# Sustainable and Inclusive Welfare States: Employment and Poverty Among Immigrants and People with Disabilities in Different Welfare State Regimes

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#### Abstract

In this article, we ask to what extent immigrants and people with disabilities are excluded from labor markets and to what extent they are exposed to poverty in different European welfare state regimes. Our starting points lie in the United Nation's and European Union's agendas for sustainable development, in research on welfare regimes, and in the social investment paradigm. We utilize the European Union Statistics on Income and Living Conditions (EU-SILC) to run multilevel random effect models to measure the extent to which there are regime-specific differences in risk of poverty and months out of work. Our results show that within-regime differences are often larger than between-regime differences. The implementation of the social investment paradigm, emphasizing the role of a decent level of income transfers combined with extensive public services, fortifies the fiscal and social sustainability of the welfare state.

Keywords: welfare state regimes, sustainability, decommodification, social investment, immigrants, people with disabilities

#### Introduction

The United Nations' 2030 Agenda for Sustainable Development (UN 2015) provides policy recommendations for measures to combat poverty, fight inequalities, tackle climate change, and ensure that no one is left behind. Similarly, the European Union's initiatives (European Commission 2021a, 2021b) emphasize sustainability and provide toolkits on how to improve the social and labor market inclusion of people who have previously experienced problems with integration into society in general and into the labor market in particular. According to the

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principles enshrined in the European Disability Strategy 2010–2020, the European Pillar of Social Rights, and the European Semester, the EU promotes initiatives designed to help vulnerable groups adapt to the labor market.

There are two main motivations behind these initiatives pertaining to two aspects of society's sustainability. The first motivation is linked to our conceptualization of the tasks of the welfare state. Whereas the decommodification paradigm that dominated the discussion in the 1990s paid attention to compensation paid to people, the main focus of the social investment paradigm is the accumulation of human capital. The concept of decommodification was introduced by Gosta Esping-Andersen in The Three Worlds of Welfare Capitalism (1990). This book is one of the most influential welfare state studies, with over 40,000 citations. Esping-Andersen argued that national social policies cluster in a certain way. He distinguished three clusters called welfare state regimes - namely, social democratic, conservative, and liberal regimes. The first regime pertains to the Nordic countries, the second to Central European countries, and the last to the Anglophone nations. Later, Esping-Andersen's trichotomy was complemented by two new European welfare regimes, the Southern and Central East European clusters (see Beland, Morgan, Obinger and Pierson 2021). The decommodification paradigm was geared toward comparing the comprehensiveness of compensatory policies – i.e., counting and analyzing the levels of income loss compensation national social policy programs guarantee to people in cases of such social risks as work accidents, old age, sickness, and unemployment. Gradually, the focus has shifted from a reactive compensatory welfare state to a more proactive welfare state that, in addition to offering decent safety nets, invests in policies that will accumulate human capital (Hemerijck 2013; Morel, Palme and Palier 2011).

The second motivation is more mundane. It has its roots in the demographic forecast of the population development and the challenges to the sustainability of the welfare state caused by population aging and low fertility rates. In most countries, large generations are followed by smaller generations, and thus there will be more pressure in terms of balancing welfare transfers between generations and between the active and passive layers in labor market (OECD 2019). This fiscal imbalance between welfare spending and revenue is often called the sustainability gap (European Commission 2012). For the tax base required to pay for generous welfare states, employment rates must be high (Kenworthy 2020).

In this paper, our focus is on two groups that have been on the outer circles of the labor market and whose employment rates have been historically low: immigrants and people with disabilities. We analyze how well European welfare states have been able to include these two groups in the labor market, and how well these groups are protected against poverty and hence against social exclusion. Our theoretical starting points are embedded in the social investment paradigm, emphasizing social investment instead of compensation. In practice, this means that countries need to emphasize social services (benefits in kind) rather than compensatory income transfers (benefits in cash) in their social policies in order to be a proper social investment welfare state. Our hypothesis is that countries that extensively provide social services are also more inclusive with regard to the employment of our two groups of interest.

We follow in Esping-Andersen's footsteps and ask whether regime classifications have any power in explaining differences in labor market outcomes and poverty rates among these groups. As a rule, the decommodification paradigm depicts the Scandinavian/Nordic model as

superior to other regimes. Our question is whether Nordic countries perform better than the other welfare regimes with regard to groups on the margins of society.

