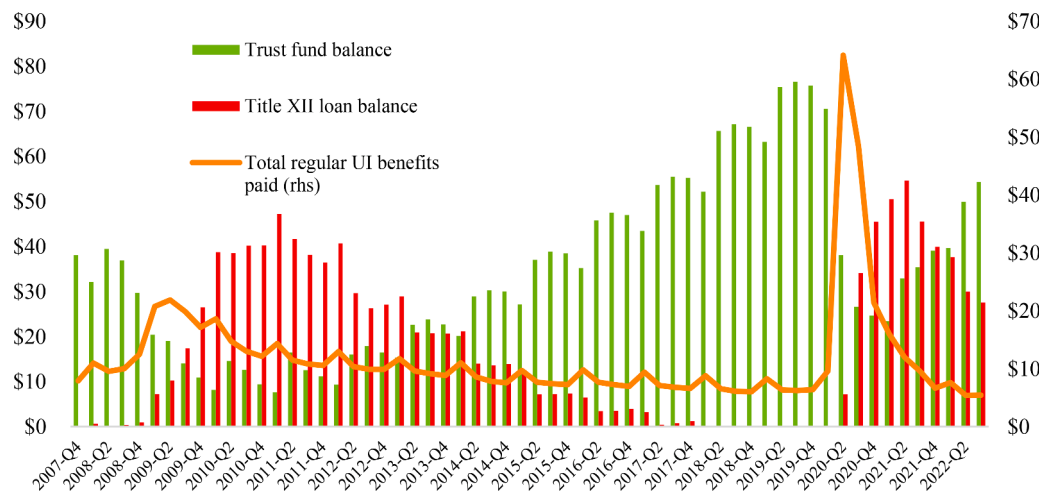


Fig. 3. Trust Fund and loan balances 2007–2021 (quarterly). Source: author's elaboration on U.S. Department of Labor data https://oui.doeleta.gov/unemploy/data_summary/DataSum.asp

of unemployment benefits is greater for a given level of moral hazard risk, which is anyway lower in downturns given weak conditions in the labor market (Dube, 2021).

As emphasized by Hellwig (2021), the distinctive stimulative power of UI programs goes beyond the very injection of cash into the economy that supports consumption – i.e., the traditional Keynesian effect – and rather arises from their crucial role in reducing idiosyncratic household income risk, which in turn gives rise to several powerful channels through which benefits may support aggregate demand: for example, preventing mortgage default, preserving housing wealth, reducing precautionary savings.

Even before the pandemic, empirical research had documented the strong demand effects from the extension of UI benefits under emergency federal programs. In a study using county-level data and a difference-in-difference approach, Hellwig (2021) estimates the relative magnitude of supply and demand effects of benefits extension and finds that the boost to aggregate demand from additional weeks of UI benefits is more than enough to offset any labor market disincentives. This positive effect is driven by such non-tradable sectors as retail and construction. In this latter sector, one reason is that UI benefits play a strong role in stabilizing house prices and thus generate a wealth effect for homeowners.

One specific reason highlighted in the literature why UI benefits are an optimal option for providing stimulus during downturns is because unemployed workers have a higher marginal propensity to consume (MPC), of around 0.8 according to recent estimates (Ganong and Noel, 2019): consumer spending is thus generally highly sensitive to UI benefits, which means that increasing their generosity can be an effective macroeconomic stabilization tool.

Kekre (2022) emphasizes the role of expanded UI benefits as a discretionary tool in the stabilization of short-run fluctuations and studies the output and employment effects of UI in a general equilibrium framework with incomplete markets, search frictions, and nominal rigidities. Calibrating the model to the U.S. economy during the Great Recession, the author finds an important stabilization role of UI, with an output multiplier ranging between 0.6 and 1.8 and an unemployment rate that would have been as much as 0.4 percentage points higher in the absence of the extensions to the EUC08 program. These results depend to a significant extent on the heterogeneity in the marginal propensity to consume MPCs – i.e., higher for the unemployed than the employed – the decline in agents' precautionary saving (because of lower income risks provided by UI) and an accommodative monetary policy (i.e., no increase in the nominal interest rate).

Chodorow-Reich and Coglianes (2019) summarize the empirical

evidence on both the marginal propensity to consume and the total output multiplier of UI – which factors in possible disincentive effects on labor supply – and settle on a multiplier for federally financed UI programs of between 0.5 and 1 when monetary policy does not respond, while underscoring that the evidence cannot rule out a multiplier as small as 0 or as large as 2. The authors also specify that the multiplier may be larger for UI extensions than increases in benefit levels and smaller when monetary policy is active. More recently, Hellwig (2021) provides estimates of fiscal multipliers of fairly similar size to previous estimates found in the literature, confirming the ability of temporary UI benefit extensions to stimulate employment and aggregate demand.

