Modern Economy, 2023, 14, 671-693
https://www.scirp.org/journal/me
ISSN Online: 2152-7261
ISSN Print: 2152-7245

Some Remarks on Actual Unemployment Insurance Schemes

Paola Potestio

Department of Economics, University of Rome III, Rome, Italy
Email: mariapaola.potestio@uniroma3.it

How to cite this paper: Potestio, P. (2023). Some Remarks on Actual Unemployment Insurance Schemes. *Modern Economy, 14,* 671-693.
https://doi.org/10.4236/me.2023.145037

Received: March 16, 2023
Accepted: May 28, 2023
Published: May 31, 2023

Abstract

The article analyzes and compares the actual unemployment insurance schemes adopted in ten countries and their evolution over the 2001-2020 twenty-year period. The "OECD tax-benefit model" is a precious informative source for the analysis. The comparison between the UI schemes and the rationale that appears to have driven their designs is focused in particular on how the individual schemes tackle the trade-off between insurance and incentives. The main point from this comparison is the identification of two "benefit structures", which characterize in a deeply different way the actions for countering opportunistic behaviors within the ten countries. The article underlines issues and questions that the factual differences in the UI schemes leave open or contribute to raising.

Keywords

Unemployment Insurance, OECD Tax-Benefit Model, Unemployment Insurance Schemes, Benefit Structure

1. Introduction

Trends and characterizations of Unemployment Insurance (UI) structures have been the object of extensive analyses. Changes in the unemployment benefit coverage and their readings, the problems of non-standard dependent employment, and differences between advanced and emerging economies are the issues of recent, important analyses[1] within the more general themes in the operational UI area. The settlements and adjustments in this area induce further considerations on a few base aspects. This article moves on the factual plane of comparison be-

[1] I am referring in particular to OECD (2018) Ch. 5, OECD (2020) Ch. 2, Asenjo and Pignatti (2019).

tween some countries' actual unemployment insurance schemes and their evolution over twenty years. "The OECD tax-benefit model" is a precious informative source for the unemployment insurance schemes in OECD countries[2]. The picture of the rules in the individual countries and the set of elaborations developed within the model are the essential informative base of my remarks.

The focus of this article is on the apparent rationale of the schemes adopted in ten countries and the comparison on this basis of those schemes. Naturally, the apparent rationale driving the design of the individual schemes has no implication for the efficiency and effectiveness of the individual designs. My aim is limited to underlining and comparing two main points: how the trade-off between insurance and incentives is tackled in the individual schemes, a point that can also involve generosity aspects, and the presence of equity aspects. As is, to some extent, well known, a large series of differences emerge from the schemes adopted and their recent histories. Framing an important part of these differences in two different benefit structures (with different components and a different role of the common component) is the main point of my remarks. Questions and new issues can be raised from the identification of different benefit structures and their suitable consideration. A discussion on this open field of analysis is introduced and completes the main point of the article.

2. UI Schemes over the Years 2001-2020 in Ten Countries

A few premises: The OECD tax-benefit model is here the reference to follow the structure of UI systems over the 2001-2020 twenty-year period[3]. The main changes of these years are useful for a better reading of the structures in 2020 and thus to this end, they will be briefly considered. Note, moreover, that considering the widespread measures connected with the COVID-19 pandemic and initially introduced in 2020 would unnecessarily burden the comparisons between the ten UI schemes since the baseline structures of 2020 remain unchanged in 2021-2022. My last reference is the year 2020 also for this reason. The second point: in the picture of the policy rules of each country, the OECD tax-benefit model separates the "Unemployment insurance benefit" from the "Unemployment Assistance". Beyond the simple observation of the presence or absence of "unemployment assistance", the reference of the article is only to the first scheme, a scheme that is uniformly characterized as contributory and not means-tested. In connection to these general properties, note also that benefit taxability is widespread but not uniform. The third premise is that the focus of the article on the structure of the UI schemes allows for neglecting the obvious nominal increases over time of the amounts of the variables involved.

[2]For the Overview of the model see OECD (n.d.): https://www.oecd.org/els/soc/OECD-Tax-benefit-model-Overview.pdf.

[3]OECD, "THE OECD TAX-BENEFIT MODEL—Description of Policy rules". The link to "The country policy descriptions for all available years": https://www.oecd.org/social/benefits-and-wages/benefits-and-wages-country-specific-information.htm.

The ten countries chosen for comparison are Canada, France, Germany, Israel, Italy, Japan, Spain, Sweden, United Kingdom, and United States[4]. The partial description of their UI systems is concentrated only on the eligibility requirements, the characterization of the benefit levels, and the extension of the benefit durations. The legal aspects of the contributory burden are not considered as well as the behavioral requirements for eligibility and the sanctions provided for. The only behavioral condition that I obviously stress is that in all countries the benefit recipient must be a proper job-seeker. Thus, here the eligibility requirements are considered only in their contribution/employment/earnings aspects.

The succession in this brief examination of the actual UI schemes is purposely chosen to emphasize the changing rationale behind them.

2.1. United States

Each state has its own UI program in the United States. An important point in this respect, continuously underlined in the OECD model, is that the eligibility conditions and the maximum benefit levels "differ from state to state". The state of Michigan is the specific reference of the OECD tax-benefit model. Closing this premise, a relevant stability characterizes this UI scheme over the twenty years considered.

Eligibility is linked to earnings requirement. In the effective synthesis of the OECD model, earnings requirement "details how much an individual must have earned and the period of time during which the individual must have had earnings"[5] to qualify for the minimum Weekly Benefit Amount (WBA). Base Period Wages (BPWs), where the base period is 2 quarters, are the ultimate reference for the eligibility requirement. A constant formula is applied to calculate the weekly benefit amount, which results as the 4.1% of high quarter wages during the base period plus USD 6 for each dependent up to 5 dependents. A minimum and a maximum amount per week are set, and the relative figures clearly change over the years. Observe that since 2017 it is specified that the maximum amount is set regardless of the null or positive number of dependents. As to the benefit duration, until 2011 the maximum duration for "regular state UI benefits" is 26 weeks, and the range was 14 - 26. From 2012 the range is reduced to 14 - 20 weeks. If the unemployment state continues after the exhaustion of the regular benefits, forms of Emergency Unemployment Compensation (funded by the federal government) can be activated. Workers can also enjoy Extended Benefits "generally shared by state and federal governments". The extension of benefits could be remarkable. On 1st July 2009 the duration of benefit in Michigan was

[4]The economic importance of the country, the economic area, and the interest of the specific UI scheme adopted have guided this choice. The limited number of countries makes the description of the schemes and changes along the two decades less heavy. On the other hand, it is worth underlying that, beyond the differences within all OECD countries, the issues raised can be extended to a comprehensive consideration of the UI schemes of the OECD countries.

[5]OECD, https://www.oecd.org/social/benefits-and-wages/benefits-and-wages-country-specific-information.htm– USA 2020 p. 3.