The remainder of this article is structured as follows: The next section provides an overview of our theoretical starting points. We then specify the research questions. In the subsequent section, we give a detailed description of the database, the variables constructed, and the methods used. Our results are presented in the penultimate section. Finally, we summarize our findings and discuss their bearing on the sustainability of the welfare state.

# **Theoretical Starting Points**

## Sustainability of the welfare state

At the European level, there is an abundance of initiatives to help vulnerable groups adapt to the society and the labor market. For example, the European Disability Strategy aims to empower persons with disabilities to enjoy their full rights and participate in society on an equal basis (European Commission 2021b). Similarly, there is a strong emphasis on equal opportunities in the European Pillar of Social Rights. In particular, the European Commission (2021a) demands that equal opportunities for underrepresented groups be fostered. The target is a Europe that is environmentally, economically, and socially sustainable and that provides opportunities for all.

The starting point in these declarations reflects the capability approach developed by Sen (e.g., 1992, 1999) and Nussbaum (2011), according to which people must be able to make rational and well-informed choices in their lives. A prerequisite for this is that people have a set of opportunities and resources that they may or may not exercise in their actions. The task for the government is to provide a sufficient platform for people to exercise their full capability and participate in life as is customary in their society (Nussbaum 2011, cf. Townsend 1979). In market economies, money opens up possibilities and sets severe limitations on the options people have at their disposal. For most people, paid labor is the main source of income. However, employment is much more than simply obtaining money. Employment also promotes the grand ideas of the capability approach. Through employment, we obtain an identity, social belonging, and participation in society; this is based on the classic Marienthal study (Jahoda, Lazarsfeld and Zeisel 1971). Thus, employment is key to social inclusion and inclusion fortifies the sustainability of the welfare state (e.g., Hughes, Warhurst and Duarte 2021)

However, there are situations in which people, for various reasons (e.g., sickness, disability, old age, gender, ethnicity, etc.), are excluded from employment and cannot provide for themselves. For these groups, the essential question is whether the national social security system adequately safeguards them against poverty. The functioning of the welfare state has repercussions for the social sustainability of our societies. Social sustainability includes the distributional aspects of the social policy system. The concept pertains to various social aspects of welfare states, such as social equity, social capital, social security, labor rights, and people's attitudes toward fairness and their life changes (Ferrera and Rhodes 2000; Hemerijck 2013, 2017; Polomarkakis 2019; European Commission 2021a). If income disparities are too large and the

poverty-stricken layers of society are too wide, social sustainability may be in danger. Furthermore, if poverty, unemployment, and welfare dependency are high, for example among immigrants, the situation can cause welfare backlash: the native population may feel that they are obliged to pay benefits to immigrants, which in turn fortifies the distinction between us and them (Reeskens and van Oorschot 2006; Hellwing and Sinno 2016; Laenen, Rossetti and van Oorschot, 2019). These ideas are the moral foundations of the UN and EU initiatives on socially sustainable development.

The other underpinnings of the EU declarations are more mundane and are related to the economic sustainability of the welfare state. The concept of sustainability deficit, or the fiscal gap in the welfare state, pertains to its ability to maintain its current social policy programs, spending levels, tax, and other policies for decades to come (Lee and Mason 2011, 2017; European Commission 2012; Neaime 2015; OECD 2019; Kangas et al. 2020). Due to population aging, the balance in welfare transfers is harder to maintain (OECD 2019, 2021a). Therefore, the level of employment is of decisive importance for combatting the deficit (Lee and Mason 2011, 2017; Kangas, Palme and Kainu 2020). The natural population increase – namely, births minus deaths – is not sufficient to solve the sustainability problem. In most European countries, the population increase is dependent on net immigration. Immigration may be a necessary but not sufficient condition for improving the sustainability deficit (Österman, Palme, and Ruhs 2019). Immigrants must also find appropriate employment. To fortify economic sustainability, employment rates must be high among the native population, and among males, females, immigrants, and other people who often have weak connections to labor markets and are too often wholly excluded from paid labor. Therefore, it is necessary also to examine the labor market inclusion of groups that have often been excluded from international comparisons. In this study, we are interested in two such groups: people with disabilities and immigrants. Both of these groups tend to have lower employment rates and a higher incidence of poverty than the disability-free and native population (Carmel, Cerami, and Papadopoulos 2011; OECD 2021b; Eurostat 2022).