The Covid-19 pandemic has provided a major test case for the UI system to demonstrate its full potential as a macroeconomic stabilizer, all the more so given the unprecedented expansion of UI benefits in scope and size, even when compared to the Great Recession. Because of the combined effect of a sudden rise in the unemployment rate and the expanded pandemic programs, between May and July 2020 unemployment benefits amounted to close to 7.0 percent of total monthly personal income, a record far exceeding the 1.3 percent peak during the Great Recession.

It has been estimated that UI benefits, as a share of wage and salary income, provided an economic boost roughly four times as great during the pandemic as during any previous recessions (Bivens and Banerjee, 2021). In fact, data from the Bureau of Economic Analyst show that UI benefits as a ratio of employees' wages and salaries reached a peak of 2.6 percent in January 2010, largely because of the support from the EUC08 program; during the Covid-19 pandemic, the above-mentioned ratio peaked at over 15 percent in June 2020 and remained close to 5 percent through May 2021, largely because of the new FPUC benefit. With the early termination of pandemic programs in many states beginning in June 2021, the ratio decreased to 3.4 percent by August. When these programs all expired by law in early September, the ratio further dropped to 0.43 percent in October 2021, still higher than the pre-pandemic 0.26 percent of February 2020.

Using estimates of the marginal propensity to consume, Autor et al. (2022) offer a back-of-the-envelope comparison of the degree of stimulus provided by three main programs adopted in response to the pandemic: the Paycheck Protection Program, the Economic Impact Payments ("stimulus payments") and pandemic UI programs such as PUA. The authors' calculations show that the overall MPC out of UI benefits is higher than the other two programs. This is notable if one considers that 40 percent of PUA recipients are estimated to be high income self-employed business owners (Boesch et al., 2021) that have lower MPCs than the one assumed for standard UI recipients.

The \$600 FPUC introduced by the CARES Act clearly stands out in terms of generosity; several studies have thus analyzed both its countercyclical impact and the potential for moral hazard effects on labor supply. The latter can be first appreciated by assessing the FPUC impact on the UI replacement rate (Burtless, 2020; Ganong et al., 2020). With a typical UI replacement rate of around 40 percent of past earnings as of end-2019, the \$600 FPUC has raised this rate to about 105 percent; Ganong et al. (2020) estimate that 76 percent of unemployed workers eligible for regular UI had statutory replacement rates above 100 percent: for the median worker, the \$600 supplement nearly tripled the typical benefit levels, replacing 145 percent of lost income. As a result, many unemployed workers, especially those earning below-average wages, received weekly UI benefits that are greater than the weekly earnings they lost, a “*big bazooka in terms of countercyclical stimulus*” (Burtless, 2020). It is also important to note that the extraordinarily high replacement rates delivered by enhanced unemployment benefits may have diminished the recipients’ marginal propensity to consume (Autor et al., 2022).

The unique impact of the FPUC – through exceptional replacement rates higher than 100 percent – is also confirmed by the evidence that, when the \$600 supplement was available, the spending of unemployed households actually rose after a job loss, both in absolute terms and relative to the spending of employed households (Ganong et al., 2021). This spending increase stands in sharp contrast to normal times when spending falls sharply after a job loss and is particularly striking because overall spending was substantially depressed during the pandemic.

All in all, the \$600 boost from the FPUC is believed to have helped turn what would have been a very sharp and protracted reduction in spending into a gain in spending compared to the baseline (Dube, 2021, p. 4). According to some estimates (Ganong et al., 2021), the FPUC supplement increased total spending by 2.0–2.6 percent between April and July 2020.

Further evidence on the demand-side impact of pandemic UI programs is provided by Coombs et al. (2021), who study the effects of the decision by 22 states to end early – in June 2021 as opposed to the expiration date of September 6 – all the above-mentioned supplemental benefits. The authors find that UI reciprocity dropped by 35 percentage points among workers who were unemployed and receiving UI at the end of April 2021. Through the first week of August, average UI benefits for these workers fell by \$278 per week and earnings rose by \$14 per week, thus offsetting only 5 percent of the loss in income. Spending fell by \$145 per week, as the loss of benefits led to a large immediate decline in consumption. Despite this evidence supporting the macroeconomic relevance of cutting UI benefits, the authors underscored that these effects might be overstated by the fact that the sample is composed entirely of low-income and credit-constrained workers who are likely to respond more strongly to a loss of benefits than higher-income workers affected by the same policy.

In the face of their success, the pandemic UI programs introduced by the CARES Act have rekindled the debate about whether these federal extensions to complement the regular state UI programs during recessions improve their countercyclical capabilities. On the one hand, it is recognized that the need for longer durations of UI benefits is magnified during and (frequently) even after recessions, because job openings increase slowly and many UI recipients experience prolonged periods of unemployment well after the end of a recession (O’Leary and Wandner, 2020). The Great Recession is a most prominent example in this regard, as the rise of long-term unemployment has come to represent one of its most visible legacies.

