



BANCA D'ITALIA  
EUROSISTEMA

# Questioni di Economia e Finanza

(Occasional Papers)

Don't let me down:  
unemployment insurance in the United States

by Francesco Spadafora

March 2022

Number

673





BANCA D'ITALIA  
EUROSISTEMA

# Questioni di Economia e Finanza

(Occasional Papers)

Don't let me down:  
unemployment insurance in the United States

by Francesco Spadafora

Number 673 – March 2022

*The series Occasional Papers presents studies and documents on issues pertaining to the institutional tasks of the Bank of Italy and the Eurosystem. The Occasional Papers appear alongside the Working Papers series which are specifically aimed at providing original contributions to economic research.*

*The Occasional Papers include studies conducted within the Bank of Italy, sometimes in cooperation with the Eurosystem or other institutions. The views expressed in the studies are those of the authors and do not involve the responsibility of the institutions to which they belong.*

*The series is available online at [www.bancaditalia.it](http://www.bancaditalia.it).*

ISSN 1972-6627 (print)

ISSN 1972-6643 (online)

*Printed by the Printing and Publishing Division of the Bank of Italy*

# DON'T LET ME DOWN: UNEMPLOYMENT INSURANCE IN THE UNITED STATES

by Francesco Spadafora\*

## Abstract

The Unemployment Insurance (UI) system in the United States has once again played a decisive lifeline role in effectively mitigating the economic and social impact of the Covid-19 pandemic, which prompted an expansion of UI programmes unprecedented in scope, scale and cost. However, the crisis has exposed afresh some well-known challenges for the programme, perhaps best epitomized by the fact that, on the eve of the pandemic, less than one in three unemployed workers collected UI benefits. The objective of this paper is threefold: first, it provides a comprehensive overview of the main structural characteristics of the UI system; second, it compares the role played by UI programmes in mitigating the impact of both the 2008-09 Great Recession and the 2020 Covid-19 pandemic; and third, it discusses the main reform proposals put forth to address the challenges identified for the UI system. The experience with the UI system provides fundamental lessons that can usefully inform the debate on whether and how to introduce a common unemployment insurance scheme in Europe for macroeconomic stabilization.

**JEL Classification:** E24, H7, J64, J65.

**Keywords:** unemployment, unemployment insurance, job acceptance, Covid-19, CARES Act.

**DOI:** 10.32057/0.QEF.2022.0673

## Contents

1. Introduction .....	5
2. A brief historical overview of the Unemployment Insurance (UI) system .....	7
3. Structural characteristics of the UI system.....	9
3.1 Permanent UI programmes.....	11
3.1.1 The state's regular UI programme .....	11
3.1.2 Funding of the state's regular UI programme .....	12
3.1.3 The financial balances of the state UI trust funds .....	14
3.1.4 The Extended Benefits programme.....	17
3.2 Temporary UI programmes .....	20
3.2.1 The 2008 Emergency Unemployment Compensation programme.....	20
3.2.2 The pandemic UI programmes in the 2020 CARES Act .....	21
4. UI performance during the Great Recession and the Covid-19 pandemic.....	23
4.1 UI programmes during the Great Recession .....	23
4.2 UI programmes during the Covid-19 pandemic .....	24
4.3 Costs of the pandemic UI programmes.....	26
4.4 Financial impact of the Covid-19 pandemic on state UI trust funds and UI taxation.....	28
4.5 Macroeconomic impact of the pandemic UI programmes .....	30
5. Current challenges and reform proposals for the UI system .....	36
5.1 Eligibility requirements and coverage gaps .....	37
5.2 Erosion of UI benefits: lower replacement rates and shorter duration .....	42
5.3 Funding mechanisms and UI solvency.....	47
5.4 UI's countercyclical capabilities .....	50
6. Concluding remarks.....	51
References .....	54

\* Bank of Italy and International Monetary Fund



*Hey you, out there in the cold  
Getting lonely, getting old  
Can you feel me?*

*Hey You, Pink Floyd, 1979*

## 1. INTRODUCTION<sup>1</sup>

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. Strengthening social protection and, notably, unemployment insurance – including through wider eligibility to cover self-employed, part-timers and informally-employed workers – has been advocated by the International Monetary Fund as a policy priority that would be prudent regardless of the state of the world (International Monetary Fund, 2020).

The UI system in the United States has once again played a decisive role in effectively mitigating the economic and social impact of the pandemic; the latter prompted the largest expansion of UI programmes in history, one that is unprecedented in scope, scale and cost. By August 2021, UI benefits had provided a 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).

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 as taxes collected from employers fund the programme on behalf of workers, to provide them with (partial) income support if they involuntarily lose their jobs and while searching for new ones.

The UI programme is established as a federal-state partnership, based upon federal law but administered by states under their own laws:

- the federal government<sup>2</sup> sets a national institutional (legislative and administrative) framework – under the oversight of the U.S. Department of Labor. In particular, the Social Security Act and the Federal Unemployment Tax Act (FUTA) set forth broad coverage provisions, some benefit provisions, the federal taxable wage base and tax rate, and certain administrative requirements. A key function of the federal government is to hold and invest all money collected from employers in the unemployment trust fund (UTF), for it to be drawn down by states to pay for UI benefits (DOL, 2019).
- states (defined as the 50 states plus the District of Columbia, Puerto Rico and the U.S. Virgin Islands) establish most of the programme’s key parameters, namely eligibility criteria, benefit amounts and durations, tax levels and taxable wage bases. States also run the “regular” UI programme and administer its day-to-day operations, including the level and type of reemployment services provided to UI claimants. As a result, UI programmes vary widely across states in terms of access, coverage, level of benefits and duration.

---

<sup>1</sup> The views expressed are those of the author and do not necessarily reflect those of the Bank of Italy or the International Monetary Fund. For their useful comments, I wish to thank Pietro Catte, Domenico Fanizza, Alfonso Rosolia and Luigi Federico Signorini. The usual disclaimers apply.

<sup>2</sup> The Federal Government is composed of three distinct branches: legislative, executive and judicial. <https://www.whitehouse.gov/about-the-white-house/our-government/>

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

The UI system has three main statutory objectives<sup>3</sup>: 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<sup>4</sup>.

Against this background, there has long been quite ample consensus among many scholars and policymakers alike that the UI system has not been adapted and modernized – notably at the federal level – to address the changes in the structure of the U.S. economy, in terms of demographics characteristics, technological advances and industry composition, with an increasing role of the services sector and a decline of manufacturing. All these developments have in turn been reflected in major changes in the characteristics of the labor market, the types of jobs – full versus part time – the nature of the workforce and the pool of unemployed workers. Ultimately, these changes in the labor market have resulted in a rising share of 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 programmes may 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 programmes 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<sup>5</sup>. 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 programmes – financed by the general revenues – that in recessionary times complement the state-based UI programmes are usually quite effective. However, because most of these emergency programmes 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.

---

<sup>3</sup> Wandner (2018). O’Leary *et al* (2020) list two additional objectives: 4) preventing dispersal of employers’ workforces during temporary layoffs; 5) promoting rapid return to work.

<sup>4</sup> Employment stabilization – or unemployment prevention – was frequently singled out by President Roosevelt as the primary objective of the UI program: “*An unemployment compensation system should be constructed in such a way as to afford every practicable aid and incentive toward the larger purpose of employment stabilization*”. Blaustein (1993, p. 46).

<sup>5</sup> See Section 5.1.



The distinctive challenges brought about by the Covid crisis – and the unprecedented and innovative temporary expansion of the UI programmes – 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 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 inform 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 programmes, the debate mostly revolves around the case for setting up a European unemployment re-insurance scheme that would top up national programmes 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, it provides a comprehensive description of the main structural characteristics of the UI system in the United States; second, it compares the role played by UI in mitigating the impact of the 2008-09 Great Recession and the 2020 Covid-19 pandemic; third, it discusses the identified challenges and the reform proposals to address them.

## **2. A BRIEF HISTORICAL OVERVIEW OF THE UNEMPLOYMENT INSURANCE (UI) SYSTEM**

The UI provisions of the Social Security Act of 1935 drew upon the considerable experience developed in Europe, where before 1935 seventeen nations had established some form of unemployment insurance; this included national compulsory programmes in seven countries, the first one enacted in Great Britain in 1911, the second one established in Italy in 1919 (Blaustein, 1993, p. 8).

Previous attempts around the 1920s – starting with the ones in the Massachusetts Legislature in 1916 and the New York State Legislature in 1921 – failed to pass state unemployment insurance laws, not least because of competing views on what the primary objective of UI should be; these same views also shaped the debate preceding the Social Security Act. A UI programme can in fact serve several purposes that in the U.S. have historically been a source of controversy. While the primary objective was originally identified in the need to prevent poverty and alleviate the hardships that result from the loss of wage income during unemployment, prevention of unemployment and promotion of reemployment subsequently gained prominence as statutory objectives of a UI programme (Blaustein, 1993, p. 43).

It is no coincidence that the Wisconsin Unemployment Compensation Act of 1932 – the first American law to establish a UI programme – strongly focused on unemployment prevention and this was reflected in its technical design. The Wisconsin programme was indeed based on individual employer reserves rather than on a pooled insurance state fund combining contributions of both employers and employees. For its part, the plan proposed by the Ohio Commission in 1932 set another milestone, as it was the first one to recommend a pooled state fund; it received substantial acclaim and became a model for a number of bills introduced in other state legislatures (Blaustein, 1993, pp. 118-119).

The Ohio and Wisconsin ideas were central to the process that led to the national unemployment insurance proposals of 1935, as they “*served to educate the public and illuminate the issues*”

(Blaustein, 1993, p. 121); a key outcome was that the objective of unemployment relief came to be elevated over that of unemployment prevention.

It took however the Great Depression and its enormous economic and human costs to coalesce the support for adopting, at a national level, legislation to provide financial assistance to unemployed workers. When UI benefits were first being considered as part of the Social Security Act in 1934 and 1935, the total number of unemployed workers in the United States was estimated at between 11 million and 15 million (New York State Department of Labor, 2014).

In the debate heading to the passage of the Social Security Act, the critical question of a national versus a federal-state system took center stage. In a congressional message in June 1935, the President himself had revealed a preference for a federal-state system, calling for “*a maximum of cooperation between States and the Federal Government*”, while advocating a social insurance programme national in scope and funded by contribution rather than by an increase in general taxation (Blaustein, 1993, p. 133).

The resolute role played by the federal government is epitomized by the fact that federal legislation on unemployment insurance was needed in order to remove the chief obstacle to state action, namely the fear that, by imposing a payroll tax on its employers, a state would place them at a competitive disadvantage with employers in other states that chose not impose such a tax (Blaustein, 1993, p. 141).

To surmount this obstacle, in early 1934 Senator Robert Wagner and Congressman David J. Lewis had introduced a bill proposing the establishment of a compromise federal-state programme that would use the federal taxing power to induce states to adopt their own insurance programmes. The Wagner-Lewis bill was endorsed by President Roosevelt but rejected by the House Ways and Means Committee; however, the bill’s major provisions were ultimately incorporated into the Social Security Act (Cogan, 2017, p. 105).

In fact, the Committee on Economic Security – established by President Roosevelt in June 1934 – recommended that the above-mentioned first-mover problem be overcome through a uniform federal excise tax on payrolls, complemented by a tax credit to employers for insurance contributions they made under a compulsory state unemployment insurance law. The uniform tax would remove the obstacle to state legislation, while the tax credit would encourage each state to act to enable their employers to qualify for it (Blaustein, 1993, p. 141).

Overall, the prevailing position of the Committee was to allow the states considerable leeway in evolving the kind of unemployment insurance programmes they deemed appropriate; in keeping with this position, very few federal standards were recommended, notably those dealing with the control and use of state benefit funds. No standards were recommended regarding such key issues as the level and duration of state unemployment benefits or the eligibility requirements (Blaustein, 1993, p. 144).

The ground-breaking scope of the Social Security Act – and its UI provisions – is magisterially captured in the words of President Roosevelt at the signing ceremony<sup>6</sup>:

*This law, too, represents a cornerstone in a structure which is being built but is by no means complete. It is a structure intended to lessen the force of possible future*

---

<sup>6</sup><https://www.ssa.gov/history/fdrs/signstate.html#:~:text=This%20law%2C%20too%2C%20represents%20a,furnish%20relief%20to%20the%20needy.>

*depressions. It will act as a protection to future Administrations against the necessity of going deeply into debt to furnish relief to the needy. The law will flatten out the peaks and valleys of deflation and of inflation. It is, in short, a law that will take care of human needs and at the same time provide the United States an economic structure of vastly greater soundness.*

Having been established in the middle of the Great Depression, at the beginning the UI programme was modest in its design – with states paying low weekly benefits for short periods of time – because of concerns about potentially overwhelming budgetary costs in the short term (Wandner, 2020). Benefit payments were delayed until 1938 to allow tax collection and build up state reserves in the Unemployment Trust Fund held at the U.S. Treasury. In the years after World War II, the strength of the U.S. economy prompted states to amend their laws to increase the generosity of the benefits and lengthen their potential duration.

During the three decades from 1951 to 1980 a series of revisions in federal and state UI laws progressively broadened the covered population, raising the fraction of all civilian employment covered by UI from 58 percent in 1951 to 87 percent in 1980 (Burtless, 1983). In 1970, Congress enacted a permanent Extended Benefits (EB) programme; the last major reform was enacted in 1976 – prompted by the 1974-75 recession – but was only partial (Wandner, 2018, p. 5); two UI study commissions authorized by Congress issued reports in the 1980s and 1990s, but their reform recommendations went unheeded.

In the middle of the Great Recession, the American Recovery and Reinvestment Act (ARRA) of 2009 provided financial incentives for expansions of UI eligibility that together were referred to as “UI modernization” (West *et al*, 2016; O’Leary *et al*, 2020).

The severe financial strains that the Great Recession caused on the solvency of the state trust funds – not least because of the increase in the average duration of unemployment, which may have entered a “*new era*” (Vroman, 2018) – triggered some states to reduce benefits and restrict programme eligibility; for the first time in the history of the UI system, starting in 2011 eight states reduced the duration of the regular UI benefits to less than 26 weeks.

Responding to these cuts and restrictions, as part of the Fiscal Year 2017 Presidential Budget request, then President Obama proposed a modest range of reforms to the UI programme, primarily aiming at expanding access to benefits and services, including through a mandatory requirement for states to provide at least 26 weeks of benefits for the regular UI programme (White House, 2016). These proposals were not considered by Congress. The Covid-19 pandemic triggered an unprecedented – albeit temporary – expansion of UI programmes that was fundamental in mitigating its economic and social impact<sup>7</sup>.

### **3. STRUCTURAL CHARACTERISTICS OF THE UI SYSTEM**

The UI system is a federal-state partnership that has been characterized as a delicate balance of power designed to be self-regulating by a built-in incentive structure. The federal partners are meant to “*hold the upper hand in the relationship*”, because federal requirements for conformity

---

<sup>7</sup> See Section 3.2.2.

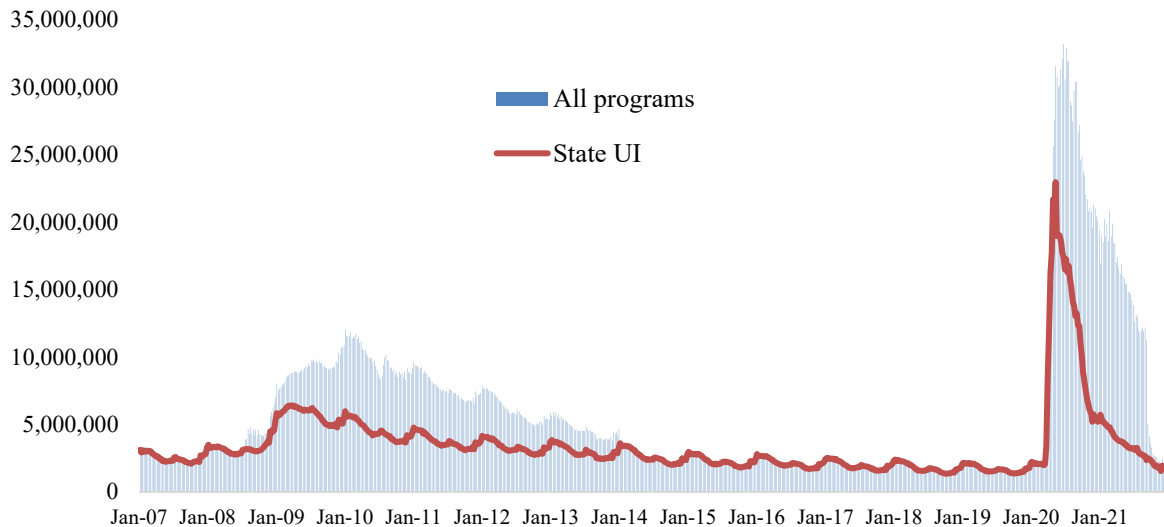
and compliance are central to regulating the system (O’Leary *et al*, p. 4, 2020): for example, state UI laws must conform to federal law for employers not to pay a much higher federal tax.

As a federal-state partnership, the UI system subjects states to these minimal federal requirements to ensure both that the programme provides a basic level of protection for eligible workers and serves as a macroeconomic stabilizer in economic downturns (Stone and Chen, 2014)<sup>8</sup>. Two of the most important requirements are the following: 1) “*all money withdrawn from the unemployment fund of the State shall be used solely in the payment of unemployment compensation*”; 2) states cannot impose excessively burdensome “*methods of administration*” that block access for otherwise eligible workers (Stone and Chen, 2014, p. 2).

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 programme.

The federal government pays only for the administrative costs of UI; however, during recessions it has historically fully funded the emergency programmes implemented to mitigate the impact on workers who lose their jobs. The UI system mainly consists of both permanent programmes and temporary (emergency) programmes (Fig. 1)<sup>9</sup>.

**Fig. 1 - UI claims 2007-2021**



Source: U.S. Department of Labor, <https://oui.doleta.gov/unemploy/DataDashboard.asp>

<sup>8</sup> O’Leary *et al* (2020, p. 36) emphasizes that to address the principal-agent problems of the multi-tiered (federal-state) UI system, the United States has made use of a variety of approaches to influence state behavior: mandates, discretionary grants, and universal grants; each approach can be effective but presents idiosyncratic pros and cons.

<sup>9</sup> 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).

### 3.1 Permanent UI programmes

Permanent programmes refer to the state regular UI programme and the federal Extended Benefits (EB) programme.