#### Welfare state regimes: a paradigmatic move from decommodification to social investments

In his seminal book, Esping-Andersen (1990) argued that there are qualitative and quantitative differences between groups of countries. On the basis of these differences, he discerned the (in)famous trio: the social democratic, the conservative and the liberal welfare states. Later, the Esping-Andersen trio was complemented by several new welfare regimes (e.g., Gough 2013, 2014; Mkandawire 2016). In the European case, such complementing models include the Southern European/Mediterranean model (Ferrera 2021) and the Central East European model, consisting of previous socialist countries and their offspring (Kuitto 2016).

Esping-Andersen also introduced the concept of decommodification, meaning the degree to which national social policy programs can liberate employees from the domination of market forces. Mimicking Kuhn's (1970 [1962]) ideas on scientific revolutions and scientific paradigms, we argue that in the early 1990s, welfare state studies revolved around decommodification and the qualitative and quantitative aspects of the welfare state attached to it. The scientific focus was on analyses of the coverage and generosity of social policy programs – that is, who gets what, how much, and on what terms (e.g., Korpi 1989; Palme 1990; Hicks and Misra 1993;

Hicks, Misra and Nah Ng 1995). According to Kuhn, one aspect of the scientific paradigm is shared examples. In the Esping-Andersen paradigm, the example was the Scandinavian model that, in relation to the gross national product (GDP), had the highest level of decommodification, i.e., the largest welfare budgets, the most generous welfare provisions, the best outcomes in terms of high labor force participation rates among men and women, and the lowest incidence of poverty and income inequality.

Gradually, a paradigmatic shift occurred and the decommodification approach was slowly replaced by the social investment paradigm (Morel et al. 2011; Hemerijck 2013, 2015, 2017; Kangas, Palme and Kainu 2017). The paradigmatic change is also mirrored in the official statements of the European Commission (e.g., 2015). Instead of seeing the welfare state as a compensatory machine that merely compensates for the occurrence of social risks by more or less lavish monetary transfers, the investment paradigm emphasizes the role of welfare institutions in preventing the risks from materializing and in supporting people's coping capacities. The focus has shifted from compensation to investment, prevention, and building human capital in the Senian and Nussbaumian sense. Consequently, the role of versatile public services (benefits in kind) was found to be more important in capacity-building and combating social exclusion (see, e.g., Morel et al., 2011; Hemerijck 2013; Kvist 2015; Nygård, Lindberg, Nyqvist and Härtull 2019) than the relative role of income transfers. Consequently, the role of social services (benefits in kind) was found to be more important than the relative role of social transfers or the size of welfare budgets (see, e.g., Nygård et al. 2019).

In the wake of the investment paradigm, the focus of cross-national comparisons has shifted toward employment. Keeping in mind Eurostat's (2020) gloomy demographic forecasts for most European nations, there is a strong inter-relatedness between the social investment welfare state and the sustainability of the welfare state. In this study, our starting point is the social investment paradigm. Our argument is that in the era of population aging, in order to be economically and socially sustainable, the welfare state and its labor market must be inclusive of all population categories.

There is an abundance of analyses on gendered impacts of the welfare state. It has been convincingly shown that in line with the social investment paradigm, social services help reconciliation between family and working life. In particular, services help women enter the labor market, and it is argued that welfare states geared toward services are more women-friendly than the traditional income transfer-heavy welfare states (Hernes 1987; Ellingsæter and Leira 2006; Ferrarini 2006; Prince Cooke 2011; Daly 2021). Whereas the gender dimension of the welfare state and the regime approach has been extensively studied, there is much less research on the two groups that this article focusses on (however, for employment among people with disability, see, e.g., European Commission 1998; Houtenville and Kalargyrou 2015; Oh 2018; regarding immigrants, see Carmel et al. 2011; Warfa, Curtis, Watters, Carswell, Ingleby and Bhui 2012; Ryndyk 2020).

As regards immigrants and people with disabilities, there is a structural mismatch between the skills people have and requirements of the labor market. The challenge is to implement effective reforms in education and training policies to improve the situation and to better include these groups in employment and protect them against the risk of poverty. According to the social investment paradigm, we can expect labor market exclusion and poverty rates to be lower in welfare regimes that have adopted the social investment approach. In our subsequent analyses, we will utilize the expanded version of the regime approach (see below) to determine to what extent, if any, it is valid regarding the vulnerable groups in question. As previously mentioned, in the decommodification paradigm, the Scandinavian model was found to be superior to other welfare state regimes. However, according to the labor market insider-outsider discourse, Interests of labor market insiders and outsiders may be radically different. Thus, countries that provide good benefits for labor market insiders (e.g. the Nordic ones) do not necessarily provide adequate benefits for labor market outsiders (Rueda 2007, 2015).