On the other hand, it is emphasized that, even in a severe recession, regular state UI programs have provided the bulk of the increase in transfers to unemployed workers, notably at the early stage (Chodorow-Reich and Coglianese, 2019). For their part, federal emergency UI benefits have historically played a surprisingly small role in providing macroeconomic stimulus early in recessions, for two main reasons: first, emergency programs lack automaticity and are often subject to

implementation lags – typically ramp up transfers late in a recession, if not after when it has ended – which may undermine their countercyclical effectiveness; second, the EB program – the automatic part of federal benefit extensions – has historically been modest in size: in fact, during the pandemic regular state UI benefits amounted to \$188 billion, while EB outlays were limited to less than \$13 billion (Table 1).

Against this background, it has been argued that reforms to enhance the automatic stabilizer properties of UI should first apply to regular UI benefits, focusing on raising the reciprocity rates and increasing the weekly benefit amount (Chodorow-Reich and Coglianese, 2019). In this regard, it is worth noting that, because of the temporary measures included in the CARES Act – notably the relaxation of UI eligibility criteria – the average reciprocity rate of regular UI benefits exceptionally increased from 28 percent in 2019 to 70 percent in 2020 – with a peak of around 90 percent in the second and third quarters – before declining to 36 percent in 2021 and 25 percent in 2022⁷.

Many reform proposals focus on the EB program and its triggers (West et al., 2016; O’Leary and Wandner, 2018; Chodorow-Reich and Coglianese, 2019; Bivens et al., 2021). The latter, as noted in Section 2.1, have long been criticized as inadequate to timely respond to economic downturns, thus contributing to making the UI system underperform as a macroeconomic stabilizer. For example, soon after the Great Recession the Advisory Council found that the temporary federal extensions of unemployment benefits had been “*extremely inefficient*”, as they were neither well timed nor well targeted (Isaacs and Whittaker, 2014b, p. 9).

Proposed reforms of the EB program rest on the principle that, for automatic stabilizers to serve their role, they need to trigger on in a timely manner at the onset of a downturn, but also need to continue to support the recovery – rather than “*putting the brakes on*” by an early deactivation (Dube, 2021; Chodorow-Reich and Coglianese, 2019). To this end, proposals include: i) making EB fully federally funded in order to remove the fiscal disincentives for states to opt out and only use the default IUR trigger; ii) reforming the triggers to enhance the automatic extensions of benefits during periods of extremely high unemployment, including by reinstating the national trigger abolished in 1981 (Hellwig, 2021); iii) extending the additional weeks of EB benefits to address long-term unemployment; iv) removing look-back provisions from EB triggers that make automatic extensions turn off during periods of prolonged unemployment.

Most of the proposals focus on designing the triggers to best link the duration of UI benefits to the state of the economy, a choice that involves important tradeoffs (e.g., level or change in the target variable, typically unemployment; national or state unemployment rates). Recent simulations by Chodorow-Reich et al., 2022 suggest that policies designed to trigger immediately at the onset of a recession (or even before it starts) result in benefits extensions that occur in less slack labor markets. Some simulations point to the benefits of a national trigger. Rather surprisingly, the simulations suggest that, despite their ad hoc nature and risks of implementation lags, UI benefit extensions legislated by Congress during the past crises compare favorably ex post to common proposals for automatic triggers.

4.2. UI’s supply-side effects and moral hazard risks

The labor market effects of UI benefits have been extensively studied so there exists ample literature on the potential job-search disincentives effects and moral hazard costs of unemployment insurance (Giupponi et al., 2022). In principle, these effects might be magnified for pandemic UI programs, given their unprecedented generosity, and have provided a key argument to those who oppose a structural expansion of the UI system.

The academic literature is overall divided about the extent to which UI benefits create supply-side distortions by affecting job search

⁷ https://oui.doleta.gov/unemploy/data_summary/DataSum.asp

incentives and labor market outcomes; the strength of these effects remains fiercely debated (Chodorow-Reich and Coglianesi, 2019).

Some recent microeconomic studies find no effect of benefit generosity on unemployed workers' willingness to accept a job, others provide evidence that extending the UI benefit duration leads to reduced job search effort, though the effect declines in recessions (Hellwig, 2021 and the references therein).

This notwithstanding, a fairly shared conclusion of the empirical research is that the duration of unemployment spells is strongly responsive to the generosity of unemployment insurance (Giupponi et al., 2022). Against this background, it is remarkable that the findings of the available studies on the effects of pandemic UI programs are somewhat less unambiguous than those highlighted by the pre-pandemic literature, as several of them suggest that the distortions to labor supply are minimal. Part of this divergence from the previous consensus can be accounted for by the unique circumstances of the pandemic (Holzer et al., 2021): for example, labor supply may be less sensitive to the generosity of UI benefits when workers face health concerns; furthermore, the elasticity of unemployment duration with respect to UI benefit generosity may have been affected by the substantial increase of household savings arising from both direct cash payments from various government programs and less opportunity to spend money due to social distancing measures.

