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Social Transfers and Income Inequality in Turkey: How Informative Is the Survey of Income and Living Conditions?

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Abstract

The main purpose of this paper is to draw attention to the difficulties in determining the extent to which social transfers have an impact on income inequality in Turkey. Given the socio-economic and political importance of the issue, an examination of the redistributive impact of pensions and socialassistance programs in Turkey could indeed be an enlightening exercise. Unfortunately, some data inadequacies limit our ability to provide a reliable answer to the research question. The currently available micro data set drawn from the Survey of Income and Living Conditions (SILC) identifies the amounts of various types of income received by individuals or-in some cases-households, and we find that social assistance and disability benefits do alleviate income inequality. However, the actual redistributive effect of what is generally agreed upon as "social assistance" in the Turkish context is probably quite larger than our findings suggest. The reason is that certain types of social benefits are lumped together in the SILC with other income types, while others-including health-insurance premiums paid by the state on behalf of poor households-are not recorded at all. The redistributive impact of pension payments and unemployment benefits does not appear to be very large, since especially the latter are received mainly by individuals who are outside the lower end of the income distribution.

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1. Introduction

Even though income inequality in Turkey is still quite high according to developed-country standards, a sizable improvement in the distribution of income has taken place since 2002, when the currently ruling Justice and Development Party (*Adalet ve Kalkuma Partisi*, AKP) first came to power. This change, which has been cited as a prime factor in the political stability seen over the period, resulted in a reduction in the Gini coefficient, from 0.44 in 2001 to 0.40 in 2010.¹ In addition to high economic growth—much of which occurred before the global crisis of 2008—the AKP arguably owes its long-lasting electoral success to the extensive social-security and assistance programs that have brought a higher standard of living to a significant portion of Turkish low-income families.

The current study has two main purposes. One is to carry out descriptive analyses to determine the extent to which social transfers (i.e., pension payments, unemployment benefits, and social assistance to poor households) have an impact on income inequality in Turkey. The other is to draw attention to the difficulty in achieving this goal due to data limitations. The survey data we work with allow us to carry out this research by identifying the amounts of various types of income received by households. The availability of details on labor income and pension payments at the individual level also allows us to distinguish between the incomes of male and female household members, which makes it possible to examine some gendered aspects of the research question. Thus, the examination of the distributional impact of pensions and social-assistance programs in Turkey promises to be an interesting exercise that will provide valuable insights. However, as will be discussed below, some data inadequacies limit our ability to fully measure the extent of the link between social transfers and income inequality.

1.1 The Turkish Welfare Regime

Since 2002, the AKP governments have mainly pursued neo-liberal economic policies that have largely ignored the need to enhance both industrial production and international competitiveness. Instead, gains in economic well-being have mainly been dependent on the availability of foreign financial investments, which bring interest rates down and inflate asset prices but do not result in substantial increases in employment. Although employment

¹ Using official data from four rounds of the Household Budget and Expenditure Survey, Filiztekin (2015) finds that the decline in equality came to a halt in 2007 and argues that a reversal in the trend may have begun.

growth in services has picked up in the past few years, it has been offset by a rise in the labor-force participation rate. Coinciding with the rapid expansion of the adult population, this has meant that a growing number of Turkish people are now facing the risk of needing social assistance to meet their basic needs.

The neo-liberal economic policies of the past decade have, perhaps unexpectedly, brought about increased public spending on social assistance. Major upgrades in the health-care services were made at the expense of putting more strains on the national budget (Erol and Özdemir, 2014; Daştan and Çetinkaya, 2015). Nowadays, not only active workers registered in the social-security system, retirees, and dependents of those two categories, but the entire population is eligible for health-care services provided by state-run medical institutions. Depending on the level of per capita household income, all citizens are now covered by "General Health Insurance" in return for making minor contributions, or even none at all (Karadeniz, 2012). At additional cost, all citizens can also receive treatment at private institutions.