#### 3.1.1 The state's regular UI programme

Almost all wage and salary workers are covered by the state's regular UI programmes, 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 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 Massachusetts; they were only \$161 in Puerto Rico<sup>10</sup>.

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 eligibility requirements for UI benefits such as their level and duration. Despite the substantial variation of these parameters across states, commonalities do exist. Workers usually qualify if they:

- are unemployed “*through no fault of their own*”, as determined under each state law;
- meet *monetary* requirements, i.e., state-specific minimum earnings and employment duration during the so-called “base period” before becoming unemployed or partially unemployed;
- meet any *nonmonetary* requirements, notably the so-called “work search requirements”: ability and availability to work, actively seeking work.

The duration of UI benefits – i.e., the number of weeks payable or Potential Benefit Duration (PBD) – is uniform in a minority of states while it is variable in most states, usually depending on the amount of earnings in the individual's base period and, in some cases, also on the state's unemployment rate (DOL, 2019).

From the late 1960s to 2011, the PBD in regular UI programmes was at least 26 weeks in all states (in Massachusetts and Montana, the maximum number of weeks payable has historically been higher – up to 30 and 28 weeks, respectively – under certain circumstances, notably very high unemployment). This uniform duration reflected the “American consensus” of the mid-1970s that states could afford to pay more benefits (O’Leary and Wandner, 2018, p. 143)

In the face of the exceptionally high amount of UI benefits paid in the aftermath of the Great Recession – not least because its exceptionally long length led to a historically high average duration of benefits – between 2011 and 2013 nine states reduced the maximum number of payable weeks or capped them based upon the state's unemployment rate (GAO, 2015, Table 1; Isaacs, 2019). On the eve of the Covid-19 pandemic, in eight states the PBD was fewer than 26 weeks – to as low as 12 weeks in Florida and North Carolina in times of low unemployment (5-5.5 percent or less) – with 20 weeks being the new maximum in six of such states<sup>11</sup>.

---

<sup>10</sup> Department of Labor, Monthly Program and Financial Data, <https://oui.doleta.gov/unemploy/claimssum/5159report.asp>

<sup>11</sup> In Idaho and Kansas, less than 26 weeks are available if the state unemployment rate is lower than, respectively, 8 and 6 percent (DOL, 2020b, Table 3-12).

Cutting future UI costs and replenishing the state’s trust fund balance – exhausted in the aftermath of the Great Recession, when 36 out of 53 state UI programmes had to borrow to pay regular benefits – were the key rationales for these states’ decision to reduce benefit duration (GAO, 2015; O’Leary and Kline, 2016).

Apart from the consequences in terms of shorter income support to unemployed workers, the reduction in benefit duration may have a macroeconomic impact by weakening the countercyclical power of UI (GAO, 2015)<sup>12</sup>. More generally, it has been argued that while the eight states that cut the benefit duration achieved a faster improvement of their trust fund reserves, the reduction is meant to have eroded the fundamental intent of UI to provide temporary, partial wage replacement to involuntarily unemployed workers (O’Leary and Wandner, 2018, p. 144)

However, this 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 programmes (CBPP, 2022). Currently, nine states provide less than 26 weeks and two states (Massachusetts and Montana) provide more (30 and 28 weeks)<sup>13</sup>.

### 3.1.2 *Funding of the state’s regular UI programme*

The state regular UI programme is almost totally funded by taxes on employers, something that is hailed as one of the system’s 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 programme 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).

Under current FUTA provisions, a federal tax is levied on covered employers at a rate of 6.0 percent on employees’ wages up to \$7,000 a year – known as the “taxable wage base-TWB”<sup>14</sup>. However, if a state UI law meets the minimum federal requirements under FUTA and Title III of the Social Security Act, employers are eligible for certain credits against the 6.0 percent FUTA tax. As a result, since all states normally meet these requirements, in practice the effective FUTA rate is reduced to 0.6 percent per year (or a maximum of \$42 per covered employee) (DOL, 2020b).

The FUTA tax is mainly used to fund: 1) federal and state administrative costs associated with UI programmes; 2) the 50 percent federal share of the federal Extended Benefits programme (the other 50 percent is covered by SUTA taxes<sup>15</sup>; 3) loans (“advances”) to states to pay UI benefits.

---

<sup>12</sup> See Section 4.5.

<sup>13</sup> Massachusetts provides up to 30 weeks except when the federal Extended Benefits program is in place (as it was until early September 2021) or in periods of low unemployment (as was the case through February 2020), when the maximum duration drops to 26 weeks (CBPP, 2022).

<sup>14</sup> Initially, the federal tax under FUTA was set at 1.0 percent of the total wages of a worker. By 1940 it had increased to 3.0 percent (0.1 percent effective tax) on wages up to \$3,000 and had reached 6.2 percent (0.8 percent effective tax) in 1985. On July 1, 2011, the Federal tax was reduced to 6.0 percent. The taxable wage base was set at \$3,000 in 1940 and subsequently increased to \$4,200 in 1972, \$6,000 in 1978, and \$7,000 in 1983 (DOL, 2020b).

<sup>15</sup> The federal government began to fully fund the EB program on a temporary basis following enactment in February 2009 of the America Recovery and Reinvestment Act. States resumed responsibility for their half of the funding in 2014. See Section 3.1.4.

The federal government normally fully finance the temporary emergency UI benefit programmes activated in recessionary periods, such as the Great Recession and the Covid-19 pandemic.

As far as SUTA taxes are concerned, across all states the amount of such taxes paid by employers depends generally on the number of employees, the state’s taxable wage base, and the contribution rate assigned to the employer. Accordingly, there is a sizable variation of UI taxes across states.

In 2020, for the U.S. as a whole, the average state employer contribution rate was equal to 0.43 percent of *total* wages; it ranged from a minimum of 0.10 percent of total wages in Florida to a maximum of 1.01 percent in Oregon. In terms of *taxable* wages, the average state employer contribution rate was 1.72 percent, ranging from 0.42 percent in Utah to 4.05 percent in California (DOL, 2021b)<sup>16</sup>.

It is important to note that almost all states have adopted a taxable wage base higher than the minimum \$7,000 applicable under FUTA. In 2020 the TWB ranged from \$7,000 in five states (Arizona, Arkansas, California, Florida and Tennessee) to \$52,700 in Washington (DOL, 2021b).

According to the U.S. Department of Labor, in 2020 24 states and the Virgin Islands had a flexible taxable wage base, i.e., bases that are automatically adjusted annually, generally depending on changes in the state Average Annual Wage-AAW or on the balance of the state unemployment trust fund (Ernest & Young, 2020).

In nominal values, in 2020 the *Average Employer Tax Amount Per Covered Employee* was \$267, equivalent to 0.43 percent of total wages (or 1.72 percent of taxable wages)<sup>17</sup>. These averages unsurprisingly mask a substantial variation across states: UI taxes ranged from a minimum of \$44 in Florida to \$588 in Massachusetts (\$701 in the Virgin Islands) (DOL, 2021b, chart 1, p. 63). Also noticeable is the fact that the average UI tax paid by employers has significantly declined in recent years: for example, in 2013 the *Average Employer Tax Amount Per Covered Employee* was \$426, equivalent to 0.88 percent of total wages (or 3.26 percent of taxable wages) (DOL, 2015, p. 7). The decline likely owes to an important extent to the intervening progress in replenishing states’ unemployment trust funds in the aftermath of the Great Recession.

In this regard, 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). This results in most favorable and least favorable tax “schedules” – used to convert the results of the employer’s “experience rating” formula into a tax rate – with tax rates varying from zero (in 22 states) to over 18.5 percent in 2019 (DOL, 2020b, Table 2-10). Furthermore, in 2020 in seven states the variable taxable wage base had an explicit link to the state trust fund balance (DOL, 2020b). Overall, these 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 that “*erode at least some of the stabilizing macroeconomic effects of paying UI benefits*” (GAO, 2010, p. 24).

Another unique feature of the state UI’s funding mechanism is that in all states the contribution rate is based on the employer’s “experience rating”, by which individual employers’ contribution rates vary on the basis of their experience with the risk of unemployment. As a result, in 2020 the employer’s *Average Contributions Per Employee at the State Tax Base* ranged from a minimum

---

<sup>16</sup> See also [https://oui.doleta.gov/unemploy/avg\\_employ.asp](https://oui.doleta.gov/unemploy/avg_employ.asp)

<sup>17</sup> DOL (2021b, p. 9). In 2019 these numbers were, respectively, \$277, 0.47 percent and 1.86 percent (DOL, 2020c, p. 9).

of \$59 – for those employers with the best experience rating, i.e., laying off the fewest employees – to a maximum of \$1,285 paid by employers laying off the most employees (DOL, 2021b, p. 9).

Experience ratings are designed to achieve a number of objectives: encouraging employers to stabilize employment; equitably allocating the costs of unemployment; and encouraging employers to participate in the system by providing eligibility information (DOL, 2020b). In addition to acting as an incentive to stabilize employment, the experience rating is meant to increase the employers’ involvement in monitoring UI eligibility and make them aware that layoffs have consequences for their tax rates (O’Leary *et al*, 2020).

In practice, the most important reason for adopting the experience rating is that federal law allows for a credit against federal unemployment tax liability if the state rates are based on not less than three years of “*experience with respect to unemployment or other factors bearing a direct relation to unemployment risk*” (DOL, 2020b, p. 2-7).

Within the broad federal requirements, each state has the legal authority to set the type of experience rating method to apply in the formulation of the employers’ tax rates, so that the experience rating provisions of state laws vary greatly. The most significant variations relate to the formulas used for determining the tax rate. Out of the four available methods<sup>18</sup>, in 2019 the majority of states (thirty-one) used the Reserve Ratio experience rating methodology, the only method which gives credit to employers for the amount of contributions they have made (DOL, 2020b, Table 2-3).

The funding role of experience ratings is not uncontroversial: for example, it has been singled out as a root cause of most of the UI programme’s problems, in so far as it creates incentives for employers to prevent workers from receiving unemployment benefits in order to keep taxes low (Edwards, 2021).

### 3.1.3 *The financial balances of the state UI trust funds*

State trust funds are used to pay UI benefits to eligible recipients of the regular state UI programmes. Each state deposits its SUTA revenues into its individual state UI trust fund account within the federal Unemployment Trust Fund (UTF) at the U.S. Treasury.

There are no federal requirements for the level of funds that should be kept in a state trust fund; however, each state operates on a so-called “forward funding” basis, i.e., it builds up reserves in expansionary years in anticipation of paying higher amounts of benefits during recessionary times (DOL, 2020a). In fact, the state’s reserves held in the UTF usually grow in times of robust economic activity, when SUTA revenue is greater than a state’s UI expenditures. This trend is reversed during economic recessions and during the early stages of an economic recovery, when the state’s reserves are drawn down and new SUTA revenue does not always make up the shortfall. The ultimate objective of forward funding is to build up trust fund reserves to avoid a pro-cyclical increase of employer UI taxes during recessions when unemployment increases (O’Leary *et al*, 2020).

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 – through the Title XII programme – provides a loan mechanism whereby states may borrow funds from the Federal

---

<sup>18</sup> Reserve-ratio, benefit-ratio, benefit-wage-ratio, and payroll variation formulas.

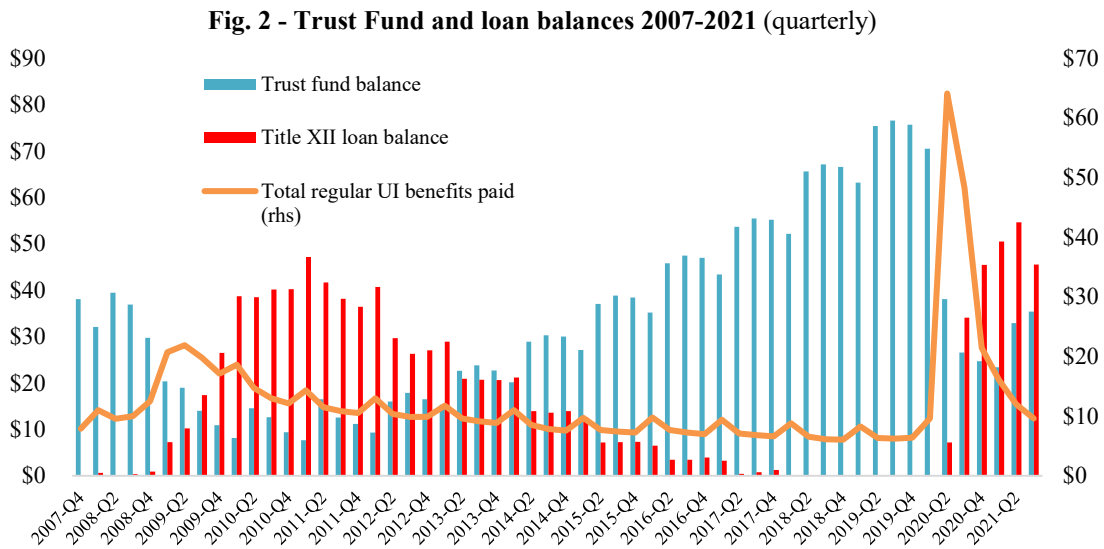


Unemployment Account (FUA), which is the federal loan account within the UTF. Interest on these advances – or “Title XII loans” – is charged on a daily basis<sup>19</sup>.

States are also able to use private sector borrowing instruments, such as revenue bonds, to repay the federal government for their outstanding loans; eight states used the private market to finance UI debt following the Great Recession and private debt outstanding reached close to \$10 billion in 2012. However, by end-2019 no state had private debt outstanding.

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. 2). 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 programmes 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 was at a record-low of \$63 million (owned by the U.S. Virgin Islands), down from a peak of \$47 billion in March 2011 (DOL 2020a).



Source: US Department of Labor, UI Quarterly Data Summary. [https://oui.doleta.gov/unemploy/data\\_summary/DataSum.asp](https://oui.doleta.gov/unemploy/data_summary/DataSum.asp)

<sup>19</sup> Since 2013 the Federal government allows a state to borrow interest free if it takes a federal advance after January 1st and repays it by September 30th of the same year.

In order to assess the adequacy of a state's UI tax structure, the U.S. Department of Labor uses the concept of "*Minimum Adequate Financing Rate*", i.e., the tax rate needed to cover the state's total benefit payments (average level of last six years) plus a solvency buffer (the difference between the state's current trust fund level – including loans – and the recommended minimum adequate level)<sup>20</sup>. The percentage difference between the state's actual average tax rate and the Minimum Adequate Financing Rate shows how the state's current level of financing compares to what is considered to be the adequate level. In 2019, 33 states had an actual average tax rate below the Minimum Adequate Financing Rate (DOL, 2020c, p. 9), in 10 of which by a percentage ranging between -76 and -30.

The adequacy of the solvency of a state's UI system is measured by the so-called *Average High-Cost Multiple* (AHCM), which is the ratio between the Reserve Ratio (the state trust fund balance divided by the state's total wages paid for the year) and the average of the 3 highest years of benefit payments (each divided by that year's total wages) experienced by the state over the past 20 years.

This indicator aims at capturing the potential UI payments expected if another recession were to occur, thus assessing whether states are financially prepared to weather serious downturns. Under this assumption, an AHCM equals to at least 1 – as recommended in 1996 by the Advisory Council on Unemployment Compensation – means that the state trust fund has enough reserves to pay for one year of UI benefits at a level experienced during a recession, before needing to borrow from the federal government. Values of the AHCM at least equal to 1 are thus considered the minimum level of state solvency.

For the U.S. as a whole, at end-2019 the AHCM stood at 0.80, the highest level since 2001, and a significant improvement compared to both the eve of the Great Recession – 0.52 in 2007 – and the post-Global Financial Crisis years (2009-2013), when the AHCM was nil because state trust funds had been depleted<sup>21</sup>.

It is also worthwhile noting that, at end-2019, 31 states had an AHCM at least equal to 1 or higher (DOL, 2020a); in this regard, since 2010 (but effective since 2019) having an AHCM greater than or equal to 1 is requested as one of the conditions for states to receive interest-free loans from the federal UTF (O'Leary and Wandner, 2018, p. 153).

Whether a state trust fund is balanced or not may have important implications for the state's employers. In fact, as noted before, state laws usually establish a link between the trust fund balances and the UI tax rates and taxable wage bases. Besides, if a state fails to repay promptly the outstanding Title XII advances within a certain deadline (November 10th of the year in which a second January 1st has passed), they may face interest charges and all taxable employers in that state may be subject to increased net FUTA taxes (via reduced credits) according to a defined timetable (Whittaker, 2018).

More generally – and equally important – 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 (see Section 5.3).

---

<sup>20</sup> The minimum adequate financing rate can also be meant as the tax rate that would be charged to all employers if there were no experience rating (GAO, 2010, p. 21, footnote 39).

<sup>21</sup> <https://oui.doleta.gov/unemploy/hb394/hndbkrpt.asp>

### 3.1.4 The Extended Benefits programme

The permanent Extended Benefits (EB) programme was enacted by Congress with the Federal-State Extended Unemployment Compensation Act of 1970 (EUCA) 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. Furthermore, the EB programme may play an effective countercyclical role as temporary extensions of the duration of UI benefits (as well as increases of their level) are usually seen as a most effective instrument for macroeconomic stabilization in downturns (Yang *et al.*, 2010).

The EB programme 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 programme.

A key feature of the EB programme is its automatic activation, which depends on a few statutory and optional “triggers” (Isaac and Whittaker, 2014b; Bauer, Edelberg and Parson, 2020).

The *statutory* trigger mandates all states to provide up to 13 weeks of EB when two conditions are met:

- the (13-week average) state *insured unemployment rate* (IUR) – the number of individuals collecting regular UI benefits (“UI recipients”) as a percentage of the total number of workers eligible for UI benefits if they lost their jobs – reaches at least 5 percent;
- the state IUR is at least 20 percent higher than it was during the same 13-week period in each of the previous two years, the so-called “lookback” provision of the trigger.

To expand access to EB in recessions, two *optional* triggers can be adopted by states (depending on their own laws):

- the first optional trigger is still based on the IUR: up to 13 weeks of EB are payable if the (13-week average) state IUR is at least 6 percent, regardless of the rate in prior years, i.e., it does not require a rising IUR;
- the second optional trigger is instead based on the state’s *total unemployment rate* (TUR), the number of unemployed people as a percentage of the total labor force (both employed and unemployed). Under this optional trigger, states can offer up to 13 or 20 weeks of EB if the 13-week average TUR reaches certain thresholds (6.5 and 8.0 percent, respectively) and is at least 10 percent higher than in the same 13-week period in either of the two preceding years.