A first batch of empirical studies have focused on the impact of specific pandemic UI programs – PUA and FPUC – on employment.

After surveying several of these studies, Dube (2021, p. 4) concludes that, overall, the evidence points to a surprisingly small impact of benefit generosity on employment, at both the micro and macro levels. For their part, Ganong et al. (2021) find that the FPUC supplement generated minimal disincentive effects on employment, which decreased by only 0.2–0.4 percent as a result of the reduction in job search. Further evidence comes from studies that focused on the impact of the decision by 24 states to opt out of the pandemic PUA and FPUC programs in the early summer of 2021, that is, before their legislated expiration date of September 6

The relevance of this decision can be best appreciated by noting that in early June 2021, about 75 percent (11.2 million) of unemployed workers were receiving PUA and PEUC benefits. When they expired on September 6, these benefits were still supporting 8.5 million unemployed workers. Because of the early withdrawal decision, pandemic supplemental UI benefits were eliminated entirely for over 2 million workers and reduced by \$300 per week for over 1 million workers.

Using anonymous bank transaction data and a difference-in-differences research design, Coombs et al. (2021) measure the effect of withdrawing pandemic UI benefits on the financial and employment trajectories of unemployed workers in states that withdrew benefits (“Withdrawal” states), compared to workers with the same unemployment duration in states that retained these benefits (“Retain” states). They find that ending pandemic UI benefits increased employment by 4.4 percentage points in Withdrawal states relative to Retain states.

In the same vein, Albert et al. (2022) assess the impact of the FPUC withdrawal on the pace of hiring, given that this policy change was intended in part to ease hiring challenges employers faced from tight labor markets. The authors compare the labor market outcomes between the 27 states (including the District of Columbia) that maintained the FPUC in place (“keep UI” states) and the 24 states that eliminated it (“cut UI” states). Statistical analysis shows that, over the full time the policy difference was maintained (July to September 2021), the states that cut UI benefits experienced a relative increase in hiring rates. However, the size of the effect—about 0.2 percentage point—is quite small relative to monthly hiring rates of around 4 to 5 percentage points.

For their part, Holtzer et al. (2021) run a counterfactual exercise and estimate that eliminating FPUC and PUA would have lowered by 0.3 percentage points the national unemployment rate in both July and August 2021 while employment would have been 0.2 and 0.1 points higher, respectively. As noted before, the authors acknowledge that this

impact is quite modest when compared to the overall effect of Covid-19 itself. Importantly, Holzer et al. (2021) emphasize that some studies' evidence of minimal distortions of pandemic UI benefits on labor supply should be seen as an anomaly due to the unique circumstances of the pandemic: from the early stages of the pandemic in 2020 through the spring of 2021 – when uncertainty and social distancing were dominating factors – the familiar relationship between unemployment duration and UI benefit generosity may have somewhat broken down. Subsequent studies would support the pre-pandemic consensus that the duration of unemployment increases with the generosity of unemployment benefits: in this regard, the summer of 2021 could be interpreted as a period of “healing” and of returning normalcy for the labor market (Holzer et al., 2021).

Other studies have specifically focused on the impact of pandemic UI programs on job-search incentives.

Marinescu et al. (2021) study the impact of the FPUC on job applications and vacancy creation and find that a 10 percent increase in unemployment benefits caused a 3.6 percent decline in applications, but did not decrease vacancy creation; hence, FPUC increased labor market tightness (vacancies/applications). Since the findings suggest that tightness was unusually depressed during the period when FPUC was available, the authors conclude that, altogether, their results imply that the positive effect of FPUC on tightness was likely welfare improving: FPUC decreased competition among applicants at a time when jobs were unusually scarce.

Furthermore, recognizing that the unprecedented increase in UI generosity caused weekly benefit payments to exceed prior earnings for most recipients, Petrosky-Nadeau and Valletta (2021) analyze the job acceptance decision for a wide range of U.S. workers by estimating a “reservation UI benefit”. They conclude that only a small fraction of workers would turn down an offer to return to work at their previous wage and would rather prefer to keep receiving expanded UI payments provided by the CARES Act; besides, like in Ganong et al. (2021) the disincentive effects of the \$600 supplemental payments on job-finding rates were found to be modest: the additional income provided to the unemployed through the CARES Act (and subsequent legislation) likely acted as an effective targeted fiscal transfer supporting aggregate demand, while having little impact on the unemployment rate via labor supply effects.

The PUA benefit – at times referred to as the “PUA experiment” (Greig et al., 2022) – has received particular attention because of its features mark a departure from traditional UI programs, in that it enabled self-employed and other workers not covered by UI (e.g., part-timers and those lacking a sufficient long work history) to become eligible for many Covid-19 related reasons beyond involuntary job loss. However, it is accepted that between 40 and 50 percent of PUA recipients were self-employed. PUA dramatically expanded UI eligibility as it represented around 40 percent of total UI claims.