80 weeks, on 1st July 2011 it was 99 weeks, and on 1st July 2013 it was 57 weeks. On 1st July 2014, Extended Benefits were "not payable", and the maximum duration in 2014 was 20 weeks.

Finally, it is comparatively interesting to note that there are no unemployment assistance schemes in the twenty years in the United States.

An exclusive focus on a single level of benefit, determined through a specific formula, is the main point of this UI scheme. This single level and its limited duration characterize the scheme. These basic components, however, join with a significant element of flexibility: the possible extension of the benefit duration, supported by specific funding, in particular economic contexts. A rather rigid, basic scheme but with duration times that can be adapted to particular economic states or emergencies is (ultimately) the US scheme.

2.2. United Kingdom

Contribution-based Jobseeker's Allowance (JSA) is the specific designation and profile of the UI scheme in the United Kingdom[6], a scheme explicitly circumscribed to unemployed workers looking for full-time jobs.

Beyond a series of conditions for receipt pertinent to behavioral aspects which have been extended and specified in detail over the years, the contribution conditions are the constant reference for the eligibility requirements. Contributions requirements must be satisfied in the two full tax years before the year of the JSA claim, and the scheme has been stable for many years. Directly referring to 2020, two conditions must be satisfied. The first condition concerns the contributions in at least one of the two previous tax years. This implies that the claimant must have been employed for at least 26 weeks in one of these tax years, but continuity of these weeks is not required. The second condition concerns the total amount of contributions to be paid in the two pertinent tax years.

The procedure for the benefit amount is absolutely stable: gross benefits are paid at a certain amount per week (which is clearly variable over the years[7]) for a worker aged 25 and over and at a certain lower amount for workers aged 16 - 24. This amount is established directly, that is it does not follow from any formula or rule beyond the differentiation by the worker age. Of course, this curt procedure excludes the consideration of minimum and maximum amounts. Moreover, the benefit is for a single person, thus with no increases for families or children. Such additions are possible within the Income-based Jobseeker's Allowance, which—as noted—is an "unemployment assistance benefit".

A stable, general rule regulates benefit duration over the twenty years: benefits are payable for up to 182 days ("in any one job-seeking period").

A conclusive remark on this UI system cannot concern but the total rigidity of

[6]Two types of Jobseeker's Allowance are present in UK in these twenty years. Income-based Jobseeker's Allowance is the second type, which is an "unemployment assistance benefit". As such, it is not contributory and means-tested.

[7]To mention the first and last figure, benefit amount for people aged 25 and over was GBP 53.05 in 2001 and touches GBP 73.10 in 2020.

the benefit amounts, which are set without connections with any economic or personal aspects of the worker or with elements of any other type. This absolutely rigid procedure differentiates UK from any other country considered.

2.3. Canada

A particularly stable scheme emerges from the *Employment Insurance* (EI) rules adopted over the years in Canada. Thus, the last year for Canada in OECD model (2019) can be the only one referred to here.

A "qualifying period" is initially defined, generally consisting of 52 weeks preceding the unemployment event. A required number of insured work hours in the qualifying period depending on the regional monthly unemployment rate identify the conditions for eligibility. This number of work hours increases with the decrease of the regional monthly unemployment rate. Specifically, the number of work hours required is between a minimum of 420 hours (with unemployment rates over 13%) and 700 hours (for unemployment rates of 6% and lower).

Benefit amount is based on the average weekly insurable earnings, which are calculated from the best weeks of earnings in the qualifying period. A number for these best earning weeks is set: it ranges between 14 and 22 in dependence on the monthly regional unemployment rate. The replacement rate is 55% of the resulting average weekly earnings. A maximum amount of weekly insurable earnings is set and the 55% of this sum defines the maximum weekly benefit amount. Low-earning families with children are supported by the EI Family Supplement, which increases the replacement rate of their earnings[8]. Here the replacement rate can be as high as 80% depending on the net income of the family and the number and age(s) of the children. However, the maximum weekly benefit amount, including the Family Supplement, is subject to the same general maximum amount fixed for 2019.

A maximum duration of 45 weeks is fixed for EI regular benefits. The benefit duration (in terms of number of weeks of benefits) depends on the number of hours worked in the qualifying period and the local unemployment rate. The duration ranges between 14 and 45 weeks. As a rule, a one-percentage point increase in the regional monthly unemployment rate gives rise to two additional weeks of benefits. An additional 70 hours of work give rise to an additional week of benefits for workers with "short employment duration" (less than 1400 hours) in the qualifying period and two weeks of benefits for workers with "long employment duration" (over 1400 hours). Finally, completing the picture it is worth recalling that in this scheme for benefit duration the worked hours range from 420 hours to 1820 and more, and that the unemployment rates range from 6% and under to over 16%.

[8]A range of family net incomes identifying low earnings is defined (and set in a certain numbers of CAD) and the relative supplement is based on the number and age(s) of the children. Net incomes under the lower bound of the range give rise to the full supplement provided for these families.

A final comment: The Canadian system is focused on a single level of benefits, which however admits significant differences in support of low-earning families. The system, moreover, encompasses specific elements of flexibility, related both to the variable state of the economy and to the worker characteristics. These elements considerably increase the interest of the Canadian scheme.

2.4. Israel

The OECD tax-benefit model includes only the years 2008-2019 for Israel. Since the structure of this UI scheme remains substantially unchanged over the years, I will refer only to 2019.

As to contribution/employment requirements, contributions of 12 work months have to be paid over 18 months antecedent the unemployment event[9]. These 12 working months give the eligibility condition.

An articulated procedure leads to the determination of the benefit amount. First, this amount is linked to the daily average wage of the unemployed worker "during the last 75 workdays" and it is differently calculated for people aged under 28 and people aged 28 and over. A large grid of monthly and daily gross salaries (subjected to insurance contributions) is defined and benefits per day, month (25 days) and the associated replacement rate are set for each gross salary with reference to the two age levels. Benefits increase and the replacement rates decrease with wages and for each wage level the replacement rate is higher for claimants aged 28 years and over. The upper bound of the grid of daily benefits associated with daily gross wage levels is equal to the daily average wage. Obviously, since people aged 28 and over enjoy higher replacement rates with respect to those under 28, the upper bound of the daily benefits is touched by people aged 28 and over in correspondence to a lower level of the daily gross salary with respect to the level that is required for people aged under 28. This stressed, the set of the replacement rates is very large: from 80% - 60%, for people aged 28 and over and under 28, respectively, to 31%, which is the lowest rate for both age groups. Note that since daily benefits of unemployed aged 28 and over reach the daily average wage in correspondence of a lower daily wage, the daily benefits of these people remain constant for higher daily wages and thus their replacement rate continues to fall at higher daily wages. The grid of wages and benefits is completed at levels of daily and monthly wages at which the unemployed under 28 reach the upper bound of the daily benefits and the replacement rate of both age groups touch 31%.

A further point concerns the time characterization of the maximum benefit level. As just seen, the grid designed of salaries and associated benefits gives the daily average wage as the maximum amount of daily benefits. This maximum amount is time constrained: it is established that from the 126th day the daily amount of benefits "shall not exceed" 2/3 of the daily average wage.