Along with popular health-care policies involving a considerable expansion of public health-insurance coverage, the central government has also ramped up its social-assistance programs for especially vulnerable groups. The Ministry of Family and Social Policies was established in 2011 and became responsible for all aspects of non-contributory social payments, including in-kind aid and monthly payments to poor families, the elderly, the disabled, and the parents of small and school-aged children. In 2014, the cost of these programs—funded by the Ministry's own budget and the Social Assistance and Solidarity Fund—was approximately 20 billion Turkish liras, a marked rise from a decade earlier, when the amount of social-assistance spending was deemed to be extremely low (Buğra and Adar, 2008). According to official figures, the share of social-assistance expenditures in national income went up from around 0.5% in 2002 to 1.4% in 2014.²

According to Yazıcı (2012), the amount of social spending may not be the best indicator of welfare transformation; and one needs to look into the institutional arrangements through which welfare provision is organized. Since its rise to power, Yazıcı argues, the AKP governments have systematically promoted iniatives on the part of the private sector and voluntary organizations, especially charitable activities underwritten by non-governmental organizations and municipalities. These have proven to be leading actors in poverty-alleviation efforts and the delivery of social services. In fact, local administrations run by the AKP also provide in-cash and in-kind aid to poor house-

² A breakdown of the total amount of social-assistance spending into various programs can be found in Başlevent (2015).

holds not only through their own budgets, but also through NGOs with Islamic affiliations. According to Pinarcioğlu and Işık (2009), the AKP has attempted to open a new chapter in the Turkish welfare regime by fostering the emergence of these new networks that complement more traditional forms of welfare provision originating with family and friends.

Buğra and Keyder (2006) draw attention to the fact that municipal governments whose Islamic ideological orientation has helped mobilize civil participation in social assistance usually act only as "brokers in charity," i.e., they channel resources to destitute people. However, this charity brokerage might involve dubious liaisons with shady characters who contribute to municipal charity funds only as a tradeoff for immunity from prosecution for their crooked business dealings. Göçmen (2014) also points to the ever greater role taken on by religion in the Turkish welfare system over the last two decades. The author claims that, during a period in which social assistance by central and local institutions has expanded, the rise of religiously based associations is not only a response to growing liberalization and economic deregulation, but also a symptom of the emergence of Islam as a principal line of cleavage between two political camps in the country.

Also expressing a highly critical view, Eder (2009) posits that the bigger role of the state in welfare provision in Turkey has led to an explosion of political patronage and ever greater state power, but without any significant improvement in welfare governance. Elsewhere, Buğra and Candaş (2011) argue that the jump in public expenditures sustains clientelistic relations between the political authorities and the poor, which reinforces our initial argument that political preferences in Turkey may be closely linked with the nature of the welfare regime. Unfortunately, the currently available micro data do not allow us to test empirically the idea that individuals' party choices are swayed by their views on the social policies of the ruling party or their recipiency status. However, the income-inequality analysis we undertake in the current study might provide some indirect evidence in this regard.

While much of the existing academic work contains strong criticism of the current Turkish welfare regime on economic or ethical grounds, praise for the transformation that welfare policies have gone through has also been voiced. Esen (2014) maintains that the negative views put forth in the existing literature on Turkey's social policies lack adequate empirical evidence. He also disagrees with the idea that Turkey's welfare regime is being shaped dominantly by the Islamist impulses of the AKP, and he gives it credit for the reforms it has introduced to widen the delivery of services and update the infrastructure of the entire welfare system.

1.2 Social Transfers and Income Inequality

One way of assessing the effectiveness of redistributive policies is to see whether they lead to a meaningful lessening of income inequality. Comparing pre-social-spending income inequality with the inequality level attained after the transfers, Immervoll et al. (2005), Whiteford (2008), and Fuest et al. (2010) find substantial redistributive effects of social benefits. In a crosssection of 28 countries, Wang et al. (2012) find that taxes and social benefits cause a major drop in the Gini coefficient (on average, by about 0.16), and social transfers account for 85% of this reduction. According to Frick et al. (2000) and Jesuit and Mahler (2010), however, this approach is problematic because it neglects the fact that the pre-transfer distribution of income is not independent of welfare policies. Social transfers might influence individuals' behavior in many ways, such as by removing the incentive to work, leading, in turn, to a worsening of pre-transfer income inequality. Furthermore, Sinn (1995) believes that more social spending sparks more investment in risky assets and more moral hazard effects. Therefore, more redistribution may result in not only more pre-transfer, but also more post-transfer inequality.