Greig et al. (2022) do not see clear evidence that PUA recipients exhibited greater work disincentives than traditional UI recipients. PUA did not provide a flat benefit but rather the weekly benefit amount was linked to the income declared by the applicant. The authors examine the flows of recipients entering and exiting the PUA program versus the traditional UI program and find that the exit rate – a proxy for job search – is only slightly lower (by 5 percent) for PUA than the corresponding rate for traditional UI in 2020 and broadly similar in 2021. This would signal that PUA did not generate especially strong work disincentives.

Finally, the pandemic UI programs stand out also in terms of their distributional impact, which had been the object of several empirical studies.

Ganong et al. (2022) argue that the expansion of UI programs was highly progressive in that they offset income losses and delivered the most benefit to lower-income workers, not least because job losses were concentrated in low-wage service sectors. For example, the FPUC, unlike typical stabilization tools such as broad-based stimulus checks, has been targeted to a subset of the population hard hit by the recession and may

have reversed income patterns which would have otherwise arisen across income levels, occupations, and industries (Ganong et al., 2020).

As far as PUA is concerned, Autor et al. (2022) argue that the incidence of unemployment insurance during the pandemic was weighted towards both the upper and lower tails of the U.S. household income distribution. The authors estimate that over 50 percent of pandemic unemployment insurance payments went to the bottom fifth and second-to-bottom fifth of households but also – and rather surprisingly – that the top fifth of households received a bit more than one-quarter of unemployment insurance benefits: the latter finding can largely be accounted for by the PUA, which extended UI benefits to the self-employed, often business owners with high incomes.

In the same vein, Greig et al. (2022) argue that PUA disproportionately benefited lower-income families and those more marginally attached to the labor market. This conclusion relies *inter alia* on the fact that PUA recipients received their labor income through direct deposit in a dramatically lower percentage.

It should also be noted that the FPUC has had an impact also in terms of the debate between targeted versus universal stimulus payments (Ganong et al., 2021). For the last 20 years, the federal government has regularly used universal or near-universal tax rebate payments at the onset of recessions; targeting payments to certain particularly vulnerable households – such as the unemployed workers – can be an alternative approach to fiscal stimulus. The spending impacts from targeted transfers are indeed substantial, even in a pandemic, and larger than estimated spending responses to universal transfers in the past. In this context, however, one should also consider the fiscal externality of increasing the generosity of unemployment insurance, which is seen by many as relatively large: according to Giupponi et al. (2022), the cost to the government of an additional \$1 of unemployment insurance ranges from \$1.50 to \$2.50.

5. Key challenges and reform proposals

The debate on how to reform the UI system and overcome the critical weaknesses resulting from its “patchwork” structure of 53 different state programs and rules is a long-standing one and by far predates the pandemic. The starting point is the recognition that the last major reform of the system dates back to 1976 and was not really comprehensive (O’Leary and Wandner, 2020). In the meanwhile, since the 1980s many benefits of the UI program have eroded (O’Leary et al., 2020, p. 3) while the U.S. economy has undergone significant structural changes, notably in terms of industry and occupational mix of employment as well as the demographics of the labor force, with increased female labor force participation and voluntary part-time employment.

In this context, the pandemic has re-exposed key challenges that had long been the objects of various reform proposals, more recently in the aftermath of the Great Recession. The latter prompted numerous comprehensive reports that set out detailed recommendations for reform, but they were not followed up by legislative action at the federal level.

Although an in-depth analysis of the pre-pandemic UI reform proposals goes beyond the scope of this paper, in general they aim at addressing weaknesses in three main areas: coverage and adequacy of benefits; sufficiency of funding; automatic countercyclical capabilities⁸.

Most reform proposals foresee in one way or the other an expanded role for the federal government to increase the adequacy, equity and efficiency of state UI benefits across the country. The more far-reaching proposals (Wandner, 2020; Dube, 2021) call for converting UI into a

single program fully financed and administered at the federal level. Most proposals are instead centered on introducing – or expanding – minimum federal standards for the key UI parameters: eligibility requirements as well as level, duration and funding of benefits.

The peculiar experience during the pandemic has not only rekindled but also enriched with new issues the debate on reforming the UI system, with issues related to the equity of the UI system – primarily in terms of income, race, gender and age – now playing a more prominent role that appropriately informs the design of the reform proposals (Biven et al., 2021; Stettner and Pancotti, 2021; Stone, 2021).

At the same time, one needs to recognize that the unique nature of the COVID-19 downturn – triggered by a public health emergency – makes it difficult to disentangle enduring policy lessons from those that are exclusive to the pandemic (Ganong et al., 2022).

Despite this caveat, three important UI reform issues exposed by the pandemic stand out: whether the expanded coverage of UI temporarily achieved through the pandemic programs should be made – at least in part – a permanent feature of the post-pandemic system; the need for stronger IT and administrative frameworks to maximize the advantages of an expanded coverage; the role of Short-Term Compensation schemes to discourage layoffs and complement UI benefits.