[9]The exact reference for computing the 18 months is the "determining date", that is the 1st of the month in which the unemployment event occurred.

Turning to the benefit duration, this is differentiated according to the age of the unemployed worker and the number of dependents (less than three or at least three dependents). As to the less-than-3 dependents case, a grid of days between 50 and 175 days is fixed in correspondence to four age levels between 25 and 45 and over. The duration increases with the claimant age, starting from 50 days for claimants under 25 and arriving to 175 days for those aged 45 or over. As to the at-least-3 dependents case, the benefit duration is 138 days for workers under 35, and 175 days for those aged 35 or over. Moreover, a final constraint is placed: over a stated period of 4 years, a worker aged under 40 years cannot enjoy benefits for a period longer than the 180% of his specific maximum period of benefit enjoyment. In the period above 100% of the maximum period, the benefit rate is constrained to 85% of the maximum daily unemployment benefit.

Finally, observe that there is no scheme of unemployment assistance benefit in Israel.

The set of UI rules in Israel identify an interesting combination of aspects. Attention and sensitivity towards different wage levels of individual workers emerge from the wide wage range adopted for the replacement rates. Although less significant, the differences in the maximum benefit duration for different ages and number of dependents of unemployed people also signal attention on heterogeneities between unemployed workers. However, the maximum duration limit to 175 days is the most relevant aspect of the benefit duration scheme. This limited duration joins then another interesting point, which is the upper bound of benefit payments pegged to the daily average wage for the first 125 days and the subsequent tighter bound from the 126th day reduced to 2/3 of the daily average wage. The scheme has an overall limited duration, but nevertheless provides for a possible, albeit very specific, reduction of the benefits after a certain time (about four months). On a general plane, this possibility excludes single levels of benefits over time. As concerns the base UI scheme, however, it is important to stress that Israel presents single benefit levels.

As a final remark, Israeli scheme appears rather original with respect to those of the other countries. Overall, the system appears to combine sensitivity and severity in a very specific and interesting way.

2.5. Japan

A stable and rather articulated structure characterizes the unemployment insurance scheme adopted in Japan. The employment/contribution conditions of insured work show some changes and specifications over the years only within the eligibility requirements. In 2001 a minimum of six months in the last 12 months with at least 14 days of work for month was required. A few specifications were introduced in the second half of the 2010s, and the new rules hold until 2020. Normal cases require more than 12 months, with more than 11 days per month, over 2 years "before unemployment". When unemployment is due to bankruptcy or dismissal, the insured work required is a period of more than 6 months on

1 year before unemployment.

The benefit amount is determined through a stable scheme, with small changes (actually reductions) of the involved parameters. The substantial stability allows us to directly consider the 2020 scheme. The Daily Amount of Wages (DAWs), given by division over the last 180 days, is the reference for the calculation of benefit amount. The same type of procedure applies to workers aged under 60 years and workers aged between 60 and 64 years. Two (lower and higher) specific levels of daily wage for each age group are the references set for the calculation of the daily amount of benefit. For daily wages below the first (lower) level of wage, the replacement rate applied is 80% for both age group, whereas the replacement rate applied to daily wages above the second (higher) level of wage is 50% for the age group under 60 and 45% for the age group between 60 and 64. For daily wages between the two wage levels of reference, a specific formula for each age group is used for the calculation of daily benefit, benefit levels that will clearly imply replacement rates between the two extreme values set. Thus, the procedure followed defines and calculates three ranges of possible levels of benefits for each age group. Moreover, a minimum amount and a maximum amount of daily wages differentiated for each age group are introduced. For people aged under 60, however, three (increasing) levels of the maximum amount of daily wages are set corresponding to three age levels (under 30, 30 - 44, 45 - 59).

The worker age, the period of insured employment, and the cause of the job termination concur to the determination of the benefit duration. The very articulated scheme designed has been stable since 2004. Five periods of insured employment are considered (less than 1 year, 1 to 4, 5 to 9, 10 to 19, 20 or more years) and a positive relation between the insured period and the benefit duration is stated. Referring to unemployment states due to bankruptcy and dismissal, the scheme is made up of 5 age groups: under 30 years, 30 - 34, 35 - 44, 45 - 59, 60 - 64. The benefit duration ranges from 90 days for any age group (if the insured period is under 1 year) to 330 days for workers aged between 45 - 59 years if the insured period is 20 years or more. With this long period insured, the benefit duration decreases to 270 days for workers aged 35 - 44 years, and decreases to 240 days for both the older workers (60 - 64) and the workers aged 30 - 34 years. To mention some other data, an insured period between 5 - 9 years gives rise to a benefit duration of 240 days for the age group 45 - 59 years and 180 days for the age groups 35 - 44 and 30 - 34, whereas an insured period between 1 - 4 years gives rise to a duration, respectively, of 180, 150 and 120 days. Finally, it is useful to recall that the scheme also includes a more generic case of benefit duration for "ordinary unemployed" and a more specific case for "persons difficult to re-employ". The benefit duration for the more generic case ranges from 90 to 150 days. In the case of difficult to re-employ people, benefit duration is 150 days for any age group if the insured period is less than 1 year, whereas it is 300 days for people younger than 45 and 360 days for people aged between 45 -

64 years, whatever the length of the insured period exceeding one year for both age groups.

Even the Japanese scheme focuses on a single level of benefit. This stressed, the procedures to determine benefit amounts and benefit durations are very articulated. The possible very large series of replacement rates from the rules that determine benefit amounts signal a remarkable attention to the heterogeneity of worker positions. Attention to age differences in conjunction with other specific aspects and in particular with large differences in the length of insured employment gives in turn an extended picture of maximum benefit durations. It is important however to underline that, leaving aside people with re-employment difficulties, the maximum duration of 330 days is limited to people with 20 or more years of insured work. The number of aspects considered and therefore the attention to a very wide heterogeneity of worker positions characterizes the Japanese structure in a rather particular way, while it nevertheless maintains a significant degree of rigidity of important parameters.

2.6. Germany

Rather limited changes in UI rules emerge from Germany in the twenty years. Eligibility constantly requires at least 12 months worked. Contributions are specified as paid for at least 12 months within a reference period that is variable between the last 3 years (until 2007) and the last 2 years (since 2008). Only in 2020 the reference period for the contribution requirement is set within the last 30 months.

The German scheme has been absolutely stable since 2001 as to the replacement rate. The rate is 60% of "previous earnings net of tax and social security contributions", and 67% for workers with at least one dependent child. Upper bounds are set for the monthly gross earnings on which apply the 60% and 67% replacement rates. Since 2017 it has also been set a level of monthly earnings that are "contribution and insurance free".