#### **Research Questions**

Relying on Esping-Andersen's regime approach, we use the Nordic cluster of countries (Denmark, Finland, Iceland, Norway, and Sweden), the conservative Central European cluster (Austria, Belgium, France, Germany, Luxembourg, the Netherlands, and Switzerland), and the liberal regime (consisting of Ireland and the UK). Furthermore, we group countries into two additional welfare state regimes: Southern European (Mediterranean countries: Greece, Italy, Malta, Portugal, and Spain) and Central East European clusters (Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia) (for classifications, see Beland et al. 2021).

In the first part of our empirical analysis, our research question is as follows:

• R1. To what extent are the welfare regimes based on the decommodification para digm linked to labor market outcomes?

Public social spending is perhaps the most frequently used indicator of welfare state commitments (e.g., Castles 2004). Decomposing spending data into smaller items enables a more reliable evaluation of the impacts of sub-programs of public spending (education, active labor market policies, lifelong learning, etc.). Due to limited space, we narrow it down to spending on services (benefits in kind). Our second research question is as follows:

• R2. What is the importance of benefits in kind in enabling labor force participation among immigrants and people with disabilities?

An inclusive welfare state should not only guarantee employment possibilities but also provide protection against poverty and, hence, against social exclusion. Thus, for social sustainability, it is important to determine the prevalence of poverty in our societies. Cross-sectional poverty and its determinants serve as proxies for the more profound question regarding the openness of societies (e.g., Corack 2013; OECD 2018). Thus, our third research question is as follows:

• R3. What are the relative roles of welfare state regimes, benefits in kind, and individual-level characteristics in explaining cross-national differences in poverty among immigrants and people with disabilities?

#### **Data and Methods**

We used the EU-SILC database, which covers 26 countries. The EU-SILC is a cross-sectional and longitudinal sample survey coordinated by Eurostat and based on data from EU member states. We used cross-sectional data containing information on income, poverty, social exclusion, and other living conditions. We limited our analyses to the time period 2009 to 2018 in order to include imputed values for every country. For the purposes of this study, the analyses were limited to the population aged 20-64 years. We did not utilize longitudinal data since they do not include the variables needed in our models. The data covered the period from 2003 to 2019. Our data comprised approximately 310,000 individuals living in 165,000 households (for descriptive statistic, see Appendix Table). The unit used in our analysis is the individual.

### Sample group and control group

We selected the two interest groups using two variables: In the case of the immigrant status, we used the variable PB210 which distinguishes between native citizens and those from either within or outside the EU. To select the right data on immigration, we omitted within-EU immigration and local citizens. Thus, all immigrants in our analysis belong to those whose country of origin outside the EU.

Regarding disability status, we used the variable PH030, which contains information on limitations in activities people usually do because of health problems for at least the past six months. The variable measures the presence of long-standing limitations and is defined by the respondent's self-assessment of any ongoing physical or mental health problem, illness, or disability. The possible answers are "Yes, strongly limited", "Yes, limited", and "No, not limited". We selected our data on the disability group based on the answers "Yes, strongly limited" and "Yes, limited", in accordance with the European Health and Social Integration Survey (EHSIS) and European Union regulation No 317/2010 on the disability status.

As a reference, the control group consists of all individuals who are not part of the immigrant or disability group, thus representing the average population.

#### Dependent variables

To measure social exclusion in the EU context, both being at risk of poverty (AROP) and months out of work are appropriate measures in relation to the EU-level targets expressed in the European Pillar of Social Rights. An alternative poverty measure to the AROP had been being at risk of poverty and social exclusion (AROPE). However, one dimension of the AROPE measure is work intensity. Therefore, to avoid conceptual overlapping between the poverty and employment variables, we used the AROP. To calculate the AROP, we used the EU-SILC household dataset variable HY020, which contains the households' equivalized disposable income. We created a binary variable to measure the AROP status. Households whose income is less than 60 percent of the median national disposable income (the poverty threshold) were assigned a value of 1 (poor), while households whose income was higher than 60 percent of the median disposable income were coded as 0 (not poor). This binary variable was used in the linear probability model, which evaluates the predicted probability of being AROP.