On the first issue, several authors support to keep a permanent version of pandemic programs in place. The starting point is the recognition of a rather striking feature of the UI system before the pandemic, namely that in ordinary times (i.e., except for recessions) most unemployed workers don’t receive state regular UI benefits: on the eve of the pandemic, less than one in three unemployed workers was collecting them. The coverage of the UI system is traditionally measured by the reciprocity rate – the national percentage of unemployed workers receiving regular state UI benefits – which has trended downward over the past 40 years: it was 28 percent in 2019, down from a peak of 44 percent in 1980 and 36 percent on the eve of the Great Recession (DOL UI chartbook, <https://oui.doleta.gov/unemploy/chartbook.asp>).

Low reciprocity rates reflect a number of reasons, notably a combination of restrictive monetary and nonmonetary eligibility criteria (Chodorow-Reich and Coglianese, 2019). In particular, the high thresholds of minimum earnings and/or minimum amount of work time requested by most states to be eligible for UI exclude many workers who become unemployed. Furthermore, the fact that the take-up rate of UI benefits among eligible individuals is less than one may reflect several administrative and possibly psychological hurdles (Chodorow-Reich and Coglianese, 2019). Informational asymmetries may also play a role: Boesch et al. (2021) note that the most common reason why the unemployed do not apply for UI benefits is because they believe they are not eligible.

Against this background, most proposals to improve UI eligibility call for three main changes: 1) harmonizing monetary eligibility criteria across states, notably adoption of alternative base periods for calculating earnings; 2) extending eligibility to part-time workers and individuals seeking part-time employment; 3) granting UI eligibility to people who leave their jobs for “good cause” reasons, most notably compelling family reasons, such as caring for family members or inadequate childcare. The importance of these reasons – and their potential to affect UI reciprocity rates – have been made even more prominent by the pandemic.

In fact, the latter has dramatically exposed a critical feature of the regular state UI programs, namely that they are not designed to cover all unemployed workers, i.e., they do not cover people who leave their jobs voluntarily, those looking for their first jobs, and those reentering the job market after leaving voluntarily; furthermore, self-employed workers, “gig” workers, undocumented workers and students are traditionally not eligible to apply for UI benefits (Alcalá Kovalski and Sheiner, 2020; Dube, 2021). The stringency of the normal eligibility standards has been exposed by the elevated number of unemployed workers who during the pandemic have relied on the Pandemic Unemployment Assistance program, which was explicitly introduced to cover

⁸ See West et al (2016), Wandner (2018) and O’Leary and Wandner (2018) for some of the main comprehensive reform proposals put forth before the COVID pandemic and Bivens et al (2021), Dube (2021), Furman et al (2020), Simon (2021), Spadafora, (2022), Wandner (2020) and Weidinger (2020b) for those advanced in the aftermath of the pandemic.

many otherwise ineligible workers.

As a result, perhaps the single most prominent reform proposal based on the experience of the pandemic is to keep in place a permanent version of PUA (Dube, 2021; Ganong et al., 2022; Greig et al., 2022) to structurally expand UI coverage and provide income support to those categories of workers more marginally attached to the labor force. Besides, a standing PUA-like program would provide time to establish protocols and enhance systems with a view to ultimately avoiding the inefficiencies arising from the need to establish an entirely new program when facing a crisis, which implies processing peaks of claims volume that would likely hamper the timely delivery of benefits.

The second most supported reform proposal calls for strengthening the so-called UI delivery infrastructure – most notably, Information-Technology-IT and administrative frameworks – with a view to not only maximizing the efficiency of UI – in terms of timely and accurate payments to eligible workers that magnify income support and countercyclical stimulus while minimizing the room for fraud – but also allowing an effective design of UI benefits.

In fact, several authors (Boesch et al., 2021; Autor et al., 2022; Ganong et al., 2022) have emphasized that, during the pandemic, the often-outdated IT systems and limited administrative capacity of state-based UI programs have substantially constrained optimal policy design, with the result that the U.S. was forced to provide emergency aid “using a fire hose rather than a fire extinguisher” (Autor et al., 2022). The FPUC is a case in point, in that it had to be introduced as a flat nationwide weekly supplement of \$600 because IT and administrative weaknesses made it infeasible to adopt a flexible supplement that would target a higher wage replacement rate tailored to pre-job loss earnings, which likely would create fewer inefficiencies in terms of work disincentives. In other words, although the flat \$600 FPUC was highly progressive, it was not optimal UI policy, as it was largely based on a national average pre-job loss earnings level of workers who were unemployed before the pandemic began.

A third prominent reform proposal is to expand the role of the so-called Short-Time Compensation (or work) schemes (STCs), which provide employers with the option of temporarily reducing workers’ hours – as an alternative to layoffs – and replacing via STCs some of the workers’ lost income. In other terms, STCs aim at discouraging layoffs in the first place but are best placed to address brief downturns rather than a firm’s permanent fall in labor demand or production (see Giupponi et al., 2022, for an in-depth discussion).