The benefit duration has a constant structure, which depends on the worker age and the length of the contribution period. Until 2005 five age groups were considered (from up to 45 years to 57 and over). Benefit duration increases with the contribution period and the claimant age: in 2001-2005 the maximum duration is 12 months for workers aged up to 45 years with a contribution period of 24 months, whereas it arrives to 32 months for workers aged 57 years and over and with a contribution period of 64 months. The scheme was subsequently streamlined and the composition adopted in 2009 has remained unchanged until 2020. Four age groups are considered: for workers aged under 50 years, benefit duration varies only with the length of the contribution period arriving to 12 months with 24 months of contributions. At the age of 50 and with 30 months of contributions, the maximum duration is 15 months. At the age of 55, 36 months of contributions result in a benefit duration of 18 months. Finally, for workers aged 58 years, 48 months of contributions give a maximum duration of 24 months.

The reduction of age groups and the maximum duration of benefits is a main correction of the German scheme in place in the early 2000s.

Two final remarks: The short synthesis of the German scheme reflects its relative schematicity. Single benefit levels from given and constant replacement rates characterize also this scheme. Benefit duration is instead remarkably differentiated in relation to the worker age and the contribution period. A few corrections and reductions were applied in the early 2010s, but the maximum durations (which ranges between one and two years) remain considerable in comparison to the schemes considered so far. Finally, here a broad unemployment assistance joins the unemployment insurance scheme.

2.7. Sweden

Membership of an Unemployment Insurance Fund in the 12 months antecedent the unemployment event is the base of the voluntary income related scheme of UI in Sweden.

A certain number of hours/months worked make up the eligibility conditions, whose main reference is alternatively set in terms of hours or months worked. These requirements change very little over the years: they appear slightly more stringent and formulated in more detail. In 2001 the two employment conditions were at least 6 months worked (with at least 70 hours per month) or 450 hours worked during a continuous period of 6 months (with at least 45 hours each month). In 2020, the two conditions became: at least 6 months worked (with at least 80 hours per month) over a period of 12 months immediately antecedent the unemployment event, or at least 480 hours worked during a consecutive period of 6 months (with at least 50 hours each month).

As to the benefit amount, a rate of 80 per cent of previous gross earnings is the reference for the replacement rate, whose temporal characterization, however, changes over time. Analogously, a variously identified maximum benefit level is applied. From July 2001 until 2006, the replacement rate of 80% of previous gross earnings combines with a certain maximum amount of daily benefit that is applied for the first 100 days. This maximum amount is then reduced for the remaining benefit period[10]. From 2007, the 80% replacement rate is only applied for the first 200 days and is then reduced to 70% "for the next 100 days". Instead, the stated maximum amount of daily benefit remains constant for all the benefit period[11]. A further correction was introduced in 2017. Directly referring to the scheme in 2020, after 200 days the replacement rate decreases to 70 per cent for the rest of the benefit period. But the rate decreases to 70 per cent after 100 days when the worker is aged less than 25 years, does not have children and "has activity support". Moreover, again a distinct higher maximum daily benefit is ap-

[10]To complete this period, observe that the two caps set in July 2001 were raised in July 2002 and the new levels have remained unchanged until 2006.

[11]It is interesting to note that the maximum amount of daily benefit set in 2007 is equal to the lower level set in 2002 for the period after the first 100 days. Note, moreover, that this maximum level for 2007 will remain unchanged until 2015 and will be increased only in 2016.

plied for the first 100 days with respect to the maximum applied thereafter. Finally, until 2018 no specific prescription was stated regarding the minimum daily benefit set each year. From 2019, the minimum daily benefit is specified for "someone who has been working full time".

The structure for the benefit duration remains absolutely stable until 2012. It is defined by a maximum of 300 days or 60 weeks. If at the end of the benefit duration the worker is still without a job, there is an offer to take part in a "labor market policy program (activity guarantee)". A correction in the maximum duration is introduced in 2017. Again directly referring to 2020, the maximum of 300 days or 60 weeks holds for unemployed without children, whereas it is increased to 450 days or 90 weeks for unemployed with dependent children. Finally, a further rule in the years 2013-2018 provided benefit to part-time unemployed for a period of 75 days. In 2019, the rule is specified by admitting benefit for a maximum of 60 weeks for part-time unemployed "performing part-time work within a benefit period".

Two main points result from the subsequent adjustments of the Swedish system. The changing modalities in applying reduction over the time of the benefit levels are an important aspect of the UI structure in Sweden. The reduction firstly implemented through a reduction in the maximum benefit amount after the first 100 days is followed by the more general measure of reduction of the replacement rate after the first 200 days, a reduction whose application for younger people has been then anticipated to after 100 days and has been associated to a new reduction of the maximum benefit amount again after the first 100 days. The second point is the relatively recent extension of the maximum duration for unemployed with dependent children. In conclusion, the two types of adjustment move in opposite directions: a certain reduction in the benefit level over the time, implemented in various ways, combined with an extension in benefit maximum duration, linked to family composition.

2.8. France

The scheme ARE (Allocation d'Aide au Retour à l'Emploi) was introduced in France on 1 July 2001. The scheme replaces the previous AUD scheme (Allocation Unique Digressive), which was characterized by decreasing benefit rates every six months.

Contribution requirements in the new scheme vary frequently over the years, not always in the same direction. Starting from a minimum of 4 months of contributions paid in the last 8 months in 2001, a number of specifications have been introduced. Referring directly to the rules for eligibility from 1 November 2019, the contribution/employment conditions require 130 days or 910 hours worked over a stated number of months before the termination of work contract. This number, i.e. the reference period for the contribution/employment conditions, is 24 months for workers aged under 53 years and 36 months for workers aged 53 and more.

The annual wage divided by 365 days is the daily wage reference (SJR, Salaire Journalier de Référence) for the calculation of the daily gross benefit. With this reference, since 2001 the ARE scheme calculates the daily gross benefit through five successive operations. The structure of the scheme has remained unchanged until 2020, but the specific figures utilized or derived naturally change over the years. For 2020 year and referring to the synthetic description of the OECD tax-benefit model, the gross daily allowance is equal to the higher between 40.4% of the daily wage reference (SJR) +12 Euros and 57.0% of the SJR. The resulting amount, however, cannot be lower than a certain stated minimum or higher than 75% of the SJR.

The structure of benefit duration is constantly based on the worker age at the end of the employment contract and the duration of affiliation, that is the time worked within the set reference period, but the specific rules change frequently, and not always in the same direction. In 2001, three age groups are considered (under 50, from 50 to 54 and from 55 years and over), and 5 different periods of affiliation are defined. The duration of the allowance ranges from a minimum of 4 months to a maximum of 60 months (for workers aged 55 years and more). As already seen, in 2020 two reference periods are considered: 24 months preceding the end of the employment contract if worker age is under 53 years, and 36 months if worker age is 53 years or more. The work time within these periods, that is the period of affiliation, affects the benefit duration. The general rule sets the benefit duration as given by the number of hours worked in the reference period multiplied by 1.4. Given this premise, the benefit duration cannot be less than 182 days (6 months), whereas the maximum duration is 730 days (24 months). This maximum is extended to 913 days (30 months) for workers aged 53 or 54 at the end of the contract, and to 1095 days (36 months) for workers aged 55 and more.