For our second dependent variable, we used the variables PL080 and PL086 from the EU-SILC personal information dataset. PL080 contains months of unemployment as a continuous variable, and PL086 includes months out of work due to disability or severe health limitations. We combined these variables to capture months out of work, as people with health problems can be categorized as disabled (and receiving disability pensions) instead of being classified as unemployed. We used this combined variable in the linear regression models to estimate the predicted months out of work for our target groups.

## Independent variables

We used several control variables from the EU-SILC datasets and two imputed country-level variables. We controlled for age, gender, welfare state regime, educational attainment, and the year of observation.

Demographic variables (age, gender, education) control for life course events and capabilities. Age is a continuous variable, spanning from 20 to 64-year-olds, excluding those in retirement. Gender is a binary variable. Education is important for immigrants and people with disabilities as it is a driver for inclusion and protects from unemployment. Education is evaluated according to the International Standard Classification of Education (ISCED), classified as the highest level of education. We modified the classification by combining the pre-primary education and primary education groups, forming a new merged group of primary education or below. Moreover, we merged the second stage of tertiary education with the first stage of tertiary education, resulting in the first stage of tertiary education or above" variable. The reason for the reclassification was simply the small number of observations in the two lowest and two highest education groups. The imputed variable is benefits in kind as a percentage of the GDP. The data are derived from the Eurostat database SPR\_EXP\_FTO.

#### Methods

We used multilevel random effect models to measure the extent to which there are region-specific differences in the AROP and in months out of work before and after adjustments among sample groups. We ran models separately for the total population, for immigrants, and for people with disabilities, in which the observations are clustered according to countries and individuals. Compared to the typical regression analysis of clustered data, random-effects regression models do not assume that each observation is independent but assume that data within clusters are dependent to some degree. Multilevel modeling ensures that we obtain correct coefficients that account for the clustering in the data (see Clarke et al. 2010). Here, using country as the level, we can address different sources of variation among countries to analyze AROP and unemployment among individuals using random coefficients. Thus, treating the country as a random effect will allow us to incorporate the variability in the country effect. We controlled for regime, sex, education, benefits in kind, measurement year, and age. The model we estimated can be expressed as follows:

$$Y = \beta_0 + \beta X_{cit} + \beta Z_{cit} + \tau_c + \mu_{ci} + \varepsilon_{cit}$$

Y denotes AROP and months out of work, which are the dependent variables,  $\beta_0$  is an overall intercept, and  $\beta X_{cit}$  is the age of the individuals that is adjusted for in all the models.  $Z_{cit}$  describes the observed country and individual characteristics for each independent variable; the residual  $\tau_c$  reflects differences owing to unobserved country-level heterogeneity, which does not vary between individuals of the same country.  $\mu_{ci}$  refers to unobserved individual-level heterogeneity, which is constant for each individual, and  $\epsilon_{cit}$  refers to the residual variance within individuals.

For our first and second analysis, we formed a dependent variable, months out of work', as a continuous variable with a minimum value of 0 and a maximum value of 12. Thus, our models are as follows:

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Months out of work model 1: Year + Gender + Age + Education + Regime
Months out of work model 2: Year + Gender + Age + Education + Regime + Benefits in Kind
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In our second set of analyses, we measured the probability of AROP. As the dependent variable is a dummy variable, results are to be interpreted as predicted probability of AROP, where a 0.1 change in the estimate equals a 10 percent unit change (see Mood 2010). We tested the distribution in the AROP variable for unbounded predicted probabilities (a share of 1 being 21% and 0 being 78%), as models can overestimate probabilities in highly skewed distribution (when the ratio is 10% to 90%). The first model contains demographic variables, time, and regime. In the second model, we added the benefits-in-kind variable. We ran models 1 and 2 individually for the control group, for immigrants, and for people with disabilities as follows:

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AROP model 1: Year + Gender + Age + Education + Regime + Months Out of Work
AROP model 2: Year + Gender + Age + Education + Regime + Months Out of Work + Benefits
in Kind
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Finally, Figure 1 visually presents the results of the random effects regression in model 2 as predicted probability in AROP and linear prediction in months out of work. We used marginal effects, where the prediction p function is  $\exp(y)/\exp(y) + 1$ . The figure depicts the interaction year\*regime to capture long-term changes in AROP and out-of-work status.