EB triggers have well-known drawbacks, with implications for income support and countercyclical capabilities of UI. To begin with, the EB programme has been historically activated more frequently by the TUR-based optional trigger than either the statutory or the optional IUR-based triggers, for example because IURs have rarely exceed 6 percent – with the Covid-19 crisis constituting a dramatic exception (Bauer, Edelberg and Parson, 2020). One reason why IUR triggers have become harder to reach is that reciprocity rates in regular UI programmes have declined (Chodorow-Reich and Coglianesi, 2019).

During the 2008-09 Great Recession – the longest and most-severe one since World War II – many states adopted the optional triggers to take advantage of the important provisions for the UI programme provided by the 2009 America Recovery and Reinvestment Act (ARRA) of February

2009. In particular, for the first time in the 40-year history of the EB programme the ARRA provided temporary 100 percent federal funding until it expired on December 31, 2013, as opposed to the statutory 50-50 percent federal-state cost-sharing financing arrangement (Weidinger, 2020b, p. 6)<sup>22</sup>.

As a result of this financial incentives to states provided by the ARRA – up to 20 additional weeks of fully federally-funded EB – at the peak in 2011, 38 states and the District of Columbia had opted in to use the TUR trigger, up from just 11 states early in the Great Recession (Bauer, Edelberg and Parson, 2020). During the 2008-13 period, essentially all triggers onto EB occurred via the TUR triggers rather than the UIR (Chodorow-Reich and Coglianesi, 2019); ultimately, 42 of the 53 state UI programmes triggered on to EB for at least a portion of time (Nicholson, Needels, and Hock 2014, p. 194). EB was triggered off in all states by mid-August 2012 (DOL-ETA Trigger Notice No. 2012-30); no state qualified for EB after May 2013 (GAO, 2015, p. 8).

It is noteworthy that, in the absence of incentives to adopt the TUR trigger, states usually prefer not to keep it as an optional trigger because its activation would compel them to provide the 50 percent co-financing. In fact, on the eve (February 2020) of the Covid-19 crisis, only 11 states had the TUR option in place (Bauer, Edelberg and Parson, 2020).

The states' disincentive to keep the EB activated in the absence of a full federal funding has once again been visible during the Covid-19 recession, the shortest on record. The Families First Coronavirus Response Act (FFCRA)<sup>23</sup> of March 18, 2020 and the Coronavirus Aid, Relief and Economic Security Act (CARES Act) of March 27, 2020 reinstated the 100 percent federal funding provision of the EB programme through end-2020: as a result, for some part of 2020 EB was on in all states except South Dakota (Bauer, Edelberg and Lu, 2020). But given the expected expiration of the full federal funding provision at end-2020, by early-December EB had already been triggered off in 20 states.

Besides, EB and was in danger of triggering off soon in many more states before the full funding provision was first extended (through March 14, 2021) by the Consolidated Appropriations Act of 2020 (CAA)<sup>24</sup> of December 27, 2020 – and subsequently (through September 6, 2021) by the American Rescue Plan Act (ARPA) of March 11, 2021 (Bauer, Edelberg and Lu, 2020).

The so-called “triggering off” problem – i.e., the fact that the triggers may result in an automatic premature deactivation of the EB programme in times when the unemployment rate remains high and sustained but not increasing – is a long-standing drawback of the EB programme (Isaacs-Whittaker, 2014b). This problem arises from the trigger's original “lookback” provision, the requirement that a state's unemployment rate not only exceed certain thresholds but be also rising (i.e., significantly higher than in the previous two years). Falling unemployment thus poses the risk that the EB typically triggers off prematurely at the worst possible time for unemployed workers.

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

---

<sup>22</sup> ARRA also modified the EB to allow easier access to its benefits and longer potential duration (a maximum of 20 weeks in several states rather than the traditional 13).

<sup>23</sup> Division D - Emergency Unemployment Insurance Stabilization and Access Act (EUISAA).

<sup>24</sup> UI provisions in the CAA are included in the section “Continued Assistance for Unemployed Workers Act”.

unemployment, notably its long-term component. In particular, long-term unemployment in the aftermath of the Great Recession didn't begin declining until 2012, well after the end of the recession (Fig. 5).

Even though in many states the IURs and TURs remained elevated long past the end of the recession – stretching into 2012 and 2013 – those unemployment rates had not risen relative to the peak during, or just after, the Great Recession; as a result, these states – and the workers receiving EB support – faced the risk of a “benefit cliff”, as the programme was bound to be deactivated (Bauer, Edelberg and Parson, 2020).

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, Edelberg and Parson, 2020). This option, which many states adopted, remained in effect through end-2013. However, when the federal interventions expired at end-2013 and the EB was deactivated, long-term unemployment was still well above pre-recession levels.

The triggering off problem resurfaced – with somewhat new nuances – in the recent recession caused by the Covid-19 pandemic. First, because of the swift and severe nature of the economic shock from the pandemic, the TUR and IUR triggers have automatically activated the EB programme in nearly every state, in some cases less than one month after the passage of the CARES Act (Bauer, Edelberg and Parson, 2020). As noted before, by June 2020, 52 states had EB on (the only exception being South Dakota). This prompt EB triggering on is unusual, as in the past – as noted before – automatic triggers proved to be rather unresponsive, spurring Congress to enact emergency UI extensions.

Second, while the TUR-based trigger has historically been more responsive than the IUR triggers – for example, in late 2009, 46 states and the District of Columbia were eligible for EB based on the TUR trigger, compared to just 21 states using the IUR trigger – the sudden nature of the Covid-19 downturn has meant that states triggered on more quickly the EB programme by using the IUR trigger than the TUR trigger (in contrast to the experience of the Great Recession). That is because the IUR is a timelier snapshot of local economic conditions, as unemployment insurance data are released on a weekly basis with only a two-week lag, whereas TURs are monthly and often on a several-week lag (Bauer, Edelberg and Parson, 2020).

The triggering off problem of the EB has a distinctive implication for prolonged economic downturns, when the labor market tends to remain weak for some time and long-term unemployment – workers unemployed for 27 weeks or more – become elevated. The nature of the Extended Benefits is that they are usually economically and socially important after emergency measures end. In fact, in the 1990s and 2000s, emergency federal UI extensions were structured to be paid before any EB that might be available (O’Leary *et al*, 2020, p. 10).

This requirement has been confirmed by the CARES Act of 2020 introduced as a response to the Covid pandemic. In fact, in a typical state an unemployed worker would need to exhaust its 26 weeks of regular UI benefits and its additional 53 weeks of the newly-introduced Pandemic Emergency Unemployment Compensation (as extended by ARPA) – a total of 79 weeks – before accessing the EB.

This notwithstanding, the requirement that the IUR be rising remain problematic in the current crisis, although it is mitigated by the fact that unemployment is declining more rapidly than during

the Great Recession. The unemployment rate peaked at a record level of close to 15 percent in April 2020, but subsequently started to decline rapidly, to 3.9 percent in December 2021, against a forecast made in July 2020 by the Congressional Budget Office of 6.9 percent in the last quarter of 2021<sup>25</sup>.

As a result, by December 27, 2020, EB was active in 24 states (from 52 in June 2020) but remained on only in 4 states by September 2021 (triggered by the 3-month TUR)<sup>26</sup>, when the unemployment rate was still 1.2 percentage points higher than its pre-pandemic low of February 2020 (3.5 percent). Currently, as of early February 2022, the EB is still active in 2 states (New Jersey and New Mexico).

### *3.2 Temporary UI programmes*

Since its inception, design flaws have prevented the EB programme from responding rapidly and effectively to recessions, frequently failing to pay additional benefits even during periods of high unemployment. This recognition led federal lawmakers to enact temporary federally funded supplementary programmes on an *ad hoc* basis in every recession since 1958, to provide additional weeks of UI benefits to individuals who had exhausted state UI benefits (Isaacs and Whittaker, 2014b). 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 programmes of emergency UI benefits, which often included temporary changes to the permanent EB programme to extend the duration of benefits for the long-term unemployed.

Historically, for several reasons temporary emergency programmes became operational only when the trough of a recession had already passed (i.e., after the recession had officially ended). One such reason is that the exact date of the recession is usually not known until months after it has started. In the last five recessions, the NBER's announcement has come 6 to 12 months after the official starting date of the recession (Boushey *et al*, 2019).

Finally, it should be noted that unemployed workers usually qualify for EB and temporary emergency programmes only if they are initially found eligible for UI benefits and are not disqualified during the time they receive regular benefits. These requirements may undermine the coverage of UI programmes as a source of income support in so far as states that restrict access to regular UI benefits may make ineligible workers unable to receive benefits of any type (i.e., not only regular, but also extended or emergency ones).

#### *3.2.1 The 2008 Emergency Unemployment Compensation programme*

The Emergency Unemployment Compensation (EUC08) programme was created on June 30, 2008 to provide benefits to individuals who had exhausted regular state UI benefits. The amount of the EUC08 benefit was the equivalent of the eligible individual's weekly regular UI benefit and included any applicable dependents' allowances (Isaacs and Whittaker, 2014a). Although the EUC08 programme shared many features of previous emergency programmes, an important

---

<sup>25</sup> In February 2021, the Congressional Budget Office projected an unemployment rate of 5.9 percent on average in 2021, gradually declining through 2026; the number of people employed were projected to return to its pre-pandemic level in 2024.

<sup>26</sup> U.S. Department of Labor, EB Trigger Notice Archive: [https://oui.doleta.gov/unemploy/claims\\_arch.asp](https://oui.doleta.gov/unemploy/claims_arch.asp)

innovation was that EUC08 was initiated much earlier in the recession than were previous emergency programmes, thereby providing it with a potentially greater stabilization role (Nicholson and Needels, 2011).

The EUC08 programme 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 programmes in that it lasted more than five 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 (TUR or IUR) 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 programme had provided more than 33 weeks of benefits (Weidenger, 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 World War II (Needels *et al*, 2016).

Availability of these benefits enabled unemployed workers to search for work for a longer period before collecting all their UI entitlements (so-called “exhaustion”). Research covering the years 2008-12 shows that, on average, (single-claim) recipients were eligible for 88 weeks of UI benefits and 57 percent were eligible for the maximum number of 99 weeks; they collected, on average, a total of 43 weeks of UI benefits through both the regular state UI programmes and the emergency federal EUC08 and EB programmes. However, this average masks considerable variability among recipients: about one-quarter of them collected 12 or fewer weeks of benefits and almost one-fifth received 91 to 99 weeks of benefits. Finally, almost 63 percent of recipients exhausted their benefits through the regular UI programme and 26 percent of them exhausted all of the UI benefits (state, EUC08 and EB) to which they were entitled (Needels *et al*, 2016, p. 25).

### 3.2.2 *The pandemic UI programmes 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 programmes, eligibility and level of benefits.

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

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 is the current version of the extra weeks of emergency federal benefits (like

EUC08) that policymakers had enacted in past recessions. Importantly, PEUC is 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 programmes). 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 programmes (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" programme, authorized by then President Trump's memorandum of August 8<sup>27</sup>, 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<sup>28</sup> 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 weeks of PUA a person could receive from 39 to 50 and extended the programme's duration through March 14, 2021. The March 2021 ARPA further increased the maximum number of weeks to 79 and extended PUA's duration to September 6, 2021<sup>29</sup>.

---

<sup>27</sup> Memorandum Authorizing the Other Needs Assistance Program for Major Disaster Declarations Related to Coronavirus Disease 2019.

<sup>28</sup> The CAA also introduced an optional (for states) new Mixed Earner Unemployment Compensation (MEUC) program to address a gap in the CARES Act, which had excluded "mixed earners", i.e., "gig" workers (typically freelancers, artists, independent contractors, Uber drivers) who receive most of their income as self-employed and supplement it by working part-time in traditional employment. Under the CARES Act, a mixed earner had to choose between applying for traditional unemployment benefits or for PUA benefits. The applicant could not claim both.

<sup>29</sup> It is important to note that, in the pandemic's early stages, all 50 states dropped or limited the statutory job-search requirements in exchange for accessing the new temporary, emergency federal funding. While each state handled work-search requirements differently in response to the coronavirus crisis, some federal legislation – e.g. the Families First Coronavirus Response Act of March 18, 2020 – allowed states to disregard federal work-search requirements "on an emergency temporary basis", largely waiving the job-search requirements to be eligible for UI. Someone who stopped working because of, for example, childcare needs would be eligible for benefits. The DOL hasn't specified a "stop date" for when states can reinstate job-search requirements, a decision that belongs to states (Bloomberg Law, 12 May 2020).



While the PEUC closely resemble 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.

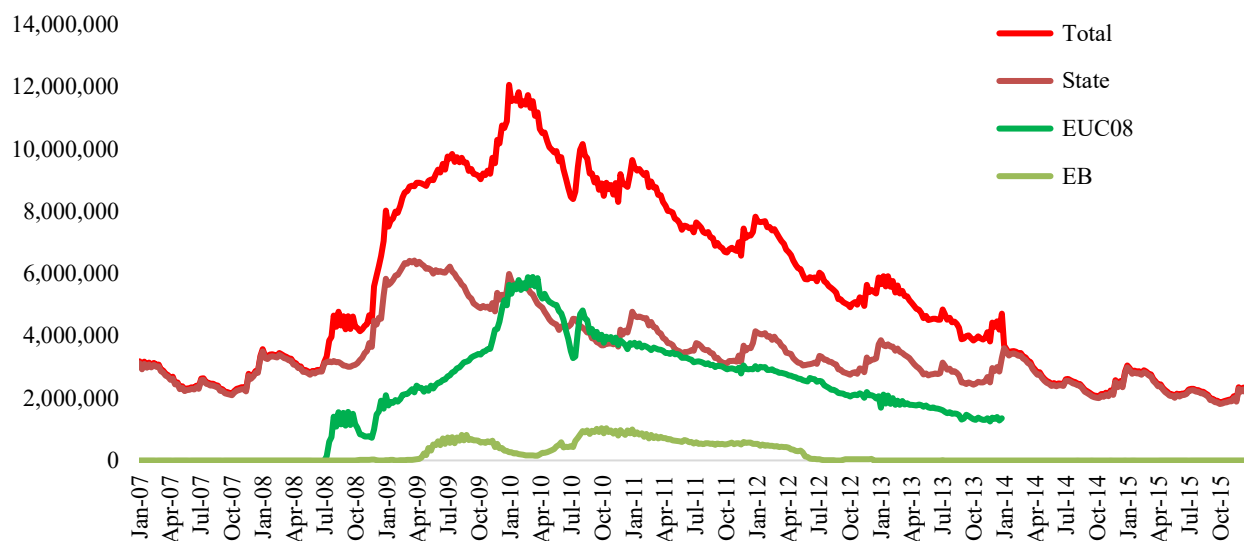
#### 4. UI PERFORMANCE DURING THE GREAT RECESSION AND THE COVID-19 PANDEMIC

##### 4.1 UI programmes during the Great Recession

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 early-2016; 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 May 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 programmes (Nicholson *et al*, 2014, p. 188).

Total weekly UI recipients – including both regular state and (emergency federal) programmes – 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. 3). 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.

Fig. 3 - UI recipients by program 2007-15



Source: U.S. Department of Labor, <https://oui.doleta.gov/unemploy/DataDashboard.asp>

Regular state UI programmes 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 programme began operating since July 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 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 programme 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 programme covered up to 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 programmes (Council of Economic Advisers, 2013).

#### *4.2 UI programmes during the Covid-19 pandemic*

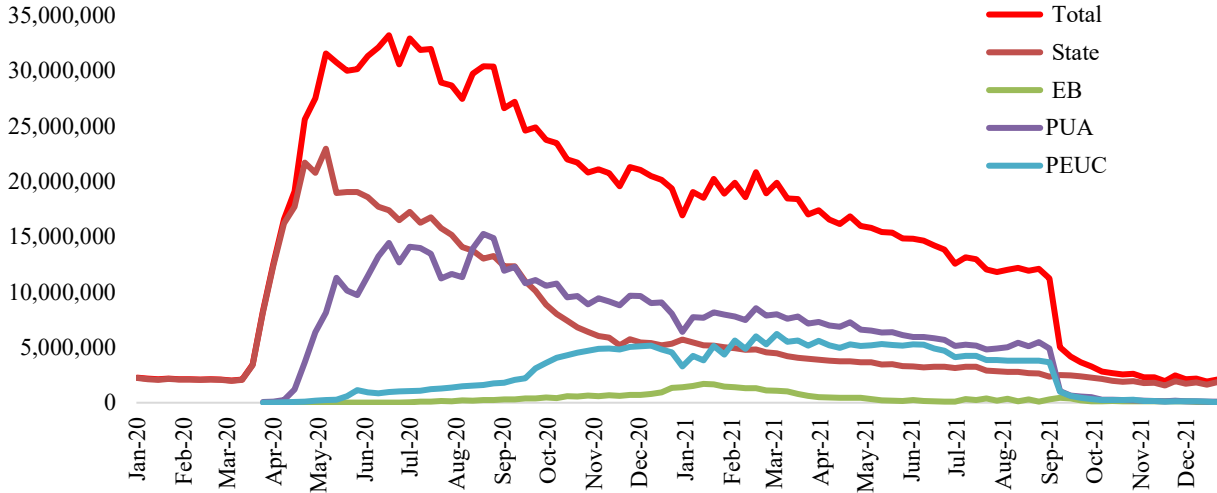
The impact of the Covid-19 pandemic led to an expansion of UI programmes that is unprecedented in scale, scope and cost despite that the recession lasted only two months and was thus the shortest in history. Between February and April 2020, nonfarm payroll employment fell by almost 22.4 million jobs; as of January 2022, employment remained 2.9 million jobs below the pre-pandemic peak of February 2020.

On the eve of the pandemic, regular state UI programmes – the first line of defense – had been covering 2 million unemployed workers per week (Fig. 4). Insured unemployment, i.e., the number of people 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.

Even more striking is the increase of unemployed workers receiving both (regular) state and (emergency) federal UI support. Following the activation of federal emergency UI programmes (EB, PUA, PEUC) by early April 2020, total UI claims – comprising all programmes, both state and federal – peaked at over 33 million 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 programmes 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. 4). These pandemic programmes 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 for traditional UI benefits. In the same vein, the FPUC added a substantial increase in the level of benefits. Reflecting the expiration of the pandemic emergency programmes in September 2021, the number of workers receiving UI benefits dropped abruptly to a low of about 2 million by December 2021, 90 percent of which from the regular state UI.