Finally, an important new rule is introduced from the 1 November 2019, stating that the allowance of workers aged under 57 years at the end of the work contract is reduced to 70% from the 183rd day of the enjoyment of the allowance, if the allowance is at least equal to a certain defined number of Euro. Thus, a specific reduction of benefits is imposed in 2019, actually linked to a particularly wide age range of workers.

It seems interesting to underline three points of the French scheme. The first is a certain elasticity of the benefit amount. The 75% of the SJR (daily wage reference) represents the upper bound of the benefit amount. The second point concerns the relevant length of the possible benefit duration and the differentiation of the maximum durations between age groups. These extensions mark a significant difference with respect to the schemes considered so far. The third point is the specific reduction of the benefit amount after about six months introduced in 2019. Considering the possible large lengths of benefit duration this rule appears to have a relevant role.

Finally, a large scheme of unemployment assistance is articulated in France

2.9. Spain

A considerable relative stability characterizes the Spanish UI scheme. Throughout the twenty years eligibility requirements constantly require contributions paid for a minimum of 360 days in the 6 years antecedent the unemployment state.

The average gross earnings over the last six months are the reference for the calculation of gross benefits. One correction was uniquely made in 2012 to the scheme adopted. Since 2001 benefits were 70% of the "reference earnings"[12] and this level could be enjoyed for a maximum of six months. The percentage was then reduced to 60% for the remaining period of benefits. Moreover, a maximum and a minimum for the benefit amounts are defined, and these amounts depend on the number of dependents. From 2012 the rate after the first six months has been reduced to 50%. Thus, the replacement rates in 2020 are 70 per cent for a maximum period of six months and 50 per cent for the remaining period of benefits. The application of a minimum and a maximum of benefit amount depending on the number of dependents (under age 26) follows a constant general rule over the entire period of twenty years. The absence of children and their presence without a number specification diversify the minimum benefits amount. No children, one and two or more children diversify the maximum benefit amount.

A constant scheme over the twenty years defines the benefit duration linked to the contribution record. The duration increases with the contribution record in the last 6 years. In terms of days, the duration ranges between 120 days (from a contribution record of 360 - 539 days) and 720 days (from a contribution record of 2.160 or more days). Whether they are expressed in days or months, these time lengths and their relation with the contribution record are constant over the twenty years.

Two final remarks: The very long period within which to define the contribution requirement for eligibility is connected to its being at the same time the reference for defining the benefit duration. This noted, the relevant benefit duration in Spain appears in line with the length in the European countries considered in this article. As to the benefit amounts, the stability of the Spanish scheme is only interrupted by a stronger reduction of the benefit level to 50% of the reference earnings. This new replacement rate after six months significantly characterizes the Spanish scheme and appears to be aimed at counteracting the negative incentives of the possible long benefit durations.

2.10. Italy

Various and rather different types of unemployment insurance are present in Italy's recent history to provide support for *de facto* unemployment. The focus

[12]"Reference Earnings" is the expression constantly used in all twenty years. Until 2016 "reference earnings" are identified as those corresponding to the average gross earnings over the last 180 days. From 2017 a specification is introduced and the reference earnings "correspond to the average contribution base over the last 180 days".

here is on the (evolving) scheme of unemployment insurance for laid off workers. Let me first note that before the reform in this area of 2013 the OECD tax-benefit model defines the insurance provided to this end as ordinary unemployment benefits. Finally, it is almost useless to premise that Italy's complex framework makes attention to the evolution of the rules particularly useful in this country.

The scheme introduced in December 2000 raises the replacement rate from the 30% to 40% of the average gross earnings over the last three months. A maximum level of benefits per month was set. The maximum duration of benefits, which was six months for people under 50 years of age, is extended to nine months for people aged 50 or more. The eligibility conditions required contributions for at least 52 weeks during the two years preceding the unemployment event. The wide and difficult debate on a profound reform in this matter led to the introduction of temporary relevant changes (not involving the eligibility requirements) from April 2005 to December 2007: now the replacement rate is 50% in the first six months and decreases to 40% in the seventh month, and seven months are the maximum duration for peoples aged under 50. People aged 50 or more benefit from the 40% rate for three additional months and in the tenth month the rate decreases further to 30% (leading the maximum duration for this age group to ten months). Thus, in 2005, an initial provisional scheme of benefits decreasing over the time was introduced. The scheme has been marginally corrected in the following years with the replacement rate rising up to 60% and the maximum duration increasing to 8 and 12 months for, respectively, people aged under 50 and people aged 50 and more. Along these processes different maximum amounts of the benefit are also set.

A new scheme was introduced in 2013: the ASPI scheme (Assicurazione Sociale per l'Impiego), nevertheless maintaining the eligibility requirements unchanged. From this point benefits are 75% of the previous wages if wages are below a certain fixed threshold. For higher levels of wages benefit are increased by 25% of the difference between this level and the fixed threshold. As usual, a maximum amount of benefits is set. As regards the benefit duration, a new age group is considered, that is people aged 55 or more. In 2014, the maximum duration for this age group was set at 14 months. In 2015 the duration was extended to 10 months for people aged under 50 and to 16 months for the new age group of 55 or more. As to the benefit time structure a new rule is adopted: after the first six months the benefit is reduced by 15% and by 30% in the following six months.

A final scheme—NASPI (Nuova Assicurazione per l'Impiego)—was introduced in 2015. The eligibility requirements in force until the introduction of the NASPI scheme change: now these require 13 weeks of contributions in the four years preceding the unemployment state and 30 days of "actual work" in the 12 months preceding the unemployment event. The calculation of the benefit amount is unchanged: 75% of the previous wages if these wages are below a certain fixed threshold, whereas benefit are only increased by 25% of the difference between the higher levels of wages and the fixed threshold. A maximum benefit amount is set. As to the benefit time profile, the new rule is that benefits are reduced by 3% per month from the first day of the fourth month. Thus, a continuous monthly decrease of benefits after a certain limited period of enjoyment of an initial, significant replacement rate is imposed. As to the benefit duration, the general rule is that it is equal to "half the number of weeks for which social contributions were paid in the four years before the start of unemployment"[13], and the maximum duration is therefore 2 years. This scheme remains substantially unchanged until 2020.

A slow, difficult and profound process of introduction of new rules and subsequent adjustments leads to the 2020 UI structure. The long evolution of the system leads to a structure in which the temporal profile of the benefits plays a key role, given the relatively high level of initial benefits and the relatively extended maximum duration of the benefits. The temporal profile of the benefits, its continuous and slow decreasing path, strongly characterizes and differentiates the Italian scheme from the other countries that have adopted benefit reductions.

Finally, note that a form of unemployment assistance was provided only in the years 2015-2017, through an instrument (ASDI Assegno di disoccupazione) aimed at unemployed people who had run out of NASPI support.

3. Comparing the UI Schemes

1) The focus on the eligibility conditions, the benefit amounts, their duration and the changes over the time highlights deep differences in the structure of the ten UI schemes. The order chosen in the brief examination of these schemes has followed the change in the rationale driving them, i.e. in the policy approach pursued in the individual schemes. This order has extensively introduced comparisons and differences between the UI policy approaches. That said, the basic points characterizing these schemes and thus the main references for comparing them should include how to cope with opportunistic behaviors to which UI is exposed, how far to push the generosity of the rules and the weight of equity aspects.