Marx *et al.* (2014) also discuss the inappropriateness of using a counterfactual pre-transfer distribution along with other theoretical and definitional issues that need to be kept in mind when evaluating the redistributive impact of the welfare state. For example, the distinction between social insurance and social-assistance benefits is an important one that has also been addressed in, for example, Danziger *et al.* (1981) and Barr (2004). While the amount of the first type depends largely on contributions made by individuals in the past, likely making its redistributive impact small, the latter is typically meanstested (i.e., provided on the basis of an income test) and thus is expected to have a larger redistributive effect.

Making use of a cross-country panel data set and econometric techniques that try to solve the above-mentioned methodological problems, Niehues (2010) finds that unemployment benefits and public pensions have a greater inequality-reducing impact on the income distribution than do the more targeted benefits, which—as it turns out—do not significantly affect income inequality. The author points to the positive (i.e., a increasing) effect of socialassistance programs on pre-transfer income inequality and attributes this finding to substantial disincentive ramifications of the kind discussed above. This revelation is especially relevant for Turkey, as many experts and commentators argue—and even the Prime Minister has weighed in on this issue that many recipients of social assistance choose to remain out of work in order to maintain their eligibility for aid.

1.3 Functional Income Distribution

One key concept that describes our research is "functional income distribution"—the study of how much of the income in a society goes to the owners of various factors of production. The downward trend in labor's share of labor income has been what spurred scholars to take up this approach. Incomeinequality analyses that distinguish between different types (or sources) of income received by the various units (e.g., households) that make up the population aim to identify which types of income (usually labor, non-labor, and transfer incomes) comprise a larger share of household income and which ones contribute to inequality the most.

The literature on the contribution of various sources of income to inequality has shown that they differ not only in the magnitude of their contributions, but also in the degree of inequality in their own distributions (Cancian and Reed, 1998; Lerman, 1999). As far back as Fields (1979), it has usually been found that labor-market earnings are relatively more equally distributed than non-labor income, and they thus have a smaller effect on inequality. Frässdorf *et al.* (2011) have asserted that capital income makes a disproportionately high contribution to overall inequality in relation to its share in disposable income. Focusing on the gender aspect, Reed and Cancian (2001) and Ding, Dong, and Li (2009) find an equalizing effect of female earnings.

Empirical studies of functional income distribution in Turkey have also been conducted using official data sets. Silber and Özmucur (2000) and the TÜSİAD (2000) report, written by a team led by Seyfettin Gürsel, make use of the 1994 HIDS to find that income from primary jobs is relatively more equally distributed, but different patterns are observed when the sample is broken down by employment status. Başlevent (2010) focuses on four main subcomponents of household income, namely labor-market earnings of females and males, non-labor income, and imputed rents. The problem with that paper is that pension payments, social-assistance benefits, and income from financial assets and real estate are all lumped together as non-labor income. The study by Kaya and Senesen (2009) of Turkey makes a distinction between male and female earnings. They state that the that the gender discrepancy in earnings constitutes a rather large chunk of the Gini coefficient for disposable income and wage-income distributions. Finally, the TÜSİAD (2014) report, written by Öner Günçavdı, Raziye Selim, and Aylin Bayar, finds that wage and self-employment incomes combine for over 80% of total household income, while income from financial assets contributes a disproportionately large amount to inequality.