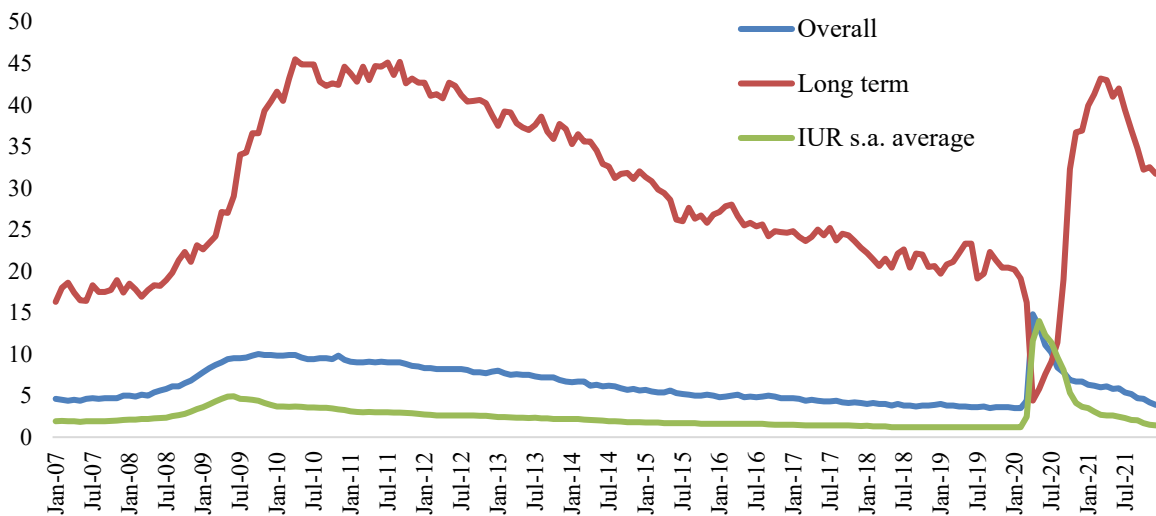
**Fig. 4 - UI recipients by program 2020-21**



Source: U.S. Department of Labor, <https://oui.doleta.gov/unemploy/DataDashboard.asp>

Because of the distinctively rapid and unprecedented nature of the Covid-19 shock, at the very beginning regular state UI programmes had to bear the brunt of the sudden spike in unemployment that followed the widespread introduction of lockdowns in spring 2020. That regular state UI programmes are the first line of defence is shown by the fact that until mid-April 2020 virtually all unemployed workers – measured by the Insured Unemployment Rate-IUR – were insured by state UI programmes (Fig. 5). This is in contrast with the Great Recession, when insured unemployed workers increased slowly and remained only a fraction (around 30 percent) of total unemployment.

**Fig. 5 - Unemployment rates**



Source: author's calculations on data from U.S. Bureau of Labor Statistics.

Given that state UI programmes typically last for 26 weeks, starting from mid-April 2020 the IUR – i.e., the share of unemployed workers covered by state UI programmes – began to decline below the total unemployment rate, as the emergency federal programmes – PEUC and PUA – started to kick in to support unemployed workers who had exhausted state UI benefits.

As far as the rate of long-term unemployment is concerned – workers unemployed for 27 weeks or longer as a percentage of total unemployed – it is first noticeable that on the eve of the Covid-19 crisis it was still slightly higher (19 percent) than the level right before the Great Recession (17 percent).

During the pandemic, the number of long-term unemployed began raising in the fall of 2020 and by March 2021 had hit 43 percent, nearing the record 45.5 percent of April 2010 that followed the Great Recession.

Besides, a distinguishing feature of the pandemic-era labor market is the high fraction of UI recipients returning to their prior employer – so-called “recalls” (Ganong *et al*, 2021, p. 1): while in normal times about 20 percent of workers exiting UI reflects a recall, this share raised to 75 percent in May 2020 before falling back to below 50 percent by the end of October.

#### *4.3 Costs of the pandemic UI programmes*

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 programmes cost a cumulative of \$856 billion, of which about \$656 billion from the emergency pandemic programmes (PUA, PEUC and FPUC), which expired on September 6, 2021. Regular state UI benefits cost \$188 billion, while EB outlays were limited to only \$12 billion (Table 1).

The scale of the exceptional pandemic support is best epitomized if one considers that the total cost of all UI programmes 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 programme; like today, payments under the EB programme were rather limited (\$29 billion) and a substantial share of the total cost derived from the emergency federal programme – the EUC08 – whose price tag hit \$230 billion. This cost is largely accounted for by an extraordinary extension – up to a maximum of 53-weeks – of the duration of federal benefits allowed by EUC08, other than by the depth and slowness of the recovery from the Great Recession (Weidinger, 2020b, p. 7). 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 programmes 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.

**Table 1 - UI Outlays by programme (\$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	317.1	44.3	8.0 <sup>a</sup>	-	56.0	50.9	157.9

Source: author's calculations on data from U.S. Department of Labor<sup>30</sup>. <sup>a</sup> first 3 quarters.

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 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,

<sup>30</sup> *State UI*: Monthly Program and Financial Data <https://oui.doleta.gov/unemploy/claimssum/5159report.asp>; *EB*: UI Data Summary [https://oui.doleta.gov/unemploy/data\\_summary/DataSum.asp](https://oui.doleta.gov/unemploy/data_summary/DataSum.asp); *EUC08*: ET Financial Data Handbook 394 <https://oui.doleta.gov/unemploy/hb394/hndbkrpt.asp>; *PEUC-PUA-FPUC*: Unemployment Insurance Data, CARES Act funding to States [https://oui.doleta.gov/unemploy/docs/cares\\_act\\_funding\\_state.html](https://oui.doleta.gov/unemploy/docs/cares_act_funding_state.html)

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 programme 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 programme amounted to \$130 billion.

#### *4.4 Financial impact of the Covid-19 pandemic on state UI trust funds and UI taxation*

As noted in Section 3.1.3, at end-2019, on the eve of the Covid-19 crisis, the state trust funds had a sizable aggregate balance of \$76 billion (Fig. 2), reflecting a steady replenishment underway since 2013 (DOL, 2020a). The amount of outstanding Title XII federal advances was at a record-low of \$63 million (own by the US Virgin Islands), down from a peak of \$47 billion in March 2011<sup>31</sup>.

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 \$143 billion (Table 1), an amount close to half the entire cost of 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 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 \$20.8 billion (DOL, 2021a); outstanding Title XII federal advances hit \$45.5 billion. At end-2020, five large states (California, Illinois, Massachusetts, New York and Texas) had a combined net deficit of \$37.7 billion in their trust funds, a major turnaround from an aggregate surplus of \$11.5 billion at end-2019<sup>32</sup>. The financial situation further deteriorated in the first quarter of 2021, when the net deficit peaked at \$27 billion.

As of December 1st, 2021, 38 out of 50 states had lower UI trust fund balances than they did before the pandemic (Lucci, 2021); it has also been estimated that, as of September 2021, 34 state accounts were insolvent by federal standards, with around \$115 billion needed to restore the minimum adequate levels requested by the federal government (Walczak and Funkhouser, 2021).

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 benefits paid declined to \$38 billion in the first three quarters of 2021 compared to \$122 billion in the corresponding period of 2020 (Fig. 2). As a result, the balance of state trust funds began to improve as early as the second quarter of 2021 – to \$33 billion from \$23 in the previous quarter – and the net deficit declined to less than \$22 billion, although Title XII advances peaked at close to \$55

---

<sup>31</sup> DOL (2020a); see also <https://oui.doleta.gov/unemploy/hb394.asp> under “Taxable Financial Data”.

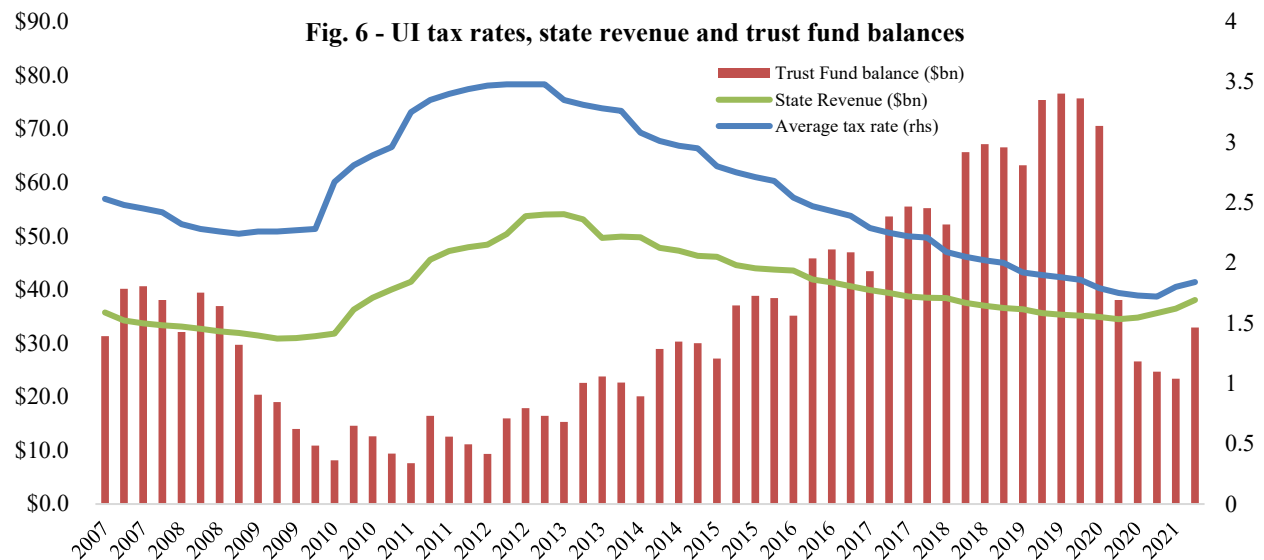
<sup>32</sup> Author’s calculations on data from DOL (2020a and 2021a).

billion<sup>33</sup>; trust fund balances further improved in the third quarter, to \$35 billion, and Title XII advances declined to below \$46 billion, so that the net deficit declined to \$10 billion.

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. Since the unemployment system is based on an insurance concept, employers will ultimately bear the financial burden generated by the Covid-19 pandemic (Towson, 2020).

Unlike federal emergency unemployment benefits (which are funded by the general revenue or simply added to the federal debt), state UI benefits remain financed by payroll taxes; furthermore, in some states additional contributions are required when fund levels drop to specified points. As a result, there is a risk that taxes are set to increase as well: in the past, periods of elevated UI benefit spending have historically been followed by higher taxes to restore the solvency of state trust funds (Weidinger, 2020a; Towson, 2020). However, there has normally been a lag between economic downturns and their impact on state UI tax rates, because calculation of an employer's experience rating takes into consideration more than just a single year (usually the past three years).

For example, average state UI tax rates on taxable wages 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 1.75 percent by end-2020 – and slightly increasing to 1.80 percent in 2021 (Fig. 6).



Source: author's calculation on DOL Unemployment Insurance Data [https://oui.doleta.gov/unemploy/data\\_summary/DataSum.asp](https://oui.doleta.gov/unemploy/data_summary/DataSum.asp)

In absolute value, the *Average Employer Tax Amount Per Covered Employee* rose from \$258 in 2008 to a peak of \$453 in 2012, before declining to \$277 in 2019 (DOL, 2020b). In 2020, average UI taxes declined further to \$267 (DOL, 2021b). Preliminary estimates by the Department of Labor

<sup>33</sup> Source: [https://oui.doleta.gov/unemploy/data\\_summary/DataSum.asp](https://oui.doleta.gov/unemploy/data_summary/DataSum.asp)

suggest that, for the United States as a whole, the average UI tax rate increased to 1.84 percent of taxable wages in the second quarter of 2021 (from 1.72 percent in the fourth quarter of 2020) and would increase to 1.92 percent for 2021 as a whole<sup>34</sup>.

The depletion of state trust funds may have implications not only for future state UI tax rates but also for the annual taxable wage base, i.e., the amount of wages subject to those tax rates (Towson, 2020). In seven states, the variable taxable wage base has an explicit link to the state trust fund balance (DOL, 2020b, Table 2-2, p. 2-6). Over the past 15 years, taxable wage bases have increased by an average of 2.4 percent annually; at the height of the Great Recession (from 2008 to 2010), the average annual increase was 4.8 percent (Townson, 2020). In response to the Covid-19 crisis, several states have increased their taxable wage base (Ernest and Young, 2020 and 2022). In 2021, taxable wage bases are estimated to have increased by an average of 2.9 percent from 2020 (Towson, 2020).

Against this background, some factors may mitigate the risk of increased UI taxation in the aftermath of the pandemic. First and foremost, the robust economic recovery has supported state UI revenues and, more importantly, underpinned a massive decrease of regular UI payments, which has been reflected in an improved aggregate balance of the state trust funds since mid-2021. Furthermore, it is underscored that, under ARPA, states are authorized to use federal Fiscal Recovery Funds (FRFs) not only to pay off Title XII Advances, but also to replenish UI trust funds to pre-pandemic levels, an option that would diminish – if not remove – the pressure to raise UI taxes (Walczak and Funkhouser, 2021). In this regard, there is some evidence that many states have avoided increasing their tax rate schedules because they deposited federal Covid-19 stimulus funds into their UI trust funds and/or enacted legislation to reduce the impact on employer tax rates caused by the reduction in their UI trust funds (Ernest and Young, 2022).

Views however differ on whether the use of FRFs to replenish state trust fund is warranted, with some observers calling instead for raising taxes on employers to improve in a structural way the standard UI's funding source and using FRFs to support employment and investment at the state and local level (Banerjee *et al*, 2021; Lazere, 2021). As of late January 2022, states have only used a small portion of the FSFs available to them<sup>35</sup>.

#### *4.5 Macroeconomic impact of the pandemic UI programmes*

Macroeconomic stabilization is one of the key functions of the UI system. The latter is generally believed to be highly cyclical and responsive to distress in the U.S. economy: the number of people benefiting from the UI programmes increases rapidly during a recession, before declining quickly past its peak (O'Leary and Wandner, 2020).

Economic theory provides ground for using UI as a countercyclical mechanism. Besides the microeconomic objectives of income support and consumption smoothing for the unemployed workers and their families, UI also plays a macroeconomic role by stimulating aggregate consumption and thus serving as an automatic stabilizer. One reason why UI benefits are well targeted for the purpose of providing stimulus during downturns is because unemployed households have a higher marginal propensity to consume than employed households, of around

---

<sup>34</sup> [https://oui.doleta.gov/unemploy/avg\\_employ.asp](https://oui.doleta.gov/unemploy/avg_employ.asp).

<sup>35</sup> The CARES Act too provides states with financial aid to replenish the state trust funds (Walczak and Funkhouser, 2021).



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 is an effective macroeconomic stabilization tool. This aggregate demand externality further supports the case for increasing UI generosity during downturns (Dube, 2021), when the insurance value 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).

Moral hazard risk – i.e., the distortions that UI benefits may induce on unemployment duration and the incentives to job search – is usually the main argument to counter the expansion of UI benefits. The traditional approach to evaluating changes in UI generosity trades off the consumption-smoothing benefits of increased spending against the moral hazard costs of discouraged job search (Ganong *et al*, 2021). In fact, one of the classic empirical results in public finance is that social insurance programmes such as UI reduce labor supply. Empirical evidence quoted in Chetty (2008) shows that in the United States a 10 percent increase in unemployment benefits raises average unemployment durations by 4-8 percent. This finding has traditionally been interpreted as evidence of moral hazard caused by a substitution effect: UI distorts the relative price of leisure and consumption, reducing the marginal incentive to search for a job<sup>36</sup>.

The pandemic UI programmes introduced by the CARES Act have rekindled the debate about whether these federal extensions to complement the regular state UI programme during recessions improve the overall countercyclical capabilities.

On the one hand, it is recognized that the need for longer durations of UI benefits is magnified during and (frequently) 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 (Fig. 5).

A corollary of this view is that the federal extensions of UI programmes in recessions are recognized to be critical for the UI system to be effective in meeting both its microeconomic and macroeconomic objectives. Empirical evidence supports this view. In a Congressional Budget Office report, Yang *et al* (2010, Table 1) assessed the timeliness, cost-effectiveness and consistency with long-term fiscal objectives of 11 macroeconomic stimulus measures. They rated the increase of income support to the unemployed – through the 2008 Emergency Unemployment Compensation (EUC) programme – as the most effective measure in term of cumulative effects on GDP and employment per dollar of budgetary cost, largely because of a higher income multiplier. In this regard, Nicholson and Needels (2011) review the macroeconomic literature on the stabilization capability of UI benefits and conclude that it is quite significant, as the value of the “GDP multiplier” – the effect that \$1 of spending on UI has on GDP – is about 2.0 and does not differ between regular UI and extended benefits programmes. Importantly, Ganong and Noel (2019) finds that, because spending is so much lower after benefit exhaustion than during UI receipt, the consumption-smoothing gains from extending UI benefits are four times greater than

---

<sup>36</sup> Chetty (2008) also shows that UI benefits raise unemployment durations purely through moral hazard only when consumption can be smoothed perfectly. When smoothing is imperfect, unemployment benefits affect job search through a “liquidity effect”, i.e., UI benefits increase cash on hand and consumption, so liquidity-constrained unemployed workers face less pressure to find a new job quickly. The author shows that 60 percent of the increase in unemployment durations caused by UI benefits is due to this liquidity effect rather than to moral hazard: in this context, the optimal UI benefit level exceeds 50 percent of the wage.

from increasing the level of UI benefits. Besides, an often-overlooked benefit of emergency UI programmes is that they tend to prevent the long-term unemployed from exiting the labor market (Council of Economic Advisers, 2013).

On the other hand, it is emphasized that, even in a severe recession, regular state UI programmes have usually provided the bulk of the increase in transfers to unemployed workers, notably at the early stage of downturns (Chodorow-Reich and Coglianesse, 2019). For their part, extensions by the federal government of UI benefits have historically played a surprisingly small role in providing macroeconomic stimulus early in recessions, for two main reasons: first, emergency programmes – often subject to implementation lags – typically ramp up transfers late in a recession, if not after it has ended; second, the EB programme – the automatic part of federal benefit extensions – has historically been modest in size (i.e., number of recipients). Furthermore, while acknowledging that benefit extensions are impactful in the “*historically rare circumstances of very high and persistent unemployment*” (p. 159), only relatively few individuals reach very long-term unemployment, so that benefit extensions have only a modest effect on total UI transfers (Chodorow-Reich and Coglianesse, 2019).