As concerns the historical developments, the path of the UI systems followed by the OECD model over the twenty years 2001-2020 is rather different. A substantial stability of the UI setting emerges in USA (Michigan), UK, Canada, Israel, and to a lesser extent in Japan and Germany. This substantial stability contrasts with significant modifications over the time of the UI rules in the other four countries. Reductions variously applied in the benefit amounts over the time are the more significant change observed in Sweden, France, Spain and Italy. If these

[13]OECD, https://www.oecd.org/social/benefits-and-wages/benefits-and-wages-country-specific-information.htm, Italy 2020, p. 6.

reductions obviously express a certain tightness in the insurance coverage, they appear going towards a more definite design of rules. This seems to be the more interesting aspect in the changes over the twenty years. I will return to this main point in a few moments.

The various compositions of contributions payments, employment records and previous earnings define the (partial) requirements for eligibility. The broad and severe behavioral requirements complete the eligibility conditions, behavioral requirements that have not been considered here. Concerning the aspects examined here, the reference period within which the required conditions (contributions, hours/months worked, previous earnings) have to be satisfied and the temporal extension of these conditions show differences. No uniformity in the length of the reference period and the time extension of the required conditions is observed. The only possible distinction is between countries where the reference period extends up to two years (USA, UK, Canada, Israel, Japan, Sweden) and countries where this period is at least two years (France, Germany, Italy, Spain). Within each group, however, the differences are remarkable. But, despite the general differences, the rules for eligibility in France, Germany, Italy, and Spain exhibit a characteristic: a considerably longer extension of the reference period with respect to the temporal length of the required conditions. To some extent, this characteristic is linked to what can be identified as the 'benefit structure' adopted, that is the elements that constitute the base UI scheme. To this base (which is far from being uniform in the ten countries) I now turn.

Comparing the benefit structures let me mention first the general adoption (with the exclusion of UK) of a maximum amount of benefit with a certain time reference (day, month). Clearly, beside budgetary reasons and equity aspects, also the maximum benefit amount involves choices about the degree of severity of the scheme. Given the component of maximum benefit, two aspects appear to characterize the relatively rigid benefit structure of USA, UK, Canada, Israel and Japan: unique level/levels of benefit of the base UI scheme and benefit provided for a comparatively much shorter period of time. Also note that the length of the reference period within which the eligibility conditions are set is relatively small in these countries. All these aspects place the problem of unemployment insurance in these countries in a short-term perspective. Within this perspective, the focus of all these schemes is counteracting opportunism. However, a few other elements are important and deserve attention. The relatively rigid benefit structure adopted combines with some very interesting differences of the schemes. The differences concern the link in Israel and Japan of the benefit level with the heterogeneous previous levels of wages and the link in Canada of the eligibility requirements and the benefit duration with the current (regional) unemployment rates. The basic rigidity of the UI scheme is combined with important elasticities of the replacement rates in Israel and Japan and of the eligibility conditions and benefit duration in Canada. The consideration of equity aspects in Israel and Japan and of the relevance of the unemployment rates in Canada adds variables for a broader characterization of the UI schemes with respect to its basic rigidity. Thus, a more composite benefit structure results designed in Canada, Israel and Japan with respect to the essential scheme of USA and UK. But a last remark refers just to the USA and the relevance of the well-known forms of Emergency Unemployment Compensations and Extended Benefits that here can be activated. Alongside the rigidity of the benefit structure, these possibilities introduce a (historically) very relevant element of flexibility in USA[14].

The UI scheme in Germany share aspects with both groups of countries. A single level of benefits (differentiated by the presence of dependents) is a common point with the benefit structure of the countries just referred to. The setting of the benefit duration is instead deeply different: it is strictly linked both to the length of the contribution period and the worker age, aspects whose configured combination significantly lengthens the benefit duration and can extend it up to two years.

A common aspect emerges from the benefit structure of Sweden, France, Spain, and Italy: the reduction of the benefit level over time. The processes towards the 2020 structure are differently characterized. Thus, it is interesting to follow how the benefit reductions are inserted within the general characteristics and changes of the benefit structure. The simplest case is Spain. Throughout the twenty years 2001-2020 the maximum benefit duration (only depending on the contribution record) is held constant at two years. But only in 2012 the rule in force from 2001, which stated an initial rate of 70% of the reference earnings for the first six months of benefits and then a reduction to 60%, changed. In 2012, the rate was reduced at the 50% for the remaining period. In France, constant rules about a certain degree of elasticity of the benefit level are combined with frequent changes about the benefit duration, which results variously diversified by the worker age at the end of the contract and the affiliation period[15]. Overall the process moves towards a reduction of the maximum duration. As seen, in the definitive scheme of 2018 the maximum duration is 2 years, which can be extended up to 3 years for workers aged 55 or more. This end point precedes the introduction from 1 November 2019 of a specific reduction of the benefit amount: a benefit level at least equal to a certain amount is set for which the enjoyment from the 183rd day is reduced to 70% for workers aged under 57 years. Thus, a relevant change of the French benefit structure was passed relatively very late, almost at the end of the twenty years. Despite the differences, the cases of Spain and France show an important similarity: the two specific benefit reductions of these countries are introduced in the presence of generous rules already in force on the benefit duration.

In Italy, the gradual process of construction of a UI scheme shows parallel

[14]Note also that such a flexibility is introduced in USA in the face of emergency conditions, whereas in Canada the relevance of different unemployment rates is part of the benefit structure rules.

[15]To give further references, in 2002 the maximum duration reaches 60 months for workers aged 55 and more, in 2005 it is 42 months for workers aged 57 or more and in 2015 it is 36 months for workers aged 50 and more.

elaborations of rules on the benefit amount and on its reduction over time. The exclusive characterization of the final NASPI scheme of 2015 is the adoption of a continuous reduction process of the benefit amount. Benefits decrease at a rate of 3% per month from the first day of the fourth month of benefit enjoyment. Here it is also useful to repeat that the starting benefit level remains at the rate set in 2013, that is 75% of previous earnings. Sweden reduces the benefit level through both reductions in the replacement rate and in the maximum amount of daily benefit. As seen, the initial reduction of the maximum daily benefit after the first 100 days is followed in 2007 by the reduction from 80% to 70% of the replacement rate after the first 200 days, leaving instead constant the maximum daily benefit for all the benefit period. From 2017 the reduction of the replacement rate is applied after the first 100 days to workers aged less than 25 and a new reduction of the maximum daily benefit is introduced after the first 100 days. Even the Swedish adjustment process of the benefit structure shows a specific characteristic. The more severe rules on benefit reduction of 2017 are accompanied by the extension of benefit duration to 450 days or 90 weeks for worker with dependent children.