2. The Data

In the empirical work, we use data drawn from the 2013 Survey of Income and Living Conditions (SILC), conducted by the Turkish Statistical Institute, TUIK. The income figures provided in the SILC data include after-tax in-cash and in-kind payments from primary and secondary jobs (and jobs previously held during the past year), as well as income from non-labor sources, such as interest and rent incomes, dividends, and transfers. Also reported are imputed rents, which were shown by Dayıoğlu and Başlevent (2006) to have a nonnegligible negative contribution to income inequality in Turkey. Since the point of our exercise is to rank households with respect to their standards of living, all of these figures will be included in the total incomes of the households.

According to the 2013 SILC, the working-age population of Turkey is 55.6 million. About 69% of this population resides in urban areas (i.e., in administrative units with populations of more than 20,000). The focus of the current study will be on the earnings in this sub-population due to the dominance of agricultural activities – which are characterized by seasonal and unregistered employment and work without pay in family-owned businesses – in rural areas. The SILC data set allows us to distinguish between several types of income received by individuals aged 15 and above during the reference period of the 2013 SILC, which is the year 2012. The two types of income representing labor-market earnings are "wage and salary" and self-employment (i.e., employers and own-account work) income. Retirement payments (including survivor benefits) and disability allowances are the two types of income received by inactive individuals. While almost all men in our sample receive retirement payments in return for their own contributions, more than half of the women in this category are paid survivor benefits.

An important shortcoming of the survey in relation to our purposes is that some payments made by the government through social-assistance programs are lumped together with the income types listed above. First, regular payments received by the elderly (aged 65 and above) who are in need of financial support are recorded under "retirement and old-age income," which mostly consists of payments made to retirees and their survivors. According to 2014 figures published by the Ministry of Family and Social Policies, more than half a million people are beneficiaries of the financial-support program for the elderly, and it would have been quite useful to identify those people. Secondly, individuals who receive monthly payments in return for spending a certain amount of time looking after disabled family members are recorded as being in the category of wage and salary workers. The official figure puts the number of such individuals above 400,000 as of 2014. Finally, the disabilityincome item includes invalidity allowances and payments to war veterans, as well as payments to people with disabilities.

As the discussion above implies, our inability to identify individuals receiving social-assistance benefits and treat their earnings separately means our findings as to the impact of such programs on income inequality are likely to be biased downward. However, an even more significant limitation of the SILC is that it provides no information on the amount of General Health Insurance premiums paid by the state on behalf of poor families and elderly individuals. According to 2014 figures, around nine million individuals benefit from this service. Given that the amount of money spent by the Ministry of Family and Social Policies on health-insurance premiums represents roughly one-third of its budget, the lack of this information is probably the main reason why the SILC cannot reflect the true size of the Turkish welfare state.

Another salient feature of the SILC is that unlike labor-market incomes and retirement payments, which are recorded at the individual level, the remaining types of non-labor income (such as that from rents and financial assets) and in-kind and cash transfers from various social-assistance programs are recorded at the household level. This precludes us from identifying whether the household is eligible for social assistance due to simply having a per capita household income below a certain level or the presence of, for example, a female member who has recently given birth or is currently enrolled in an educational institution. This could be considered another inadequacy of the data, for it fails to uncover the gendered aspects of the links between social protection and income inequality. On the plus side, the SILC data allow- us to distinguish between the labor market, retirement, and disability incomes of male and female household members.

3. Empirical Work

We begin the empirical work with an individual-level analysis to demonstrate how the different types of income (recorded at the individual level by the SILC) are distributed among the recipients. We then move on to a household-level analysis, the main purpose of which is to present the prime patterns in household income-inequality and how the different types of income contribute to it. Given the methodological problems with measuring the impact of social programs on income inequality, we refrain from making pre- and posttransfer comparisons and rely on more standard decomposition techniques that are presented below.