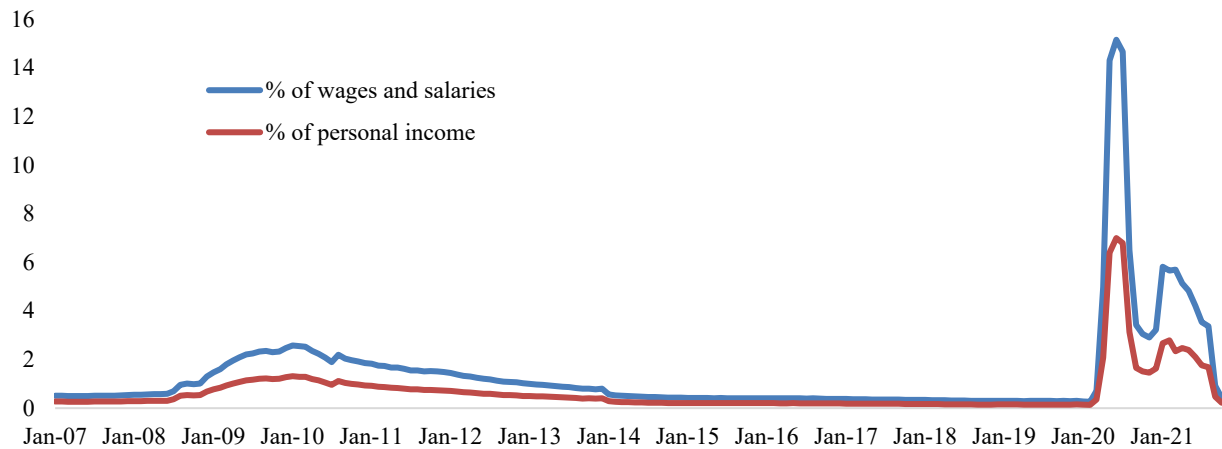
To substantiate these views, Chodorow-Reich and Coglianesse (2019, p. 160) point out that two-thirds (\$64 billion) of the \$98 billion increase in total UI payments between 2007 and 2009 – in itself a demonstration of the potential for the UI system to serve as a macroeconomic stabilizer – can be accounted for by payments under either regular state UI benefits or the EB programme rather than under Tier 1 of the federal EUC08 programme: in other words, most of the increase in UI payments in 2009 relative to 2007 could have occurred even without any new federal emergency programme, because relatively few unemployed workers had been unemployed for more than 46 weeks. Although – starting in 2010 – the distribution of unemployed workers began shifting toward longer durations – and were covered by the new EUC08 tiers – the majority of UI benefits kept going to regular UI or EUC08 Tier 1 claimants who had fewer than 46 weeks of benefit receipt. Only 15 billion – through EUC08 Tier 4 or EB – went to claimants who had duration greater than 73 weeks. A similar pattern held true in 2011 and 2012.

As noted before, the expansion of UI benefits in response to the Covid-19 pandemic has been unprecedented in scope and magnitude, even when compared to the Great Recession. 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 programme (Fig. 7). During the Covid-19 pandemic, the above-mentioned ratio peaked at 15.2 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 programmes in many states beginning in June 2021, the ratio decreased to 3.5 percent by August. When these programmes all expired in early September, the ratio further dropped to 0.43 percent in November 2021<sup>37</sup>, still higher than the pre-pandemic 0.26 percent of February 2020.

---

<sup>37</sup>Source: Bureau of Economic Analysis.  
<https://apps.bea.gov/iTable/iTable.cfm?1903=76&1921=survey&isuri=1&reqid=19&step=3#1903=76&1921=survey&isuri=1&reqid=19&step=3>

**Fig. 7 - UI benefits as a percentage of employees' wages/salaries and personal income**



Source: Bureau of Economic Analysis.

The new \$600 FPUC introduced by the CARES Act clearly stands out in terms of generosity. Several studies have analyzed both the countercyclical impact of the FPUC and the potential for moral hazard effects on labor supply.

The countercyclical potential of the FPUC can be first appreciated by referring to its 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<sup>38</sup>, the \$600 FPUC has raised the replacement rate to about 105 percent; Ganong *et al* (2020) estimate that between April and July 2020 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, have received weekly benefits that are greater than the weekly earnings they lost, a “*big bazooka in terms of countercyclical stimulus*” (Burtless, 2020).

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, by an estimated 2.0-2.6 percent between April and July 2020 (Ganong *et al*, 2021)., This spending increase stands in sharp contrast to normal times, when spending usually falls sharply after a job loss, and is particularly striking because overall spending was substantially depressed during the pandemic.

Overall, one-quarter of all working-age people – about 53 million<sup>39</sup> – received pandemic benefits in 2020-21. Because of the combined effect of a sudden rise in the unemployment rate and the expanded pandemic programmes, between May and July 2020 unemployment benefits amounted on average to 6.7 percent of the monthly personal income, a record far exceeding the 1.3 percent peak during the Great Recession (Fig. 7). The \$600 boost from the FPUC is thus believed to have

<sup>38</sup> See Section 5.2.

<sup>39</sup> <https://www.dol.gov/newsroom/releases/eta/eta20210811>

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).

As far as the risk of moral hazard is concerned – in principle a prominent one given the generosity of the new federal UI benefits and a key argument of those who opposed a structural expansion of the UI system – Dube (2021, p. 4) surveys the available studies and conclude that, overall, the evidence from the pandemic shows a surprisingly small impact of benefit generosity on employment at both the micro and macro level. In the same vein, Ganong *et al* (2021) estimate 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. 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.

Further evidence on the potential behavioral impact of supplemental pandemic UI benefits comes from Coombs *et al* (2021), who study the effects of the decision by 22 states to end these benefits in June 2021, earlier than the expiration date of September 6<sup>40</sup>.

---

<sup>40</sup> The statutory authority for these temporary UI benefits (PEUC, PUA and FPUC) specifies that they are payable through voluntary agreements between the U.S. Department of Labor (DOL) and each state that chooses to provide them. The law requires states to provide at least a 30-day notice to DOL that they plan to terminate their agreements to administer them (Whittaker, 2021). States assert several rationales for opting out of their agreements with DOL, including: 1) work disincentive effects (i.e., the \$300 weekly FPUC benefit coupled with regular UI payments may be greater than the workers’ original paychecks); 2) decreased state unemployment rates; 3) an end to previous barriers to employment (e.g., no remaining industry shutdowns, full operation of childcare facilities); and (4) increased numbers of job openings, often equivalent to the number of unemployed workers. Previous temporary UI programs enacted in response to recessions were authorized using the same DOL-state voluntary agreement structure; for example, the EUC08 program authorized from July 2008 to December 2013 in response to the Great Recession. Except for the only case of North Carolina – which terminated its EUC08 agreement in 2013 – there is no recent precedent for a state opting to terminate its voluntary agreement with DOL via state executive branch announcement, as under the current situation. As noted by Isaac and Whittaker (2014a), from February 2009 through December 2013 states were temporarily prohibited from actively reducing UI benefit amounts through changes to benefit calculation (this prohibition is referred to as the “nonreduction” rule). The “nonreduction” rule expired along with EUC08 program authorization at the end of December 2013 (see Section 5.2).

The relevance of this early withdrawal of the pandemic supplemental UI benefits can be first appreciated by the fact that – as noted in Section 4.2 – 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.

According to Coombs *et al* (2021), 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, the authors 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; however, 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, 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 reducing UI, 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.

To conclude, many empirical studies suggest that the extraordinary expansions of UI benefits during the pandemic has been more effective than predicted by standard structural models, perhaps because of the unprecedented scale – for both the U.S. or any other country – of the countercyclical boost; in a recession, a significant and persistent increases in UI benefit leads to a robust response by consumer spending, while job search distortions are minimal (Ganong *et al*, 2021). Besides, the FPUC has important distributional consequences: unlike typical stabilization tools such as broad-based stimulus checks, FPUC is 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)<sup>41</sup>.

Finally, as noted by Ganong *et al* (2021), the FPUC has also impacted the debate about targeted versus universal stimulus payments. In these authors’ views, 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.

---

<sup>41</sup> “For example, unemployment rose more for retail workers than for teachers during the pandemic. Under normal UI benefits, this greater increase in unemployment would lead the expected income of retail workers to decline relative to that of teachers. However, under the \$600 FPUC, these patterns reverse: expected income for the median retail worker actually rose, both in absolute terms and relative to the median teacher.” Ganong *et al*. (2020, p. 3).

## 5. CURRENT CHALLENGES AND REFORM PROPOSALS FOR THE UI SYSTEM

The analysis in the previous Sections has evidenced that the UI system as a whole has played an unprecedented role in delivering massive relief, income support and fiscal stimulus during the Covid-19 pandemic. At the same time, in many observers' views, the pandemic has tested the UI system in the most dramatic way, once again highlighting important challenges in terms of low reciprocity rates, often inadequate levels of regular UI benefits, lack of effective triggers to closely tie benefit duration to economic conditions, poor and underfunded administrative capacities, funding mechanisms that generate pressure to cut benefits for budgetary reasons, and technological constraints. The pandemic has also been characterized as an event that has strained the delicate balancing act between support and enforcement that defines the relationship between the Department of Labor and the state UI programs (Simon, 2021, p. 8).

The peculiar experience during the pandemic has not only rekindled but also enriched with new issues the debate on how to reform the UI system<sup>42</sup> and overcome the critical weaknesses resulting from its “patchwork” structure of 53 different state programmes and rules. 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 (Biven *et al*, 2021; Stettner and Pancotti; 2021; Stone, 2021).

Over the 80-year history of the UI programme, its objectives are meant to have largely been met during the first 40 years, but many benefits of the programme have eroded since the 1980s (O’Leary *et al*, 2020, p. 3). The last major reform of the system dates back to 1976 and was not really comprehensive (O’Leary and Wandner, 2020). In the meanwhile, the U.S. economy underwent 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.

It has also been argued that, in the face of a diminished oversight role of the U.S. Department of Labor, states were left to determine the scope and nature of their state UI programmes, generally resulting in weakened benefit payment and tax collection systems (Wandner, 2020).

Following the Great Recession, numerous comprehensive reports set out detailed recommendations for reform, but they were not followed up by legislative action at the federal level. The various reform proposals aim at addressing weaknesses in three main areas: coverage and adequacy of benefits; sufficiency of funding; automatic countercyclical capabilities.

As noted before, problems in the first two areas are closely intertwined: insufficient funding in many states – because of the decline over time of UI tax rates and taxable wage bases (mainly due to lack of indexation) – has made it difficult to pay adequate UI benefits, leading some states to adopt tighter eligibility requirements, cut benefits or lower their duration, ultimately resulting in a deterioration of the two key performance parameters: the reciprocity and the replacement rates.

---

<sup>42</sup> An in-depth analysis of the UI reform proposals goes beyond the scope of this paper. 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), Wandner (2020) and Weidinger (2020b) for those advanced in the aftermath of the pandemic.

To be sure, this reduced support from the UI system before the pandemic – which has at times been characterized as a “*race to the bottom*”<sup>43</sup> – has been uneven across states, as some of them have been able to provide adequate benefits (O’Leary and Wandner, 2020); in any case, a less supportive UI system appears to be more unwarranted because of the increase in the average duration of unemployment in the United States, notably in the aftermath of the Great Recession (O’Leary and Wandner, 2020).

Despite the differences in emphasis and diagnoses across the various studies, there is a broad consensus on identifying the variation in state UI laws as one of the most important sources of inefficiencies and inequities. This legislative “patchwork” mirrors the lack of nationwide standards with respect to benefit eligibility, level and duration of benefits, as well as funding standards (Wandner, 2020). The absence of such standards has been singled out by many scholars as the root cause of a key weaknesses of the system, namely the incentive for states to compete for keeping low the UI tax burden on their local businesses; in turn, together with the need to replenish insufficiently forward funded and easily depleted state trust funds, the inadequacy of tax revenue generate pressures to shorten benefit duration and tighten eligibility, rather than raising UI taxes (Bivens *et al*, 2021 p. 2-3). There is a risk that the strain on state trust funds arising from the pandemic-induced extraordinary increase in UI payments could reignite these pressures.

As a result, 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 programme fully financed and administered at the federal level<sup>44</sup>. 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.

### *5.1 Eligibility requirements and coverage gaps*

A rather striking feature of the UI system is 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 received them<sup>45</sup>. 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 (Fig. 8): 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.

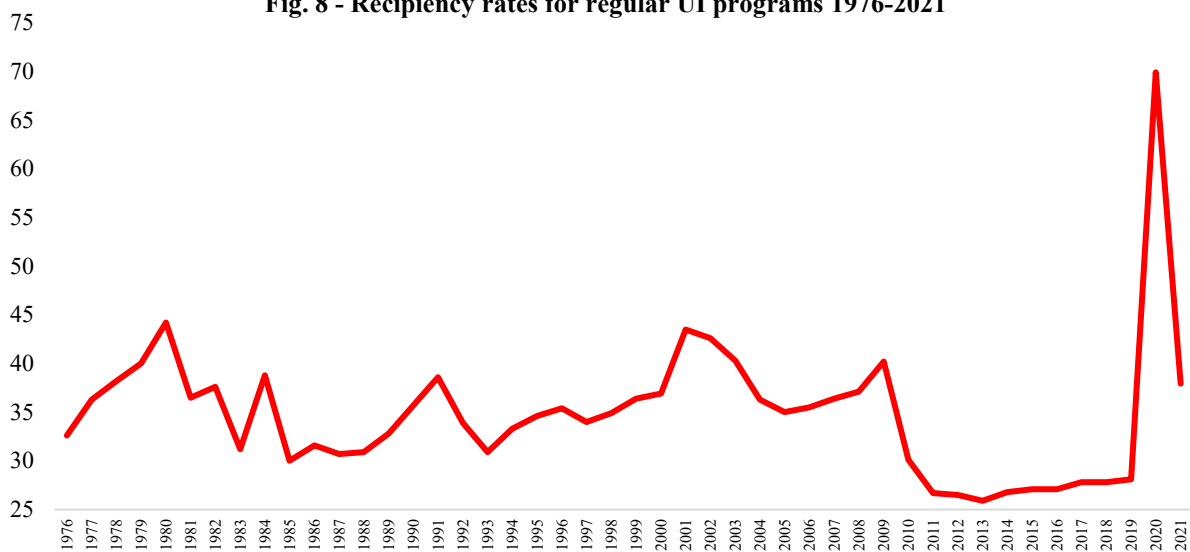
---

<sup>43</sup> Biven *et al* (2021, p. 3); Bennet *et al* (2021).

<sup>44</sup> Options for implementing a single federal UI program include the transfers of responsibilities: i) to the U.S. Department of Labor, with state UI agencies as agents of the federal government; and ii) to the Social Security Administration (Wandner, 2020).

<sup>45</sup> A separate but relevant issue is that of “unclaimed” benefits, i.e., workers who are eligible for UI payments but do not collect them. These unemployed made up, on average, 23 percent of eligible workers from 1989 to 2012 (Auray *et al*, 2019).

**Fig. 8 - Reciprocity rates for regular UI programs 1976-2021**



Source: DOL UI Chartbook <https://oui.doleta.gov/unemploy/chartbook.asp>; annual averages of quarterly data.

The UI's low reciprocity rates have long been viewed as a key weakness, not only from the viewpoint of the individual unemployed, who does not receive income support, but also from a macroeconomic viewpoint, as lower reciprocity rates translate into weaker UI's stabilization and countercyclical capabilities (Burtless, 1983; Vroman, 2018; GAO, 2015).

It is also worth noting that, generally, the UI reciprocity rate rises during economic recessions – as many workers who are laid off have longer work histories and thus qualify for UI – and falls during economic expansions – as new entrants to the labor market begin to comprise a greater proportion of the unemployed (Isaacs and Whittaker, 2014b).

This pattern has been uniquely magnified during the pandemic (Fig. 8), as the reciprocity rate spiked from 28 percent in 2019 to close to 80 percent in 2020, partly because of the unprecedented loosening of eligibility requirements introduced by the CARES Act. Besides, the temporary increase in the weekly benefit amount allowed by the FPUC has plausibly stimulated more people to apply for and receive UI benefits (CBO, 2020).

In general, low reciprocity rates reflect a number of reasons, notably a combination of restrictive monetary and nonmonetary eligibility criteria as well as a take-up rate of less than one among eligible individuals (Chodorow-Reich and Coglianese, 2019).

To begin with, state regular UI programmes 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 programme, which was introduced to cover many otherwise ineligible workers.



Second – and perhaps more importantly – the 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. The level of recent income required to qualify for UI benefits is the parameter that shows the greatest variation across states and in part explains the variation in reciprocity rates: in 2019, the minimum amount of earnings required to qualify for UI benefits ranged from \$1,000 to \$5,000 over the prior base period (almost all states use the first four of the last five completed calendar quarters preceding the application for UI benefits as their base period) (O’Leary *et al*, 2020). To expand coverage, a majority of states has in fact adopted an “alternative” base period (ABP), where qualification for UI benefits is based on earnings from the immediately preceding four quarters.

When the thresholds are too high (as they often are), many low-wage, part-time, seasonal, and volatile-schedule workers – who are most likely to become unemployed – are among the least likely to get UI benefits when they lose their jobs (Alcalá Kovalski and Sheiner, 2020). Empirical evidence shows that, during the Great Recession, only one quarter of low-wage workers – defined as those who earned less than their state’s 30th percentile wage – received UI benefits when they became unemployed. In contrast, workers who earned more than the 30th percentile wage before becoming unemployed were twice as likely to receive UI benefits (Gould and Zipperer, 2020).

One reason why low-wage workers often are ineligible and do not receive benefits is because of low hours worked or not enough earnings during the times they *do* work, e.g., fast-food workers or retail clerks (Gould and Zipperer, 2020). However, it has been underscored that the main reason why low-wage workers do not qualify for unemployment benefits is not low hourly wages per se (i.e., earnings requirements), but rather it relates to work history requirements. In fact, many workers who earn low hourly pay also have intermittent employment, and most states’ eligibility rules require laid off workers to have minimally steady earnings over the previous year to qualify for at least 20 weeks of benefit payments (Alcalá Kovalski and Sheiner, 2020).