A few summary considerations: A long process of changes and adjustments leads to the benefit structures in force in 2020 in Spain, France, Italy and Sweden. Beyond the diversities, this process drives a benefit structure that tends to balance the generosity of initial level and duration of benefits with significant benefit reductions over time. Thus, initial benefit levels, their reduction over time and their maximum durations are three essential components of the benefit structure of the four countries. However, the composition of the benefit structure is the only point of convergence over the twenty years between the four European countries. Significant differences remain in the starting levels of benefits and in particular in the benefit durations. The large extensions of the reference period for the eligibility conditions in Spain, Italy, and France are the strict references for the measure of the benefit durations. In Italy the benefit duration is equal to half of the period of contributions paid within the reference period of 4 years. It derives that the range of the benefit durations is between 3 - 4 months and 2 years. In Spain it is set a grid of lengths of contribution payments within the reference period of 6 years and the associated benefit durations for each length. The resulting range of benefit duration is between 120 and 720 days. The rule adopted in France gives a minimum benefit duration of 6 months and a maximum duration of 730 days (two years), which is equal to the reference period set for workers under 53. This maximum duration is extended up to 3 years for workers aged 55 and more, and 3 years is the maximum reference period set for workers aged 53 and more. In conclusion on this point, an apparent, significantly higher generosity characterizes the structure of the benefit duration in France.

On the more general plane, the picture of the four countries over the twenty years highlights new specific choices to counteract opportunism. Benefit reductions have the main role in this direction and in characterizing processes towards a more definite and balanced design of rules. This remark paves the way to further insist on the reading of the contrast between the UI setting in the two groups of countries, that is USA, UK, Canada, Israel, Japan on one side and Sweden, France, Spain, Italy on the other.

Beyond the evenly shared purpose of smoothing consumption in unemployment, a number of individual specificities characterize each of the ten countries considered. The different stories and specificities in tackling the problem of the trade-off between incentive and insurance, however, share a common basic approach within each group of countries. Single benefit levels awarded for a limited time is the basic scheme of the first group whereas benefits reductions and definitely longer maximum benefit durations identify that of the second group. Within each group there are differences, which are even relevant, but do not upset the engineering of the scheme. Level and short duration of benefit are the instruments to counteract opportunism in the first group, a construction that prompts to remark that the scheme is focused on directly counteracting opportunism. Benefit reductions are the essential instrument to counteract opportunism in the second group, an approach that leads to comment the scheme in force in 2020 as focused on trying a balance between generosity and severity. The generosity side here referred to is mainly the long-lasting benefit duration. All this stressed, the different focus of the two sets of schemes requires a further remark on the benefit structures chosen. Single benefit level and benefit duration compose the benefit structure of the first group of countries, whereas benefit duration, initial level of benefit and their reduction over time compose that of the second group of countries. An essential difference concerns the benefit duration within the two base UI schemes and thus within the two benefit structures. Benefit duration results in a constraint within the UI scheme of France, Spain, and Italy, a constraint that prompts the benefit reductions applied. In Sweden benefit duration is a constraint that can be partially eased by the benefit reduction applied in 2017. On the contrary, in USA, UK, Canada, Israel, and Japan benefit durations have the strategic role of counteracting opportunism. This opposite nature of the benefit duration—as a constraint in France, Spain, Italy, Sweden and as a strategic component to counteract opportunism in USA, UK, Canada, Israel, and Japan—deeply differentiates the two benefits structures and underlies the focus to which the base UI schemes of the two groups of countries appears to be addressed.

2) A useful reference to grasp the strong contrast between the UI schemes of the two groups of countries is the calculation by the OECD tax-benefit model of the "net replacement rate in unemployment", NRR[16]. This indicator shows the share of the net income when employed that it is retained upon becoming unemployed. All forms of monetary support as well as tax and social contribution

[16]For the construction of the NNR rate see: https://www.oecd.org/social/benefits-and-wages/OECD-TaxBEN-methodology-and-manual.pdf, Section 5.3.1.

liabilities, for both the in-work and the out-of-work scenarios, are considered as sources of income. Thus the NRR differs from the unemployment benefits replacement rates referred to in the description of the policy rules in the individual countries, since the latter do not include social contributions and taxes in their definition. Table 1 shows the calculations of the NRRs for 2020 in the ten countries after 2, 8, and 12 months. The data concern a single person without children and with previous in-work earnings at a level of 67% of the average wage. These calculations exclude specifically social assistance benefits and housing benefits, exclusions that do not imply a coincidence of the NRRs with the insurance-directed replacement rates. Despite the non-coincidence and differences within each group, the data clearly show the relevant discrepancy between the two groups, a discrepancy linked to the presence/absence of benefit reductions associated with remarkably different benefit durations. The deeply different role of the benefit duration within these UI schemes gives a clear reading key of this relevant discrepancy. Finally, note how the constant NRR over the years differentiates Germany with respect to the other European countries (placing Germany in an intermediate position with respect to the two groups of countries) and remember that in France the rule about the reduction of the benefit level was only introduced in November 2019.

4. Final Remarks

Following the set of UI rules over the long period of twenty years shows significant stabilities and relevant movements. These histories help to better clarify the overall picture of 2020. Certainly, the story does not stop this year, but it is interesting to read that picture as a result of distinct processes.

The characterization of two benefit structures over the years is the main aspect of the period, an aspect that is clearly identifiable beyond the specific, individual

Table 1. Net Replacement Rate—2020.

Country	After 2 months	After 8 months	After 10 months	After 12 months
Canada	63	63	2	2
France	65	65	65	65
Germany	59	59	59	59
Israel	76	0	0	0
Italy	73	66	63	60
Japan	78	78	0	0
Spain	77	53	53	53
Sweden	70	60	60	60
UK	22	22	22	22
USA	55	0	0	0

implementations. In this article, these structures are only followed and underlined as *facts*, without any implication about the optimality of the individual schemes under any assessment line. Naturally, on the empirical side, a huge amount of quantitative analyses has been developed to assess the optimality of many schemes, their important effects, or the consequences of changes adopted or suggested. The attention here on the apparent rationale underlying the elaboration of the UI schemes leads to stress that just in the juxtaposition of the benefit structures, the actual UI schemes remain largely open to analysis. Let me only mention in this respect the important work of Kolsrud, Landais, Nilsson, and Spinnewijn (2018) in developing the theoretical side of the "optimal timing of unemployment benefits" and its empirical application for assessing the Swedish UI scheme in the early 2000s. Clearly, however, the differences underlined in UI settings can raise many questions that are pertinent to different fields of analysis. In partial connection with the empirical analysis, it is useful to underline a specific question that would deserve attention: the relevance, or the irrelevance, of different benefit structures for the issue of a common insurance scheme in a large area, specifically the European area, and in particular the issue of the US unemployment insurance system as a reference for a European unemployment insurance system[17]. The openness of the diversified set of actual UI schemes to further analyses and insights is the first point of my final remarks. Naturally, this openness also includes the hard issue of the possible relations of the diversified UI schemes with diversified aspects and characteristics of the individual labor markets.