#### Results

We started our multivariate analyses by examining the determinants of the labor market status (Table 1). The coefficient indicates the direction and magnitude of the change in the dependent variable – namely, the number of months out of the labor market. If we concentrate on the individual characteristics, we find some constant and statistically significant patterns in all the models. Education protects against labor market exclusion; women tend to have shorter absence times than men; and age is negatively associated with these absences. As regards the welfare state regime, in most cases coefficients are not significant, indicating that there are no differences between the Nordic and the other regimes.

Table 1. Multilevel random effects models of months out of work by population, immigrant status, and people with disabilities

Months out of work

	Months out of work						
	Population	l	Immigrants	S	People with disabilities		
Year	0.0175***	0.0159***	0.0176***	0.0151***	0.0390***	0.0390***	
	(0.001)	(0.001	(0.003)	(0.003)	(0.002)	(0.002)	
Regimes							
Nordic regime	(0)	(0)	(0)	(0) (0)		(0)	
Central European	-0.161	-0.438	-0.227	-0.652	-0.652	-0.664	
	(0.237)	(0.240)	(0.325)	(0.340)	(0.678)	(0.689)	
Liberal regime	0.118	-0.200	-0.441	-0.932	-0.603	-0.618	
-	(0.339)	(0.343)	(0.464)	(0.483)	(0.968)	(0.984)	
Southern European	0.408	-0.173	0.0447	-0.843*	-1.029	-1.055	
_	(0.245)	(0.250)	(0.336)	(0.371)	(0.701)	(0.718)	
Central East Euro-	$0.544^{*}$	-0.0943	-0.125	-1.093**	-0.0657	-0.0937	
pean							
_	(0.215)	(0.220)	(0.300)	(0.342)	(0.616)	(0.635)	
Education							
Primary education	(0)	(0)	(0)	(0)	(0)	(0)	
· <=							
Lower secondary	-0.147***	-0.152***	-0.274***	-0.272***	-0.231***	-0.231***	
	(0.010)	(0.010)	(0.036)	(0.036)	(0.024)	(0.0240)	
Upper secondary	-0.923***	-0.928***	-0.674***	-0.674***	-1.382***	-1.383***	
	(0.009)	(0.009)	(0.034)	(0.034)	(0.022)	(0.0223)	
Post-secondary	-0.921***	-0.926***	-0.858***	-0.859***	-1.857***	-1.857***	
	(0.013)	(0.013)	(0.059)	(0.059)	(0.040)	(0.0401)	
Tertiary >=	-1.362***	-1.367***	-1.272***	-1.271***	-2.696***	-2.696***	
	(0.009)	(0.009)	(0.035)	(0.035)	(0.025)	(0.0248)	
Age	-0.0161***	-0.0162***	-0.000004	-0.0001	-0.0178***	-0.0178***	
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	
Women	-0.0604***	-0.0604***	-0.245***	-0.246***	-0.691***	-0.691***	
	(0.004)	(0.004)	(0.018)	(0.018)	(0.013)	(0.013)	
Benefits in kind		-0.100***		-0.152***		-0.00441	
		(0.005)		(0.023)		(0.018)	
Constant	-32.70***	-28.31***	-32.41***	-25.54***	-71.94***	-71.78***	
	(1.349)	(1.367)	(6.444)	(6.529)	(4.495)	(4.546)	
N	2,826,739	2,826,739	221,105	221,105	615,047	615,047	

Standard errors in parentheses

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

The results from our multilevel random effects models of predicted probability of AROP are presented in Table 2. Of the individual-level variables, age and higher-level educational attainment significantly decrease the probability of being poor whereas the AROP rates are higher among women, be they immigrants or people with disabilities. When running models for Table 2, we included time out of work as the individual-level independent variable. Not surprisingly, this variable is a significant determinant of higher levels of AROP rates in all groups. As in Table 1, in all our sub-groups, in-kind spending on services significantly reduces the risk of poverty.

Table 2. Multilevel random effects models of predicted probability of those at risk of poverty by population, immigrant status, and people with disabilities