Third, the solvency of states’ UI trust funds has also been singled out as a key determinant of UI reciprocity rates, although indirectly and through multiple and interrelated factors). As early as 1993, analyses by the Government Accountability Office demonstrated that the decline in the reciprocity rate – from 50 percent at the peak of the recession in 1975 to 39 percent in the 1990-1991 recession – was associated with the deteriorating financial condition of states’ UI trust funds: states with lower UI trust fund balances attempted to improve their financial condition by enacting more stringent UI laws, such as tightening eligibility requirements and lowering the proportion of wages replaced by UI benefits (GAO, 1993, p. 30).

The increase in the average unemployment duration, notably since the Great Recession<sup>46</sup>, has been pointed out as another factor to account for the decline in the reciprocity rates: because regular UI programmes pay, at most, 26 weeks of benefits, longer unemployment duration is expected to adversely affect the UI reciprocity rate (GAO, 1993; Vroman, 2018). Finally, reducing maximum (and actual) potential benefit duration (PBD) in the regular UI programme may also have contributed to the decrease in the reciprocity rate (Vroman, 2018): in the three states (Florida, Georgia and North Carolina) that after the Great Recession made the largest reductions in PDB,

---

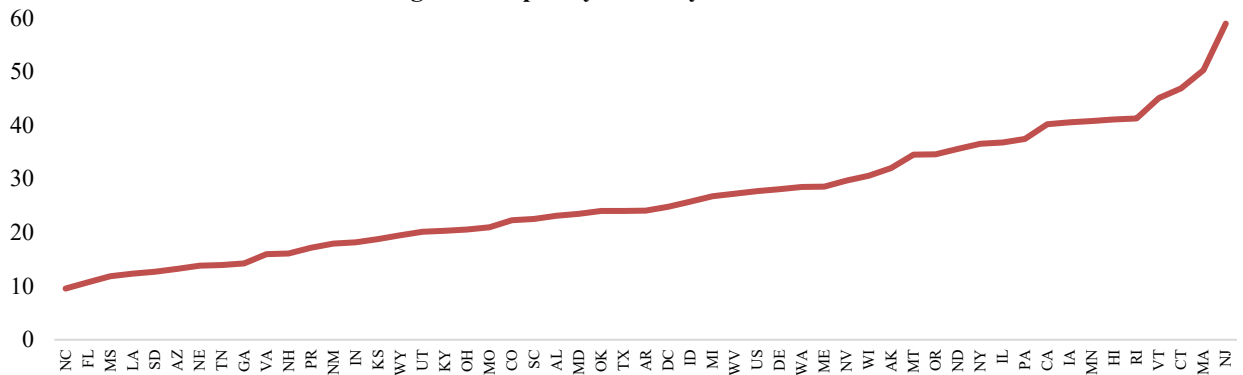
<sup>46</sup> Between 1967 and 2008, annual mean unemployment duration ranged from 7.8 weeks in 1969 to 20.0 weeks in 1983. Following the Great Recession, mean duration exceeded 39.0 weeks in 2011 and 2012 and 33.0 weeks in 2013 and 2014 (Vroman, 2018).

average benefit durations decreased from 13 weeks in 2006 to 9.2 weeks in 2016, a drop of nearly 30 percent.

Finally, Vroman (2009) analyses the monthly Current Population Survey (CPS) conducted by the U.S. Census Bureau and finds that the primary cause of the low overall UI benefit reciprocity rate is the belief that one is not eligible for them, a belief that becomes the most common reason for not applying for UI benefits. In the same vein, low UI's take-up rates may reflect “a myriad of administrative and possibly psychological hurdles that resist easy cataloging” (Chodorow-Reich and Coglianesse, 2019, p. 170). The authors note that administrative hurdles to successful completion of an application for UI have received notice in both the popular press and the academic literature. The role of IT and administrative inefficiencies has been magnified during the Covid-19 pandemic, as the states’ IT systems were often overwhelmed by an unprecedented number of applications and based on outdated technologies. The substantial variation across states in the efficient processing of UI applications and timely payments of benefits has been pointed out as a consumption loss with negative macroeconomic impact (Dube, 2021; U.S. Department of Labor, Office of Inspector General, 2021). It has also been argued (Simon, 2021) that “*technology realities*” have influenced the design and administration of the pandemic UI programmes , notably the FPUC.

Another distinguishing feature of the UI system is that, due to major differences in each state’s eligibility criteria, the UI reciprocity rate varies significantly across states (Fig. 9), in 2019 ranging from 59 percent in New Jersey to 10 percent in North Carolina; furthermore, in sixteen states less than 1 in 5 unemployed workers did receive benefits from the state’s regular UI programme.

**Fig. 9 - Reciprocity Rates by States in 2019**



Source: DOL UI Chartbook, Category A.13 Reciprocity Rates by State (accessed February 2, 2022). <https://oui.doleta.gov/unemploy/chartbook.asp>

This substantial coverage gaps primarily result from the fact that states vary considerably in how they apply the three general eligibility criteria: the unemployed worker: 1) has lost the job “*through no fault of his or her own*”; 2) is able to work, available to work, and actively seeking work; 3) has a required work history, i.e., has earned at least a certain amount of money during a base period prior to becoming unemployed. Moreover, given the ample discretion that states have in defining the base period of employment used to determine eligibility, a growing percentage of unemployed workers that meet the *basic* UI eligibility criteria fail nevertheless to satisfy their *state’s* eligibility criteria – often established decades ago in a very different labor market (Stone and Chen, 2014).

Overall, it has been argued that if all states followed the practices of high-recipient rate states, then UI benefits would cover substantially more individuals, especially during recessions (Chodorow-Reich and Coglianese, 2019).

In the face of low recipient rates and too many workers that “*fall through cracks*” in the UI system, the American Recovery and Reinvestment Act (ARRA) of 2009 – without setting federal standards – provided financial incentives for expansions of UI eligibility and a series of other measures that together were referred to as “UI modernization” (White House, 2016; West *et al*, 2016; O’Leary *et al*, 2020; Congdon and Vroman, 2021). States could receive one-third of their potential incentive payments if they introduced an alternative base period (ABP) available for monetary determination of UI eligibility – which allows more workers to qualify for benefits by including the most recently completed calendar quarter – and the remaining two-thirds if they adopted any two of the following additional reforms: i) extend UI eligibility to part-time workers; ii) extend benefits for workers in training courses; iii) allow compelling family issues as a good cause to voluntarily quit; iv) set 26 weeks of UI duration for all workers; v) add a dependent benefit to the worker’s UI checks.

By the end of incentive availability on June 30, 2011, 41 states had received modernization payments for having an ABP, and 36 of these states also received the remaining two-thirds of their available funds (O’Leary *et al*, 2020). Because of the UI modernization provisions – which as noted before did not set any federal standard – the majority of state UI programmes now cover part-time workers and have an alternative base period; furthermore, allowing separations for compelling family reasons, which was relatively uncommon before the Great Recession, is now included in about half of UI programmes (Congdon and Vroman, 2021). However, some states have subsequently repealed some or all of the expansions of UI eligibility adopted to qualify for modernization payments.

The importance of the UI modernization provisions can be vividly appreciated by noting that, by some estimates (West *et al*, 2016), the adoption of just three of the above recommendations – extending eligibility to part-time workers, workers who voluntarily quit a job for a good cause, and workers who qualify under the alternative base period – would cover 13 percent more unemployed workers.

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.

These reforms are intended to better align the eligibility criteria to a modern labor market in which many more individuals than before have short spells out of the labor force or prefer part-time employment due to family obligations or other considerations. In this regard, the importance of compelling family reasons – such as caring for family members, or inadequate childcare – and their potential to affect UI recipient rates has been made even more prominent during the pandemic (West *et al*, 2016).

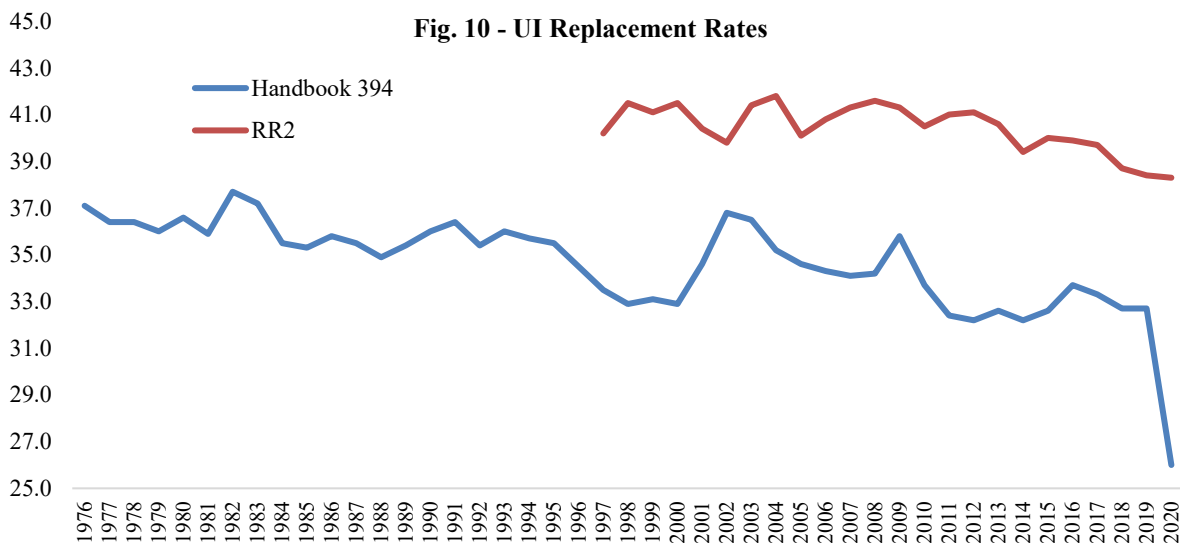
Finally, it is worth noting that low recipient rates – resulting from tighter UI eligibility requirements or changing demographics of the workforce – can have macroeconomic effects to the extent that they translate into a low Insured Unemployment Rate (IUR), which in turn fails to activate the EB programme even when the total unemployment rate (TUR) has risen to high levels

(O’Leary *et al*, 2020, p. 10). In this regard, as early as 1983, Burtless had noted that the fraction of jobless workers receiving regular, extended or supplemental UI benefits – at around 45 percent – was lower in the 1981-82 recession than in any other postwar recession. This contrasts strikingly with the experience of the 1975-76 recession, when close to 80 percent of the unemployed were covered by some form of UI benefits. As a consequence, the countercyclical stimulus provided by UI was also considerably lower in the 1981-82 recession.

In Burtless’ view, the decline in countercyclical stimulus and income protection provided by UI in part reflected a policy choice to reduce the scope of extended and supplemental unemployment benefits. In fact, in 1981 the national trigger for EB was eliminated and the trigger for EB at the state level was raised considerably. In response to the lower reliability of the IUR as an indicator of economic conditions at the state level and the attendant failure of EB to be activated in more than a few states during the recession of the early 1990s, in July 1992 Congress passed legislation allowing states to adopt an alternative trigger based on the TUR.

### 5.2 Erosion of UI benefits: lower replacement rates and shorter duration

The UI programme was designed to replace about 50 percent of the UI recipient’s prior weekly wages, up to a maximum set annually by each state (generally some percentage of the average weekly wage-AWW in the state) (O’Leary and Wandner, 2020). Because of this cap, states tend to replace a higher percentage of low-wage individuals’ income than they do for high-wage individuals (DOL, 2020b).



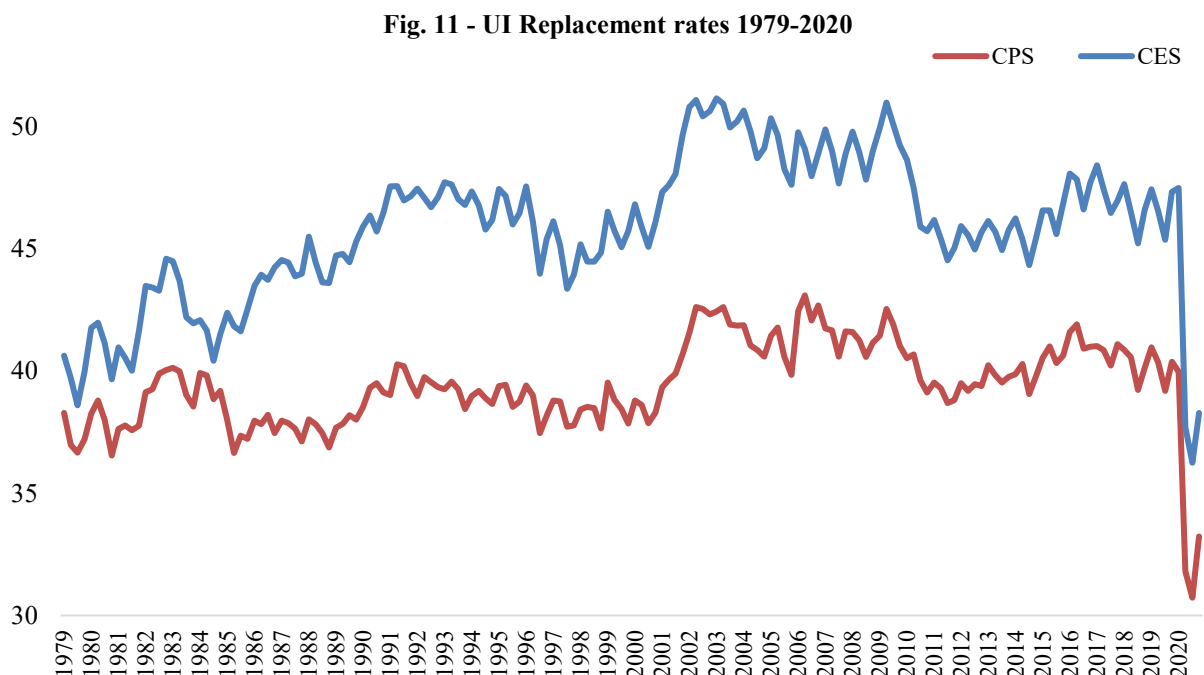
Source: U.S. Department of Labor

Since many states set the benefit maximums at low levels, during most of the post-World War II period the nationwide average wage replacement rate had tended to be approximately 35 percent (O’Leary and Wandner, 2020). Besides, since the mid-1970s there seems to have been a downward trend in the UI wage replacement rate (except for in recessions, when federal emergency UI benefits are activated). A commonly used replacement rate (Fig. 10) provided by the U.S.

Department of Labor<sup>47</sup> – “Handbook 394” – stood at around 37 percent in 1980 and was hovering around 32-33 percent from 2010 to 2019, on the eve of the pandemic.

In the same vein, the so-called national “Replacement Ratio 2” (RR2) – the weekly benefit amount as a ratio to the average weekly wage (available only from 1997) – stood at 38 percent in 2019 and 2020, down from around 41 percent in early 2010<sup>48</sup>.

The RR2 measure is in line with the replacement rates computed by using as a numerator the weekly benefit amount from the DOL’s UI Data Summary and as a denominator the average weekly earnings from the Current Population Survey (CPS) or the Current Employment Statistics (CES)<sup>49</sup>; these indicators do not show a clear downward trend and point to replacement rates in 2019 at or above 40 percent and higher than in 1979 (Fig. 11).



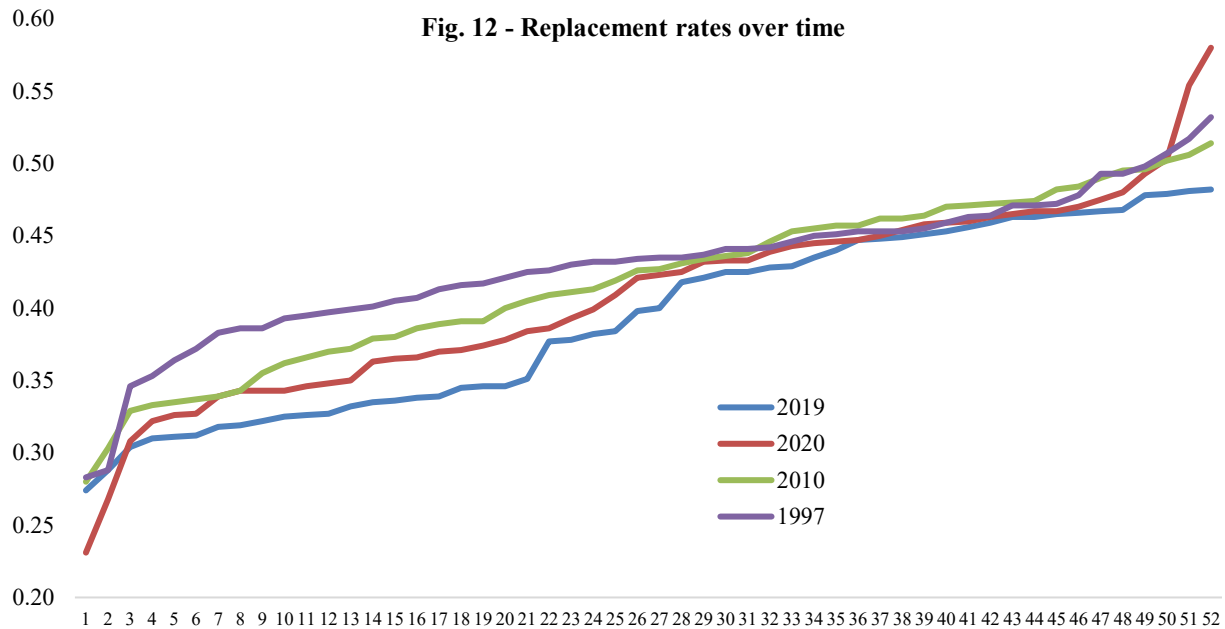
Source: authors’ calculations.

<sup>47</sup> ET Financial Data Handbook 394: <https://oui.doleta.gov/unemploy/hb394.asp>. The indicator is computed as the average weekly benefit amount divided by the average weekly total wage in taxable and reimbursable employment.

<sup>48</sup> Department of Labor’s Replacement Rates Report: [https://oui.doleta.gov/unemploy/ui\\_replacement\\_rates.asp](https://oui.doleta.gov/unemploy/ui_replacement_rates.asp). An alternative indicator – RR1 – shows slightly higher replacement rates, at around 45 percent in 2019 and 2020 (46 percent in 2010).