The relation between the actual UI schemes and the analytical work in the field of optimal UI policies also raises relevant questions: have there been some inspiration from the theoretical side for the adopted schemes or have these schemes suggested in some way a formalization task to the analytical economy? Or, more generally, what are the relationships between analytical and actual UI schemes? These relations are beyond the scope of this article. Let me, however, briefly remark on a few aspects in this connection. The predominant part of the formalizations on optimal UI policies is focused on two independent issues: the optimal level of UI benefits and the optimal time profile of UI benefits[18]. The optimal benefit level has no particular time dimension within the first issue whereas the preliminary step in the optimal time sequence of benefits, that is the government's commitment to a stated level of discounted expected utility for the worker at time zero[19], is simply a given, which acts as a constraint in the analytical constructions

[17]Within different approaches many works have been developed on these issues. Let me mention the recent analyses in Dolls, Fuest, Neumann, and Peichl (2018), Fischer (2017), O'Leary, Barnow, and Lenaerts (2020). Clearly, these issues raise a large set of questions. The related analyses, though, appear focused on more general aspects and do not address differences in the benefit structures, neither within more general treatments of the problems involved nor within the empirical works.

[18]This sort of gap between the two strands of analysis is extensively reviewed in Potestio (2022). To quote here only early and essential contributions, Chetty (2006) and Hopenhayn and Nicolini (1997) are two basic references in the literature on the formalizations of optimal UI choices within the two strands of analysis.

[19]Let me mention here the appropriate reading of this set level of discounted expected utility provided by Pavoni and Violante (2007). This level, they write, "should be thought of as an exogenous parameter measuring the 'generosity' of the welfare system" (p. 287).

within the second issue. It is very interesting to remark on the specificities of the UI schemes of the ten countries with respect to the analytical models of optimal UI policies. The short durations of single benefit levels characterize in an essential way the UI schemes of the countries of the first group, i.e. USA, UK, Canada, Israel, and Japan. These short durations are a common component to contrast opportunism. Thus, these durations give a strategic time dimension to the adopted UI schemes which results instead completely external with respect to the models focused on the optimal benefit level. As regards the second group, i.e. Sweden, France, Spain, and Italy, more specific differences emerge. The reductions in the benefit levels do not appear to characterize the 2020 UI schemes of the group in a uniform way. The high starting levels of benefits and the designed reductions over time in Sweden and Italy contrast with benefit reductions introduced in France and Spain apparently to compensate for previously adopted long durations of benefits. The common aim of contrasting opportunism through benefit reduction is part of schemes that are differently constructed. The construction of the scheme of Sweden and Italy appears closer to the message emerging from the models on the optimal time profile of UI policy. France and Spain appear more distant from that message just in their preliminary and independent choice of a long duration of benefits.

The aspects just underlined signal different features within the analytical and the political sides of the UI problem and the (open) relevance and complexity of their relations. In more general terms, we can remark that a dichotomy between actual benefit structures joins the dichotomy, on the analytical ground, between formalizations anchored to the optimal level of UI benefits and formalizations anchored to the optimal time profile of the UI policy. Thus, a more general and challenging conclusion is that both these dichotomies and their contact or relations hopefully remain open fields of analysis.

Equity aspects have been the second reference point for my remarks. Equity motivations can have widely contributed to some UI choices. As in particular noted, the application of maximum benefit amounts could also have been affected by equity considerations. The more clear and relevant presence of equity aspects emerges in the UI scheme adopted in Israel and Japan. The large range of benefit levels in dependence on previous earnings levels uniquely characterizes the scheme of these two countries. This very interesting point deeply differentiates the scheme of Israel and Japan from those of all other countries.

Another characteristic of the Israel scheme, linked to the maximum benefit amount, deserves a conclusive note. As seen, single benefit levels and their limited duration constitute the basic structure of this scheme, a structure that Israel shares with the USA, the UK, Canada, and Japan. But Israel introduces a sort of lateral element to this basic structure that is a benefit reduction specifically circumscribed to the maximum benefit amount which is constrained to decrease to 2/3 of its level from the 126th day of enjoyment. Thus, Israel is implementing an extraordinary *de facto* complementarity between a baseline scheme focused on the benefit level and a specific benefit reduction over time. This case too opens to insights into relations and complementarities between the UI components.

Acknowledgements

I wish to thank Edoardo Magalini, Franco Peracchi, and Pietro Reichlin for helpful comments. Usual caveats apply. Thanks are also extended to an anonymous referee for useful comments.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

Asenjo, A., & Pignatti, C. (2019). *Unemployment Insurance Schemes around the World: Evidence and Policy Options*. Research Department Working Paper No. 49, ILO.

Chetty, R. (2006). A General Formula for the Optimal Level of Social Insurance. *Journal of Public Economics, 90,* 1879-1901. https://doi.org/10.1016/j.jpubeco.2006.01.004

Dolls, M., Fuest, C., Neumann, D., & Peichl, A. (2018). An Unemployment Insurance Scheme for the Euro Area? A Comparison of Different Alternatives Using Microdata. *International Tax and Public Finance, 25,* 273-309. https://doi.org/10.1007/s10797-017-9440-9

Fischer, G. (2017). *The US Unemployment Insurance, a Federal-State Partnership: Relevance for Reflections at the European Level*. IZA Policy Paper, No. 129, Institute of Labor Economics (IZA).

Hopenhayn, H. A., & Nicolini, J. P. (1997). Optimal Unemployment Insurance. *The Journal of Political Economy, 105,* 412-438. https://doi.org/10.1086/262078

Kolsrud, J., Landais, C., Nilsson, P., & Spinnewijn, J. (2018). The Optimal Timing of Unemployment Benefits: Theory and Evidence from Sweden. *American Economic Review, 108,* 985-1033. https://doi.org/10.1257/aer.20160816

O'Leary, C. J., Barnow, B. S., & Lenaerts, K. (2020). Lesson from the American Federal-State Unemployment Insurance System for a European Unemployment Benefits System. *International Social Security Review, 73,* 3-34. https://doi.org/10.1111/issr.12226

OECD (2018). Unemployment-Benefit Coverage: Recent Trends and Their Drivers. In *OECD Employment Outlook 2018* (pp. 185-210). OECD Publishing.

OECD (n.d.). The OECD Tax-Benefit Model. https://www.oecd.org/els/soc/OECD-Tax-benefit-model-Overview.pdf

OECD Model (2019). *Country Policy Descriptions for All Available Years*. https://www.oecd.org/social/benefits-and-wages/benefits-and-wages-country-specific-information.htm

OECD. (2020). Unemployment Benefits and Non-Standard Dependent Employment: Striking the Balance between Income Security and Work Incentives. In *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis* (pp. 116-166). OECD Publishing.

Pavoni, N., & Violante, G. L. (2007). Optimal Welfare-to-Work Programs. *The Review of Economic Studies, 74,* 283-318. https://doi.org/10.1111/j.1467-937X.2007.00422.x

Potestio, P. (2022). *Modelling Unemployment Insurance*. Springer. https://doi.org/10.1007/978-3-030-91319-9