In Europe, STCs have represented the primary tool to protect workers from the impact of the pandemic. On the contrary, STCs are available in only 26 U.S. states and make up only a small fraction – less than 1 percent – of overall UI benefits (Boesch et al., 2021; Giupponi et al., 2022). This major difference between Europe and the U.S. in the use of STCs reflects a diametrically opposed approach to respond to acute – and unprecedented during the pandemic – strains in the labor markets: the U.S. policy was centered on insuring the income of workers – by aggressively increasing the generosity of UI benefits – while in Europe the emphasis was on preserving the relationship between workers and firms – by providing generous subsidies for hours reduction and temporary layoffs through STCs (Giupponi et al., 2022).

Despite that STCs in a recession are funded by the federal government, they show an overall low take up rate, which is usually accounted for by such reasons as limited awareness among employers and several administrative constraints (Boesch et al., 2021). This notwithstanding, there is some consensus that STCs should be seen as a complementary tool to other UI programs. As a result, reform proposals to add STCs to a state’s toolkit intend to bolster the ability of the UI system to prevent layoffs.

6. Concluding remarks

The Covid-19 pandemic has once again confirmed the critical role played during recessions by the U.S. Unemployment Insurance (UI)

system as a fundamental source of income support for workers and – equally important – a powerful countercyclical instrument for the economy as a whole, with minimal evidence of job-search disincentives. The unprecedented expansion of UI coverage and generosity to provide financial relief to millions of suddenly unemployed workers and their families is rightly considered to be a success story (Dube, 2021). The budgetary cost of deploying the new “pandemic” UI programs has inevitably been high, but pales in comparison to the economic and social support provided by these programs.

The lifeline role played by these programs is vividly demonstrated by the fact that in early September 2021 – when they expired – benefits provided by the Pandemic Unemployment Assistance (PUA) and Pandemic Emergency Unemployment Compensation (PEUC) programs were supporting about 75 percent (8.5 million) of total unemployed workers receiving UI payments.

Despite this success, the implementation of the pandemic programs has once again highlighted several limitations of the state-based regular UI system, while acknowledging the significant heterogeneity across states in terms of performances and key UI parameters. In the event, like during the Great Recession, the system has required significant emergency legislative interventions to ensure that the microeconomic and macroeconomic support was adequate in scope and size to address the unique challenges posed by the pandemic. The latter has also exposed new challenges, first and foremost the constraints posed by an inadequate UI delivery infrastructure, not only in terms of ability to make timely payments to UI recipients but also for the optimal design of expanded UI programs.

The pandemic has inevitably rekindled the debate on whether and how to fundamentally reform the UI system, as the last significant reform dates back to 1976. Reform proposals by academics and policy-makers alike have long focused on addressing well-known weaknesses of the system, namely low reciprocity and replacement rates and duration of UI benefits in some states shorter than the long-established 26 weeks. President Biden’s 2022 Budget itself included a set of principles that are intended to serve as the basis for any major reform of the UI system, including more equitable and progressive financing mechanisms (DOL, 2021c).

A distinctive reason why the Covid-19 crisis has revived the calls for reforming the UI system is because the pandemic has dramatically exposed that regular UI programs tend to disproportionately leave uncovered exactly the types of workers most affected by the pandemic, namely the self-employed, new entrants into the labor force, and part-time workers with short employment and earnings histories. These workers are frequently ineligible for UI benefits because they may fail to meet the states’ often strict eligibility requirements; they were covered by the new PUA program, whose success is testified by the fact that it supported more than 15 million workers at its peak usage in August 2020 and around 5 million workers when it expired in early September 2021. This massive but temporary expanded coverage is pointed out as a demonstration that piecemeal fixes to the UI system should give way to reforms that establish a structurally wider safety net.

As a result, in the aftermath of the pandemic most attention is being paid to the proposals that aims at permanently extending UI coverage to previously ineligible workers, with a view to closing the mismatch between often outdated UI requirements and the changed nature of the U.S. workforce during the past two decades. At the same time, it is recognized that the choices made often hurriedly under the pressure from the pandemic may not necessarily be the best ones for a structural expansion of UI coverage (Boesch et al., 2021).

Many proposals call for making permanent the pandemic-induced expansion of UI eligibility to those workers who are forced to voluntarily quit their jobs because of “good causes”, most notably compelling family reasons. Equally important, it is emphasized that the weaknesses of the UI system penalize disproportionately women and workers of color (Goger et al., 2020; Bivens et al., 2021; Stettner and Pancotti, 2021; Stone, 2021). In this context, a key welcome novelty of the

ongoing debate is the prominence taken on by issues related to the equity of the UI system – primarily in terms of income, race, gender and age – in appropriately informing the design of the reform proposals.