<sup>49</sup> Author’s calculation on data from: UI Data Summary [https://oui.doleta.gov/unemploy/data\\_summary/DataSum.asp](https://oui.doleta.gov/unemploy/data_summary/DataSum.asp); Bureau of Labor Statistics Current Population Survey (household data): median usual weekly earnings (second quartile), unadjusted, employed full time, wage and salary workers, series ID LEU0252881500; Bureau of Labor Statistics Current Employment Statistics (establishment data): Average Weekly Earnings of Production and Nonsupervisory Employees, Total Private, Dollars per Week, Monthly, Seasonally Adjusted, series ID CES0500000030.

A comparison over time between the state-level RR2s (Fig. 12) display some signs of a decline between 1997 and 2019, notably for the lower values.



Source: UI Replacement Rates Report [https://oui.doleta.gov/unemploy/ui\\_replacement\\_rates.asp](https://oui.doleta.gov/unemploy/ui_replacement_rates.asp)

Similar to the reciprocity rates, the UI system features a substantial variation of the wage replacement rate across states (Fig. 12): in 2019, the Replacement Ratio 2 varied from 27-29 percent in Alaska and Louisiana to 48 percent in Iowa, Maine, North Dakota and Wyoming.

The weekly benefit amounts (WBAs) – set by state UI laws – vary considerably as well and are usually capped at some multiple of the average weekly wage (AWW) for all workers in the state: in 2019, the *average* WBA ranged from \$215 in Mississippi e Louisiana to \$504-535 in Hawaii, Massachusetts and Washington. All states set a minimum and a maximum WBA, largely depending on the individual’s prior work history (in terms of earnings level and employment duration): as of January 2020, the *maximum* WBA ranged between \$235 in Louisiana and \$823 in Massachusetts (DOL, 2020b, table 3-5); there were six states (Alabama, Arizona, Florida, Louisiana, Mississippi, and Tennessee) where the maximum WBA was less than \$300.

Many state laws link the maximum WBAs to the state’s AWW, thus providing for an automatic adjustment as wages change across time. Some states additionally grant a small allowance for each dependent, which can increase the maximum benefit amount: for example, in 2020 the highest benefit for any households, including the dependent allowance, was \$1,234 in Massachusetts.

In general, a worker who is receiving benefits loses them when returning to work. To encourage part-time work among benefit recipients, most states allow a small amount of part-time earnings in addition to receiving UI benefits, known as “disregard”. A typical earnings disregard is 20 to 25 percent of the weekly benefit amount; any earnings above this amount would then reduce benefits dollar for dollar. This form of taxation has been criticized as being inefficient: it imposes a zero tax rate up until a cliff, then a 100 percent rate after the cliff. Further, in many states, the earnings disregard is so low – \$30 or \$40 – that there is no real point to working at all (Biven *et al*, 2021, p. 99).

Low replacement rates not only massively affect the living standards of unemployed workers and their families but may also have wider macroeconomic effects: Ganong and Noel (2019) documents that the drop in consumption during unemployment and at exhaustion of UI benefits is larger when the state-level replacement rate and benefit duration are lower.

Ensuring an adequate replacement rate is a common goal of many UI reform proposals. O’Leary and Wandner (2018) suggest that states should provide a standard wage replacement rate of 50 percent, up to a maximum set at two-thirds of the state average weekly wage; this standard would cover about 80 percent of recipients, without generating excessive work disincentives.

Furman *et al* (2020) recommend replacing the Federal Pandemic Unemployment Compensation – expired on September 6, 2021 – with a new system that provides a federal UI benefit, in addition to state benefits, of up to 40 percent of covered wages, with a maximum of \$400. For workers making up to the median wage, this would replace about 80 to 90 percent of their wages when combined with regular state replacement rates. A key feature of this proposal is that it defines the federal bonus as a replacement rate rather than a flat dollar amount, with a view to avoiding the scenario in which workers receive more money from UI than what they were making on the job.

Dube’s (2021) proposal emphasizes the need for a more holistic approach to social insurance, which calls for better addressing distributional concerns when considering the level of UI benefits. The author recognizes that a 50 percent replacement rate may work adequately for a representative worker, in the middle of the wage distribution, experiencing short or medium unemployment spells. However, for workers placing a greater value on insurance, the optimal replacement rate is estimated to be higher: as a result, Dube suggests greater replacement rates for workers at the lower end of the wage distribution, as their salaries are often much closer to subsistence level and may suffer disproportionately from moderately long unemployment spells.

Dube proposes to link UI benefits to three brackets of the AWW, resulting in minimum and maximum benefit levels of 20 and 80 percent, respectively, of the national AWW. For example, in 2020 this would have meant a maximum benefit of \$910 and a minimum benefit of \$230, levels that would be close to those in the most generous states (as of January 2020, the minimum WBA was \$188 in Washington state and the maximum was \$823 in Massachusetts; DOL, 2020b, table 3-5).

In addition, replacement rates would be capped at 100 percent of earnings for all workers to ensure that these rates would not vary across states for workers with the same earnings levels. Based on the author’s simulations, under the proposal the average weekly benefit levels in 2019 would have risen from \$338 to \$547, leading to an average replacement rate of 72 percent (as compared to the estimated current replacement rate of around 40 percent).

Finally, assuming that in downturns it is less costly (in terms of efficiency losses and moral hazard risk) to provide more-generous benefits, Dube’s proposal include a “recessionary boost” to increase the WBAs and enhance the automatic stabilizer role of the UI system.

As noted before, the pre-pandemic examples of a reduced ability of the UI system to provide adequate income support manifested not only through lower level of benefits (and replacement rates) but also through shorter duration. In fact, cutting the duration of benefits below 26 weeks, which had been the minimum standard for 50 years, was another channel through which some states reacted to the financial impact of the Great Recession on their trust funds and the need to replenish their shortfalls (Isaac and Whittaker, 2014a; GAO, 2015). Compared to states that did

not reduce duration, those that did generally had higher unemployment rates and weaker UI trust fund balances and were more likely to have federal loans as their UI reserves became depleted. Most of these states also increased employer taxes for their UI programmes and engineered other benefit reductions by changing UI eligibility rules (GAO, 2015). Evidence following the double-dip recession in the early 1980s had already suggested that high levels of state UI borrowing can lead to tighter eligibility requirements and an attendant fall in reciprocity rates (Burtless, 1983).

In the aftermath of the Great Recession, the reduction of UI benefit duration was legislated when the so-called “nonreduction” rule expired at the end of December 2013, along with the EUC08 programme (Isaac and Whittaker, 2014a). In fact, from February 2009 through December 2013 this rule temporarily prohibited states from actively reducing UI benefit amounts through changes to benefit calculation. The rule was implemented to counter states’ actions to reduce UI benefit duration as an alternative means to decrease total UI benefit payments.

The reduction of benefit duration can have macroeconomic consequences in so far as it leads to lower reciprocity rates, which in turn result in weaker countercyclical stabilization (GAO, 2015; Vroman, 2018). Analysis by Kimball and McHugh (2015) shows that the reduction of benefit duration had a negative and substantial impact on the UI benefit reciprocity rate in eight of the nine states that implemented such reduction since 2011. In four of these states (Florida, Georgia, North Carolina, and South Carolina), short-term reciprocity rates declined by between 1.7 and 8.6 times as much as the U.S. average decline.

The negative microeconomic and macroeconomic impact of cuts in the duration for regular UI benefits is amplified by the fact that, because the duration of any federal unemployment benefits is calculated based on the states’ UI benefit duration, states that have enacted laws to reduce the duration of regular UI benefits have also reduced the duration of EUC08 and EB benefits (Isaac and Whittaker, 2014a; GAO, 2015).

Furthermore, the reduction in benefit duration in the aftermath of the Great Recession is particularly worrisome because it coincided with a substantial increase in long-term unemployment. The average weeks unemployed – a monthly indicator published by the Bureau of Labor Statistics – increased from slightly less than 17 in the years 2000-2007 to 31 in the years 2008-2016, primarily because the share of long-term unemployment was significantly higher than in any other post-WWII period<sup>50</sup>.

The Covid-19 pandemic temporarily reversed the states’ tendency to reduce the duration of benefits to less than the long-standing 26 weeks. However, as of January 2022, nine states provided maximum duration of regular UI benefits lower than 26 weeks, with Florida and North Carolina currently providing up to 12 weeks for claims filed after January 1, 2022 (CBPP, 2022, table 1). As a result, there remains a risk that, when the Covid-19 emergency is over, the financial constraints on state trust funds could trigger another wave of UI benefit reduction.

Against this background, a defining cross-cutting feature of many proposals is to introduce a mandatory requirement for all states to provide at least 26 weeks of benefits for the regular UI programme (White House 2016; O’Leary and Wandner, 2018; Bennet *et al*, 2021; Dube, 2021).

---

<sup>50</sup> [https://fredblog.stlouisfed.org/2018/11/the-unusual-duration-of-unemployment/?utm\\_source=series\\_page&utm\\_medium=related\\_content&utm\\_term=related\\_resources&utm\\_campaign=fredblog](https://fredblog.stlouisfed.org/2018/11/the-unusual-duration-of-unemployment/?utm_source=series_page&utm_medium=related_content&utm_term=related_resources&utm_campaign=fredblog)



Bivens *et al* (2021) propose a standard PBD of 30 weeks, thus extending to all states the “gold standard” of Massachusetts.

### 5.3 Funding mechanisms and UI solvency

The financing mechanisms in the Social Security Act and FUTA had the objective of ensuring that state UI programmes are self-financing through the cycle, i.e., by forward-funding during economic expansions to avoid pro-cyclical tax increases in downturns (GAO, 2015). However, as early as the early 1990s, it has been argued that a deterioration of state trust fund solvency status can compromise the overall ability of the UI system to achieve its statutory objectives: in 1993 a study by the GAO demonstrated that states with declining or insolvent trust funds were likely to result in lower reciprocity and replacement rates. This pattern repeated itself in the aftermath of the Great Recession, where the duration of benefits was reduced below the standard 26 weeks in 9 states.

Today there is a broad consensus that the UI system faces a fundamental funding problem, in that neither unemployment benefits nor UI revenues are uniformly indexed – i.e., by a federal standard – to provide adequate revenues and benefits over time.

The ability of the UI system to collect sufficient revenue and pay adequate UI benefits largely depends on two key parameters: the UI tax rate and the UI taxable wage base. The fact that both these parameters are, on average, low in many states makes it likely that UI benefits are inadequate in those states. As noted by Edwards, (2021) this low tax-low benefit strategy had been flagged by the GAO as early as 1993 as compromising the UI system’s ability to adequately support unemployed workers. (Edwards, 2021). There is evidence that benefits in states that index their UI taxable wage base, as a percentage of annual wages, exceed those in non-indexing states and have higher trust fund reserves (GAO, 2010, p. 19); besides, those states where the taxable wage base is more than double the minimum FUTA level are much more likely to avoid debt problems in times of high unemployment (O’Leary and Wandner, 2020).

As noted in Section 3.1.2, one of the key reasons for the insufficient funding of the state trust funds is the lack of a federally mandated indexation of the FUTA taxable wage base; the latter sets the minimum taxable wage standard for states<sup>51</sup> and has been raised only three times, the last one in 1983 to \$7,000. This inertia stands in striking contrast with the Social Security pension system – introduced in 1935 along with UI – which indexes both benefit levels and the taxable wage base. Since the 1960s the Social Security taxable wage base has indeed increased steadily, first by discretion and then, since 1975, by annual adjustments according to a national wage index (O’Leary and Wandner, 2020, p. 11). Accordingly, the FUTA taxable wage base now stands at less than 5 percent of the Social Security taxable wage base (\$147,000 in 2022). In 1937, more than 95 percent of all wages and salaries in UI-covered employment were subject to the FUTA tax, but by 2015 this figure has fallen to only about 25 percent (O’Leary *et al*, 2020).

Because of inadequate mechanisms to ensure sufficient forward funding, many states’ trust funds often do not meet the federally recommended minimum level of balances. In 2007, on the eve of the Great Recession, the national Average High-Cost Multiple (AHCM) was 0.52, meaning that on average states had insufficient funds to even cover one year of recessionary-like UI benefits

---

<sup>51</sup> The taxable wage base is the maximum amount of an employee’s yearly total wages that can be taxed for Unemployment Insurance purposes in the state.

(West *et al*, 2016, p. 74); only in less than half of the states the AHCM was equal to, or higher than, 1. Adequate forward funding is key not only for the financial balance of the UI system but also for it to play in full its countercyclical function. Inadequate forward funding also means that states' trust funds are easily depleted during a recession, forcing them to borrow from the federal government to pay for UI benefits.

All in all, it has been argued that the failure to adequately forward fund benefit reserves has compromised the fundamental mission of the system to provide adequate income replacement to the involuntarily unemployed (GAO, 1993; O'Leary and Wandner, 2018, p. 150). Perhaps more consequential for unemployed workers, the current funding mechanisms generates incentives for states to reduce benefits rather than raise employers' taxes or broaden the taxable wage base; these incentives are magnified following a recession, when there is a need to replenish trust funds and repay borrowing from the federal government. In fact, in the post-World War II period, there has been a downward trend in UI taxes as a percentage of total wages and this decline in financial support for the UI system has been mirrored by lower UI benefits as a percentage of total wages (O'Leary and Wandner, 2020, p. 14).

Against this background, there are some factors that are pointed out to somewhat play down the depth of the funding issues afflicting the states' UI systems.

First, one needs to emphasize that almost all states have adopted a taxable wage base that is higher than the \$7,000 FUTA minimum and in some states is also flexible, i.e., it is indexed to the average wage or varies based on the trust fund balance<sup>52</sup>: in 2020, 24 states and the Virgin Islands had a flexible wage base, pointing to a conservative approach in maintaining adequate state UI trust fund reserves (Ernest and Young, 2020)<sup>53</sup>; as noted before, in 7 states the variable taxable wage base has an explicit link to the state trust fund balance (DOL, 2020b, Table 2-2, p. 2-6).

This notwithstanding, in practice most states have elected to maintain low taxable wage bases that are not much higher than the FUTA minimum of \$7,000: as of the third quarter of 2019, more than 40 states had taxable wage bases less than \$25,000, and in 18 of these states the taxable wage bases was \$10,000 or less (O'Leary and Wandner, 2020, pp. 13-14).

Another element that is emphasized to downplay the UI funding problems relates to the fact that, on the eve of the Covid-19 pandemic, aggregate state trust fund balances had been reconstituted at a level – \$76 billion – that was nearly 40 percent greater than the last pre-recession peak in 2007 (Weidinger, 2020a); the solvency of the state trust funds was thus overall encouraging, as at end-2019 in 31 states the solvency level was greater than or at the recommended minimum AHCM standard. The improvement in the state trust fund solvency in the aftermath of the Great Recession would demonstrate that an economic expansion long enough is a critical factor to help the UI system be better prepared for the next recession. However, a 2010 study by the GAO emphasized that despite a 10-year economic expansion prior to the 2001 recession, states built up trust funds

---

<sup>52</sup> In 2019, only three jurisdictions continued to have a fixed wage base of \$7,000 (Arizona, California and Puerto Rico), compared to seven in 2010. In Louisiana and Tennessee, the wage base can decrease to \$7,000 when the trust fund reaches a certain level, and in Florida the taxable wage base reverted to \$7,000 beginning in 2015; Puerto Rico passed legislation that allows the taxable wage base to increase to as much as \$10,500 at the Secretary's discretion (Ernest & Young, 2020).

<sup>53</sup> For example, in Florida the taxable wage base is \$7,000 but increases to \$8,000 any year principal is due on Title XII advance (DOL, 2020b, Table 2-1).

that on average were sufficient to pay benefits at a high-cost rate for only 8 months (GAO, 2010, p. 15).

As noted in Section 3.1.3, the unprecedented impact of the Covid-19 pandemic inevitably brought about a sudden and substantial deterioration of UI's funding conditions: by January 2021, only 13 states remained at or above the minimum standard (DOL, 2021a). Although, the balance of state trust funds – net of Title XII loans – began to improve since mid-2021, states face the need to replenish their state trust funds, with potential – if not likely – consequences on states' UI tax rates. In fact, there is evidence that several states are considering or have passed legislation to tighten UI laws, bolster UI trust funds and/or provide tax relief to employers (Bivens *et al*, 2021; Ernest and Young, 2020)<sup>54</sup>. On the other hand, it is underscored that states are authorized to use federal Fiscal Recovery Funds to replenish UI trust funds to pre-pandemic levels (Walczak and Funkhouser, 2021).

Reform proposals to strengthen the UI's funding mechanisms and enhance its solvency are usually rooted in the recognition that assuring long-term stability of the UI system requires balancing UI benefits and taxes over time (O'Leary and Wandner, 2018, p. 132).

On the revenue side, some proposals call for changing the system from the current employer-based taxation to one that includes forms of employee-based taxation (O'Leary and Wandner, 2018; Bivens *et al*, 2021; Dube, 2021). This change is *inter alia* believed to have the potential for reducing some opposition from employers to raise taxes and improve the level of benefits; such opposition has been singled out as a primary source of the UI's financial imbalances and a key constraint to a comprehensive reform. The latter might stand more chances if employees would directly fund much or all of the UI programme.

More precisely, O'Leary and Wandner suggest allowing employee-based taxation of at least 50 percent, while Dube (2021) calls for levying the payroll tax on both employers and employees, similar to Social Security. This payroll tax – fixed across the economic cycle – would cover part of the costs of the programme – namely the regular benefits paid during normal times – while the additional costs to pay for emergency benefits in downturns and recoveries (so-called “cyclical UI”) would be financed by using general federal revenue; the latter would also provide greater countercyclical stimulus while also automatically increasing revenue collection during extended booms.

In the same vein, Bivens *et al* (2021) propose – as a “first best” solution – to switch to a wholly federally financed UI system by means of a single federal unemployment insurance tax to pay for all UI benefits (i.e., both regular and extended). The rationale is that, by introducing UI tax rates paid by employers that are level across states, one would remove competition between states to lower UI taxes, which is believed to be the most fundamental barrier to adequate benefit financing and benefit amounts; besides, in common with many other proposals, the federal taxable wage base would be raised to equal the Social Security tax base and indexed to inflation; these changes would allow, at the same time, lower UI tax rates and higher revenue overall. Reforming the experience rating systems – taxation of employers based on their employees' past receipt of UI

---

<sup>54</sup> For example, several states have transferred the federal stimulus under the CARES Act to their UI trust fund balances to avoid significant increases in the employers' 2021 state UI tax rates. In addition, most states, at least for a period of time, have chosen not to charge employer reserve accounts with Covid-19 UI benefits (Ernest & Young, 2020).

benefits – would also be needed to remove current employers’ incentives to discourage their employees from receiving adequate benefits.