	AROP							
	Popi	ılation	Immi	grants	People with disabili- ties			
Year	0.00110***	$0.00104^{***}$	0.00309***	0.00299***	0.00234***	0.00223***		
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		
Regimes								
Nordic regime	0	0	0	0	0	0		
Central European	0.00215	-0.00849	0.0125	-0.00429	-0.0588**	-0.0808***		
	(0.013)	(0.013)	(0.027)	(0.027)	(0.020)	(0.021)		
Liberal regime	0.00624	-0.00595	-0.0173	-0.0366	-0.0138	-0.0394		
	(0.018)	(0.0180)	(0.038)	(0.038)	(0.029)	(0.030)		
Southern European	-0.0221	-0.0443***	0.0449	0.0100	-0.123***	-0.169***		
	(0.013)	(0.013)	(0.028)	(0.030)	(0.021)	(0.023)		
Central East Euro-	0.00464	-0.0198	-0.00484	-0.0427	-0.0653***	-0.116***		
pean								
	(0.012)	(0.012)	(0.025)	(0.029)	(0.018)	(0.021)		
Education								
Primary education	0	0	0	0	0	0		
<=								
Lower secondary	-0.0754***	-0.0756***	-0.0522***	-0.0521***	-0.0514***	$-0.0517^{***}$		
	(0.001)	(0.001)	(0.004)	(0.004)	(0.002)	(0.002)		
Upper secondary	$-0.147^{***}$	-0.148***	-0.110***	-0.110***	-0.132***	-0.132***		
	(0.001)	(0.001)	(0.004)	(0.004)	(0.002)	(0.002)		
Post-secondary	-0.172***	-0.172***	-0.126***	-0.126***	-0.162***	-0.162***		
	(0.002)	(0.002)	(0.006)	(0.006)	(0.004)	(0.004)		
Tertiary >=	-0.209***	-0.209***	-0.172***	-0.172***	-0.220***	-0.220***		
	(0.001)	(0.001)	(0.004)	(0.004)	(0.002)	(0.002)		
Age	$0.00038^{***}$	$0.00038^{***}$	$0.00062^{***}$	$0.00062^{***}$	0.00236***	$0.00235^{***}$		
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		
Women	0.0213***	0.0213***	$0.0188^{***}$	$0.0188^{***}$	0.0305***	0.0305***		
	(0.000)	(0.000)	(0.002)	(0.002)	(0.001)	(0.001)		
Months of out of work	0.0209***	0.0209***	0.0206***	0.0206***	0.0185***	0.0185***		

Benefits in kind	(0.000)	(0.000) -0.00383***	(0.000)	(0.000) -0.00596*	(0.000)	(0.000) -0.00805***
		(0.001)		(0.002)		(0.002)
Constant	-1.992***	-1.824***	-5.963***	-5.693***	-4.457***	-4.149***
	(0.146)	(0.148)	(0.668)	(0.676)	(0.398)	(0.402)
N	2,826,739	2,826,739	221,105	221,105	615,047	615,047

Standard errors in parentheses

We also ran separate analyses (not presented here due to space considerations) where we replaced benefits in kind with the total social spending (pertaining to the decommodification paradigm) in our models. In contrast to benefits in kind, total spending was positively associated with labor market exclusion, indicating the compensatory nature of income transfers – i.e., in countries where various structural needs (due to unemployment, sickness absence, age composition of the population, etc.) are high, compensatory social spending tends to be high as well (for a fuller discussion, see Kangas and Palme 2007). The situation is different if we look at the AROP rates: High social spending levels are associated with lower poverty rates. While a compensatory social policy alleviates poverty, it may not be as effective as an investment policy to enhance employment.

We also separately analyzed the explanatory power of the welfare regime by using regime as the only independent variable in the models. The results show that the welfare regime as such is not a significant determinant in terms of labor market exclusion or the AROP rate. The same verdict is decided by our summative Figure 1, based on the models in Tables 1 and 2. The figure illustrates interactions between the models and the years of observation by welfare state regime. The upper panels on AROP rates do not show any significant interactions with the welfare regime type. The lower panels are somewhat surprising compared to the results of most previous studies. As can be seen, the labor market status among immigrants and the total population shows widening gaps between regimes from 2009 to 2014/2015, after which a slight convergence occurs. Similarly, after 2012, we can observe converging trends among people with disabilities.

<sup>\*</sup> *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001

AROP People with disabilities Immigrants Population 9. ,9 .9 ,8 Predicted at risk of poverty ,8 ,8 ,7 ,7 ,7 ,6 ,6 ,6 ,5 ,5 ,5 ,4 ,4 ,3 ,3 ,2 ,2 ,2 ,1 Months out of work People with disabilities Population Immigrants Predicted months out of work 3 Central East-European Nordic countries Liberal regime Southern-European Central European

Figure 1. Interactions between year of observation and regime, marginal effects on random effects model

#### **Conclusion**

Our starting points were derived from the UN and EU agendas for sustainable development. In these documents, policy measures for sustainable development include actions to combat poverty and ensure that no one is left behind. In particular, strong policy recommendations deal with improving the social and labor market inclusion of people who have previously been in the outer circles of the labor market and who therefore have had problems integrating into society. Therefore, we were specifically interested in how immigrants – who will be much larger part of the population in Western societies in the future – and people with disabilities are included in or excluded from the labor market.