The current context of a tight U.S. labor market and a faster-than-expected decline in the unemployment rate – by now back to the pre-pandemic level – likely run counter to the urgency to act, while the difficulties of finding political consensus on reforming UI do not appear to be lower than in the past. This is perhaps best epitomized by the decision, in mid-2021, by about half of states to discontinue the pandemic programs earlier than their expiration in early September. Unsurprisingly, this decision has received different interpretations: on the one hand, it has been justified on the ground that job vacancies appeared to be amply available and the pandemic UI programs were seen as providing disincentives to apply for them; on the other hand, the decision has been criticized because in June-July 2021 the pandemic programs were still supporting around 10 million unemployed workers.

At a more general level, the choice of discontinuing these programs has been pointed out as a consequence of much control on the UI system ceded by the federal government to states, something that is seen by some as a failure to equitably protect working people (Bivens et al., 2021, p. 1). Many reform proposals thus call for a stronger role for the federal government, first and foremost to introduce nationwide federal minimum standards for benefits eligibility, duration, and levels, with a view to overcoming the substantial variations across states.

A common goal to be drawn out of the lessons from pandemic is to make the UI system “recession-ready” (Ganong et al., 2022) and minimize – if not eliminate – the traditional trade-off between speed and accuracy that characterizes the UI delivery infrastructure. To this end, it has been suggested that states should approach the UI delivery infrastructure as it were economic disaster preparedness, by building adequate administrative capacity to aptly target, calibrate, and deploy timely its responses in an emergency. It is thus recognized that, ultimately, this goal would imply a more active role by the federal government in responding to acute labor market strains, most notably in providing technology and data infrastructure that could enable an effective design of UI programs – e.g., flexible benefit levels set at a target income replacement rate – but also stronger and smoother eligibility verification and fraud prevention (Greig et al., 2022).

In fact, in the aftermath of the pandemic unprecedented attention is being devoted to upgrade the technological infrastructure of the UI system, whose fragmentation along state lines has often been a cause of delays in providing timely and equitable income support to unemployment workers during the pandemic.⁹ To this end, in August 2021 the U. S. Department of Labor announced a series of measures – once again labelled “UI Modernization” (DOL, 2021c) – to address such most immediate challenges as promoting equitable access, ensuring timely payment of UI benefits, and developing IT solutions to modernize outdated state technology. At the same time, this UI modernization effort recognizes that longstanding problems further exposed by the pandemic can be addressed only through a comprehensive UI reform. In fact, the emergency temporary measures adopted during the pandemic – while successful – were not designed to address the fundamental objective of restoring the UI system’s ability to provide adequate support for workers in normal times.

Accordingly, the need for structural reforms remains a matter of debate. On the one hand, many observers believe that reforms are all the more necessary to fix the system’s underlying weaknesses and avoid a return to the pre-pandemic status quo of low reciprocity rates, gaps in coverage and inadequate funding mechanisms. Besides, these reforms are meant to be more stringent because of the risk that, in the face of the

massive financial pressure that the pandemic exerted on the state trust funds, more states might display the same tendencies that occurred in the aftermath of the Great Recession, namely cutting benefit levels or shortening their duration to help replenish these funds’ reserves. This risk would exacerbate what is by many highlighted as the fundamental funding problem faced by the UI system, namely that neither unemployment benefits nor UI tax rates and taxable wage bases are uniformly indexed – i.e., by a federal standard – to consistently provide adequate revenues and benefits over time.

On the other hand, other observers discount this risk by pointing to the rapid improvement as early as mid-2021 in the state trust fund balances – even net of Title XII loans – because of the sizable decline in state UI payments and the robust economic recovery; besides the financial aid provided by federal legislation approved during the pandemic presents states with an opportunity – admittedly quite disputed – to replenish unemployment insurance funds without increasing the payroll tax burden on local employers.

Like before the pandemic, many reform proposals also aim at improving the macroeconomic countercyclical role of the UI system, which has been critical in mitigating the recessionary impact of the pandemic; the focus is on enhancing the automaticity of UI’s stabilization capabilities, most notably by improving the design of the “triggers” of the Extended Benefits program to ensure that it remains active for as long as unemployment is elevated.

Reforming the UI system has always proved to be a difficult if not contentious and divisive task since its inception. As noted by Blaustein (1993, p. 149), “unemployment insurance began in controversy; it was never to be free of controversy”. Whether the political consensus to act boldly during the pandemic – forged by the dramatic challenges it posed – will extend to undertake comprehensive reforms of the UI system inevitably remains an open question at this juncture.

What is true is that the experience with the UI system in the United States provides fundamental lessons that can usefully inform the debate on whether and how to introduce in Europe a common unemployment insurance scheme for macroeconomic stabilization.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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⁹ Lack of modernization of states’ IT systems has been identified as one of the primary reasons underlying the difficulties in implementing the three key pandemic UI programs introduced by the CARES Act (DOL, Office of Inspector General, 2021).

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