Wandner (2020) proposes to establish a process by which UI benefits and taxes are adjusted automatically. In particular, the federal and state UI taxable wage bases would be gradually increased over several years to reach between 50 and 100 percent of the Social Security taxable wage base and would be indexed annually consonant with this very base. The experience rating system could be eliminated.

A similar approach to ultimately enhance the solvency of the UI system is proposed by West *et al* (2016): as a first step, policymakers should make the federal and state UI taxes more progressive and stable by simultaneously increasing the taxable wage bases and lowering the tax rates. In particular, the FUTA taxable wage base should be gradually increased until it reaches 50 percent of the Social Security taxable wage base. Because states’ taxable wage bases must be at least as great as the federal taxable wage base, this increase would automatically raise all states’ taxable wage bases to varying degrees; thereafter, the wage base should be linked to the Social Security tax base so that it will increase automatically in future years.

At the same time as the wage base is broadened, the FUTA tax rate should be lowered up to a degree that ensures sufficient revenue to fund new federal benefits and support UI’s automatic stabilization capabilities. Likewise, states could lower their SUTA tax rates in tandem with increasing their taxable wage bases, but they should be required to properly forward fund their trust fund reserves to reach within five years an AHCM of at least 1. Thereafter, states’ UI tax rates should be linked to their trust fund reserves so that tax rates automatically increase in non-recessionary times.

To incentivize forward funding, some proposals (Dube, 2021; O’Leary and Wandner, 2018) call for increasing the remuneration of the states’ trust fund balances.

#### *5.4 UI’s countercyclical capabilities*

The Covid-19 pandemic has provided a major test case for the UI system to demonstrate its full potential as a macroeconomic stabilizer: 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). However, this “bazooka” boost is due to a substantial extent to the extraordinarily large but temporary UI expansions enacted by Congress through the CARES Act, in terms of new programmes, expanded eligibility, increased level and lengthened duration of benefits. Besides, it is amply recognized that these emergency programmes lack automaticity and are thus subject to implementation lags that may undermine their countercyclical effectiveness.

As far as the regular state UI programmes are concerned, proposals to improve their macroeconomic stabilization role recognize that they have historically provided the bulk of any countercyclical boost, while the automatic component of benefit extensions – the Extended Benefits (EB) programme – has played almost no role in providing timely support; as shown in Table 1, during the pandemic regular state UI benefits amounted to \$188 billion, while EB outlays were limited to only \$12 billion. For their part, emergency programmes may reach impressive financial magnitude, but their potency as automatic stabilizers may be limited in so far as they

usually flow to a large number of individuals only after unemployment has already risen and remained elevated for a sustained period.

Against this background, it has been argued (Chodorow-Reich and Coglianesse, 2019) 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; the latter measure would immediately boost the transfers to unemployed workers as it affects both short- and long-term UI recipients at once. It is worth noting that, because of the temporary measures included in the CARES Act – notably the relaxation of UI eligibility criteria – in 2020 the average reciprocity rate of regular UI benefit exceptionally increased to 70 percent – from 28 percent in 2019 – before going back to below 40 percent in 2021<sup>55</sup>.

On the other hand, many reform proposals focus on the EB programme and its triggers (West *et al*, 2016; O’Leary and Wandner, 2018; Chodorow-Reich and Coglianesse, 2019; Bivens *et al*, 2021). The latter, as noted in Section 3.1.4, 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, the Advisory Council found that the temporary federal extensions of unemployment benefits have been “*extremely inefficient*”, as they have been neither well timed nor well targeted (Isaacs and Whittaker, 2014b, p. 9).

Proposed reforms of the EB programme 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 de-activation (Dube, 2021; Chodorow-Reich and Coglianesse, 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; iii) extending the additional weeks of EB benefits to address long-term unemployment; iii) removing look-back provisions from EB triggers that make automatic extensions turn off during periods of prolonged unemployment.

## 6. CONCLUDING REMARKS

The Covid-19 pandemic has dramatically confirmed the critical role played by the Unemployment Insurance (UI) system in the United States as a fundamental source of income support for workers as well as a powerful countercyclical instrument for the economy as a whole. The unprecedented expansion of UI coverage and benefit levels 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 “pandemic” UI programmes has inevitably been high, but pales in comparison to the economic and social support provided by these programmes.

The lifeline role played by these programmes 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) programmes were supporting about 80 percent (8.5 million) of total unemployed workers receiving UI payments.

Despite this success, the implementation of the pandemic programmes has once again highlighted some limitations of the state-based regular UI system, while acknowledging the significant

---

<sup>55</sup> [https://oui.doleta.gov/unemploy/data\\_summary/DataSum.asp](https://oui.doleta.gov/unemploy/data_summary/DataSum.asp)

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 inevitably rekindled the debate on how to fundamentally reform the UI system, as the last significant reform dates back to 1976. Reform proposals by academics and policymakers 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 includes 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 pandemic has revived the calls for reforming the UI system is because it has exposed that regular UI programmes 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 often ineligible for UI benefits because they may fail to meet the states' strict monetary eligibility requirements; they were covered by the new PUA programme, 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, 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. In the same vein, 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 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 programmes 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 programmes 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 programmes were still supporting around 10 million unemployed workers.

At a more general level, the choice of discontinuing these programmes 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. 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<sup>56</sup>. 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.

The need for timely reforms is 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. At the same time, this risk may be mitigated by the fact that state trust fund balances – even net of Title XII loans – began to improve as early as mid-2021, 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.

In any case, there is ample consensus that reforms are nonetheless necessary to fix the system’s underlying weaknesses and avoid a return to the pre-pandemic status quo of low reciprocity rates and gaps in coverage. 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 programme 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 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.

---

<sup>56</sup> 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).

## References

1. Alcalá Kovalski M. and L. Sheiner (2020), *How does unemployment insurance work? And how is it changing during the coronavirus pandemic?* Brookings Institution, blog, July 20.
2. Auray S., D.L. Fuller and D. Lkhagvasuren (2019), *Unemployment insurance take-up rates in an equilibrium search model*. European Economic Review, 112, pp. 1-31.
3. Banerjee A., S.M. Hickey and M. Sawo (2021), *States are choosing employers over workers by using COVID relief funds to pay off unemployment insurance*. Economic Policy Institute, Working Economics Blog post, 19 November.
4. Bauer L., W. Edelberg and S. Lu (2020), *There Are Too Many Ways To Lose Unemployment Compensation*. Brookings Institution, blog, December 3.
5. Bauer L., W. Edelberg and J. Parson (2020), *Unemployment Insurance Extended Benefits Will Lapse Too Soon Without Policy Changes*. Brookings Institution, blog, August 6.
6. Bennet M., R. Wyden and S. Brown (2021), *Bennet, Wyden and Brown Introduce Bill To Provide Down Payment On Unemployment Insurance Reform*. Press Release, 28 September.
7. Bivens J and A. Banerjee (2021), *How to boost unemployment insurance as a macroeconomic stabilizer. Lessons from the 2020 pandemic programs*. Economic Policy Institute, October.
8. Bivens J., M. Boteach, R. Deutsch, F. Diez, R. Dixon, B. Galle, A. Gould-Werth, N. Marquez, L. Roberts, H. Shierholz and W. Spriggs (2021), *Reforming Unemployment Insurance: Stabilizing a System in Crisis and Laying the Foundation for Equity*. A joint report of the Center for American Progress, Center for Popular Democracy, Economic Policy Institute, Groundwork Collaborative, National Employment Law Project, National Women's Law Center, and Washington Center for Equitable Growth. June.
9. Blaustein, S.J. (1993), *Unemployment Insurance in the United States: The First Half-Century*. W.E. Upjohn Institute for Employment Research.
10. Boushey H., R. Nunn and J. Shambaugh (Eds.) (2019), *Recession Ready: Fiscal Policies to Stabilize the American Economy*. The Hamilton Project, Brookings Institution.
11. Burtless G. (1983), *Why Is Insured Unemployment So Low?* Brookings Papers on Economic Activity, No. 1.
12. Burtless G. (2020), *Unemployment Insurance as Social Protection and Stimulus during the Coronavirus Crisis*. The Brookings Institution Economic Studies, April.
13. Center for Budget and Policy Priorities (2022), *How Many Weeks of Unemployment Compensation Are Available?* Policy Basics, January.
14. Chetty, R. (2008), *Moral hazard versus liquidity and optimal unemployment insurance*. Journal of Political Economy 116(2): 173-234.
15. Chodorow-Reich G. and J. Coglianese (2019), *Unemployment Insurance and Macroeconomic Stabilization*. The Hamilton Project, May.
16. Cogan J.F. (2017), *The High Cost of Good Intentions*. Stanford University Press.
17. Congdon W. J. and W. Vroman (2021), *Extending Unemployment Insurance Benefits in Recessions*. Urban Institute, February.



18. Congressional Budget Office (2020), *Preliminary estimate of the budgetary effects of H.R. 748, CARES Act, Public Law 116-136*. April.
19. Coombs K., A. Dube, C. Jahnke, R. Kluender, S. Naidu and M. Stepler (2021), *Early Withdrawal of Pandemic Unemployment Insurance: Effects on Earnings, Employment and Consumption*. Harvard Business School Working Paper No. 22-046, August.
20. Council of Economic Advisers (2013), *The Economic Benefits of Extending Unemployment Insurance*. December.
21. Dube A. (2021), *A plan to reform the Unemployment Insurance system in the United States*. The Hamilton Project, Policy proposal 2021-03, April.
22. Edwards K.A. (2021), *Unemployment Insurance and the Failure to Reform*. commentary, The RAND Blog, January 5.
23. Ernest & Young (2020), *State unemployment insurance wage bases for 2020*. Tax News Update U.S. Edition, December 11.
24. Ernest & Young (2022), *preliminary state unemployment insurance tax facts for 2022*. Tax News Update U.S. Edition, January 7.
25. Furman J., T. Geithner, G. Hubbard, and M.S. Kearney (2020), *Promoting Economic Recovery After COVID-19*. The Aspen Institute, Economic Strategy Group, June 16.
26. Ganong P., F. Greig, M. Liebeskind, P. Noel, D.M. Sullivan and J. Vavra (2021), *Spending and Job Search Impacts of Expanded Unemployment Benefits: Evidence from Administrative Micro Data*. Baker Friedman Institute for Economics at University of Chicago, Working Paper No. 2021-19.
27. Ganong P. and P. Noel (2019), *Consumer Spending during Unemployment: Positive and Normative Implications*. American Economic Review 109(7).
28. Ganong P., P. Noel and J. Vavra (2020), *US Unemployment Insurance Replacement Rates During the Pandemic*. Baker Friedman Institute for Economics at University of Chicago, Working Paper No. 2020-62.
29. Goger A., T. Hadden Loh and C. George (2020), *Unemployment insurance is failing workers during COVID-19. Here's how to strengthen it*. Brookings Institution report, April.
30. Gould E. and B. Zipperer (2020), *Without fast action from Congress, low-wage workers will be ineligible for unemployment benefits during the coronavirus crisis*. Economic Policy Institute, Working Economics Blog, March 26.
31. International Monetary Fund (2020), *World Economic Outlook*, April.
32. Isaacs K.P. (2019), *Unemployment Insurance: Consequences of Changes in State Unemployment Compensation Laws*. Congressional Research Service report, October 23.
33. Isaacs K.P. and J.M. Whittaker (2014a), *Emergency Unemployment Compensation (EUC08): Status of Benefits Prior to Expiration*. Congressional Research Service report, August 11.
34. Isaacs K.P. and J.M. Whittaker (2014b), *Extending Unemployment Compensation Benefits During Recessions*. Congressional Research Service report, October 14.

35. Kimball W. and R. McHugh (2015), *How long can we go? State unemployment insurance programs exclude record numbers of jobless workers*. Economic Policy Institute Briefing Paper No. 392.
36. Lazere E. (2021), *How States Can Best Use Federal Fiscal Recovery Funds: Lessons From State Choices So Far*. Center on Budget and Policy Priorities, November.
37. Marinescu I., D. Skandalis and D. Zhao (2021), *The impact of the Federal Pandemic Unemployment Compensation on job search and vacancy creation*. Journal of Public Economics, 200.
38. Needels K., W. Nicholson, J. Lee and H. Hock (2016), *Exhaustees of Extended Unemployment Benefits Programs: Coping with the Aftermath of the Great Recession*. Mathematica Policy Report.
39. New York State Department of Labor (2014), *A History of UI Legislation in the United States and New York State*. Division of Research and Statistics, July.
40. Nicholson W. and K. Needels (2011), *The EUC08 Program in Theoretical and Historical Perspective*, February. U.S Department of Labor.
41. Nicholson W., K. Needels and H. Hock (2014), *Unemployment Compensation During the Great Recession: Theory and Evidence*. National Tax Journal, March.
42. O’Leary C.J., B.S. Barnow and K. Lenaerts (2020), *Lessons from the American Federal-State Unemployment Insurance System for a European Unemployment Benefits System*. W.E. Upjohn Institute for Employment Research, Working Paper No. 16-264.
43. O’Leary C.J. and K. Kline (2016), *Are State Unemployment Insurance Reserves Sufficient for the Next Recession?* W.E. Upjohn Institute for Employment Research, Working Paper No. 16-257.
44. O’Leary C.J. and S.A. Wandner (2018), *Unemployment Insurance Reform: Evidence-Based Recommendations*. In: S.A. Wandner (editor), *Unemployment Insurance Reform: Fixing A Broken System*, Chapter 5. W.E. Upjohn Institute for Employment Research.
45. O’Leary C.J. and S.A. Wandner (2020), *An Illustrated Case for Unemployment Insurance Reform*, W.E. Upjohn Institute for Employment Research, Working Paper No. 19-317.
46. Petrosky-Nadeau N. and R.G. Valletta (2021), *UI Generosity and Job Acceptance: Effects of the 2020 CARES Act*. Federal Reserve Bank of San Francisco Working Paper 2021-13.
47. Simon A. (2021), *Unemployment insurance at a crossroads: Tracing program design during and beyond COVID-19*. American Enterprise Institute, October.
48. Spadafora F. (2019), *European Integration in the Time of Mistrust*. Bank of Italy Occasional Paper No. 512.
49. Stettner A. and E. Pancotti (2021), *1 in 4 Workers Relied on Unemployment Aid During the Pandemic*. The Century Foundation, unemployment commentary, 17 March.
50. Stone C. and W. Chen (2014), *Introduction to Unemployment Insurance*. Center on Budget and Policy Priorities, July.
51. Stone C. (2021), *Congress Should Heed to President Biden’s Call for Fundamental UI Reform*. Center on Budget and Policy Priorities, May.

52. Towson T. (2020), *How Severely will COVID-19 Impact SUI Tax Rates?* Equifax Insights Blog, 18 March.
53. U.S. Department of Labor (2015), *State Unemployment Insurance - Tax Measures Report 2013*.
54. U.S. Department of Labor (2019), *Unemployment Compensation: Federal-State Partnership*. Office of Unemployment Insurance, Division of Legislation.
55. U.S. Department of Labor (2020a), *State Unemployment Insurance - Trust Fund Solvency Report 2020*.
56. U.S. Department of Labor (2020b), *Comparison of State UI Laws 2020*.
57. U.S. Department of Labor (2020c), *State Unemployment Insurance - Tax Measures Report 2019*.
58. U.S. Department of Labor (2020d), *Unemployment Insurance Program Letter No. 14-20*. April 2.
59. U.S. Department of Labor (2021a), *State Unemployment Insurance - Trust Fund Solvency Report 2021*.
60. U.S. Department of Labor (2021b), *State Unemployment Insurance - Tax Measures Report 2020*.
61. U.S. Department of Labor (2021c), *Unemployment Insurance Modernization*, fact sheet. August.
62. U.S. Department of Labor, Office of Inspector General (2021), *COVID-19: states struggled to implement CARES Act unemployment insurance programs*. May.
63. U.S. General Accounting Office (1993), *Unemployment Insurance: Program's Ability to Meet Objectives Jeopardized*. September.
64. U.S. Government Accountability Office (2010), *Unemployment Insurance Trust Funds: Long-standing State Financing Policies Have Increased Risk of Insolvency*. April.
65. U.S. Government Accountability Office (2015), *Unemployment Insurance: States' Reductions in Maximum Benefit Durations Have Implications for Federal Costs*. April.
66. Vroman W.G. (2009), *Unemployment insurance recipients and nonrecipients in the CPS*. Monthly Labor Review, October.
67. Vroman W.G. (2018), *Unemployment Insurance Benefits – Performance Since the Great Depression*. Urban Institute.
68. Walczak J. and S. Funkhouser (2021), *States Have \$95 Billion to Restore their Unemployment Trust Funds—Why Aren't They Using It?* Tax Foundation, September 22.
69. Wandner S.A. (2018), *Why the Unemployment Insurance Program Needs to Be Reformed*. In: S.A. Wandner (editor), *Unemployment Insurance Reform: Fixing A Broken System*, Chapter 1. W.E. Upjohn Institute for Employment Research.
70. Wandner S.A. (2020), *Options for Unemployment Insurance Structural and Administrative Reform: Proposals and Analysis*. W.E. Upjohn Institute for Employment Research, Policy Paper No. 2020-020.

71. Weidinger M. (2020a), *Is the unemployment insurance system ready for the next recession?* American Enterprise Institute, blog post, March
72. Weidinger M. (2020b), *Extended: A Review of the Current and Proposed Duration of "Pandemic" Unemployment Benefits.* American Enterprise Institute, June.
73. West R., I. Dutta-Gupta, K. Grant, M. Boteach, C. McKenna and J. Conti (2016), *Strengthening Unemployment Protections in America.* Center for Economic Progress, National Employment Law Project, Georgetown Center on Poverty and Inequality, June.
74. White House (2016), *Fact Sheet: Improving Economic Security by Strengthening and Modernizing the Unemployment Insurance System.* Office of the Press Secretary, January 16.
75. Whittaker J.M. (2018), *The Unemployment Trust Fund (UTF): State Insolvency and Federal Loans to States.* Congressional Research Service, February.
76. Yang S., M. Lasky and B. Page (2010), *Policies for Increasing Economic Growth and Employment in 2010 and 2011.* Congressional Budget Office, January.