We discussed two forms of morals underpinning the UN and EU initiatives. The first is linked to the paradigmatic change in welfare state research from a compensatory or decommodifying paradigm toward social investment policies interested in promoting and accumulating human capital instead of looking at the levels of social spending and calculating generosity levels in compensation paid to individuals confronted with various social risks.

The second moral underpinning deals with aging population challenging the financial bases of our welfare states. The balancing of intergenerational transfers becomes increasingly difficult when future generations are smaller than previous ones. Furthermore, the increased longevity

increases spending on age-related welfare items. All advanced countries and most developing economies are faced with the problems of greying populations; some will face the problem sooner and others later, but the problem will be common (OECD 2019). To be economically sustainable, transfers between generations must be balanced. If we look at the sustainability deficit from a lifecycle perspective, the role of employment becomes essential for combatting the deficit.

The social investment paradigm attempts to do justice to both of these moral foundations. The ultimate goals of the investment approach are to guarantee a decent livelihood through comprehensive safety nets and to promote possibilities for higher employment through an extensive bundle of services – i.e., investments in human capital accumulation.

Our first research question was related to the old decommodification paradigm. We asked how well the welfare state regime paradigm, developed to describe social rights guaranteed to the main population groups, explains differences in the social inclusion of immigrants and people with disabilities (R1). We were also interested to see whether the renowned Scandinavian/Nordic welfare state model performs better regarding more marginal labor market groups than the other welfare state regimes. As Table 3 shows, the impact of the regime is insignificant in most cases and individual and spending-related variables are more important (R3). Often, within-regime differences are larger than between-regime differences. For example, whereas in Sweden the poverty rate among immigrants is one of the highest in Europe (close to 50%), in Iceland it is one of the lowest (close to 10%). Regimes are not homogeneous entities, and they perhaps conceal more than they reveal.

Table 3. Descriptive statistics

	Population		Immigrants		People with disabilities			
	Mean	SD.	Mean	SD.	Mean	SD.	Min	Max
Dependent varialbes								
AROP (60% <p50)< td=""><td>0,176</td><td>0,380</td><td>0,271</td><td>0,445</td><td>0,283</td><td>0,450</td><td>0</td><td>1</td></p50)<>	0,176	0,380	0,271	0,445	0,283	0,450	0	1
Months out of work	1,473	3,704	2,003	4,200	3,042	5,038	0	12
Independent variables								
Esping-Andersen's regimes								
Nordic countries	0,083		0,095		0,07		0	1
Central European	0,284		0,277		0,256		0	1
Liberal regime	0,049		0,053		0,047		0	1
Southern-European	0,245		0,278		0,226		0	1
Central East-European	0,339		0,297		0,394		0	1
<b>Education (ISCED)</b>								
Primary education or lower	0,099		0,090		0,125		0	1
Lower secondary education	0,203		0,201		0,201		0	1
(Upper) secondary education	0,390		0,401		0,455		0	1
Post-secondary education	0,035		0,033		0,034		0	1
Tertiary education or higher	0,273		0,274		0,183		0	1

	1						1	
Age	49,04	15,34	44,147	11,988	50,583	11,493	20	64
Gender (ref. men)	1,515		0, 552		0,553		1	2
Benefits in kind (% of GDP)	7,753	2,547	7,827	2,502	7,487	2,497	3,5	14,9
N	3624139		221105		615049			

Regarding our second research question (R2) on the role of social spending, the results are quite clear. In most cases, benefits in kind are negatively and significantly linked to labour market exclusion and the risk of poverty. Whereas the total spending level is positively associated with labor market exclusion, it is negatively associated with poverty rate. The result is logical: More people without employment generate the need for more social transfers, whereas social transfers reduce the risk of poverty.

In sum, our results support the social investment paradigm. Decent social protection – i.e., compensation of social risks – protects people against poverty. Versatile services open up possibilities for participating in employment, which, in turn, reduces the risk of poverty and effectively combats the fiscal sustainability gap of the welfare state. Furthermore, higher employment levels among those in the outer circles of the labor market contribute to the legitimacy and so fortify the social sustainability of the welfare state.

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