3.1 Individual Level Analysis

The figures presented in Table 1 are meant to display which types of income are the most commonly received and how they are distributed among the recipients in the sub-population aged 15 and above. It turns out, as expected, that the most commonly received type is wage and salary income. Sixty percent of working-age males and 25% of females received some wage and salary income in the year 2012. Both the mean and median figures reveal that self-employment earnings are typically higher than wage and salary earnings and that men earn more than women. According to Gini coefficient figures, the most unequally distributed type is self-employment income. The especially high figure among females (Gini = 0.71) points to the heterogeneity in the type of activities classified under self-employment. Apparently, this category contains both women engaging in modest home-based activities and full-time working professional women, whose annual earnings exhibit a great deal of variation. Another clue that this might be the case is that the rate of informality is much higher among self-employed women in comparison to men (68% vs. 37%). Among wage and salary workers, on the other hand, the rates of informality for male and female workers are not very different.³

	Income type						
		Wage and Self- Retirement Dis					
		salary	employment				
Share of	Overall	42.2	8.9	17.4	0.8		
recipients	Male	59.8	14.4	20.8	1.1		
(%)	Female	24.8	3.5	14.0	0.6		
	Overall	0.435	0.562	0.260	0.299		
Gini coefficient	Male	0.407	0.519	0.215	0.314		
among recipients	Female	0.494	0.709	0.307	0.245		

Table 1. Summary Statistics of Earnings by Income Type and Gender

The information presented in Table 2 is meant to provide a better understanding of the characteristics of individuals receiving the four types of income that the SILC distinguishes between. These figures confirm that labormarket earnings are mainly received by males. The relatively high share of female recipients in the case of retirement payments is not really surprising if we recall that this category includes the survivors of deceased retirees. With respect to age, we find that the largest share of recipients is in the 25-34 age group in the case of wage and salary incomes, and in the 35-44 age group in

³ Başlevent and Acar (2015) report that the gender difference in the rate of informality is present even when the sectoral composition of employment and basic personal characteristics of the employed are controlled for. This means that informality is an important gendered aspect of social protection in Turkey.

the case of self-employment incomes. Married individuals, those with primary-school education, and household heads make up the largest group of income recipients among the wage earners, the self-employed, and the retired. Those receiving disability income, on the other hand, are more likely to be illiterate, never-married, and the child of the household head.

	Income type					
		Wage and	Self-	Retirement	Disability	
		salary	employment			
Gender	Male	70.3	80.0	59.3	65.9	
	Female	29.8	20.0	40.8	34.1	
	15-24	17.9	3.3	1.9	11.2	
	25-34	35.0	23.5	1.1	25.4	
Age group	35-44	28.0	32.2	2.8	24.1	
	45-54	14.9	24.3	27.6	17.5	
	55+	4.2	16.7	66.7	21.9	
	Married	67.3	85.7	66.1	41.1	
Marital	Never-married	28.3	8.7	4.9	45.0	
status	Widowed	0.8	2.3	24.4	6.7	
	Divorced	3.6	3.3	4.5	7.2	
	Illiterate	1.7	2.6	12.4	39.3	
	Literate	3.3	3.6	7.8	11.2	
	Primary	27.2	45.2	42.1	28.1	
	Secondary	18.5	15.7	9.9	8.5	
Education	High school	12.3	9.6	7.3	7.5	
	Vocational	12.6	9.7	8.0	4.3	
	Higher educ.	24.5	13.6	12.5	1.2	
	Head	50.8	72.3	74.4	37.1	
Relationship	Spouse	17.4	16.2	12.3	8.3	
to household	Child	28.3	9.6	4.0	41.9	
head	Parent	0.1	0.8	6.1	3.4	
	Other	3.4	1.2	3.3	9.3	

Table 2. The Distribution of Recipients of Income Types IntoBroad Categories (% Shares)

3.2 Household-Level Analysis

Having presented certain stylized facts about the types of income received by individuals, we now turn to a household-level analysis, whose main purpose is to observe the extent of inequality in total household incomes. In addition to the income types examined earlier, the household incomes which we base our analysis on include imputed rents, returns on financial assets, rental income from real-estate ownership, unemployment benefits, income received from social-assistance programs and relatives, and other types of income, such as alimony payments, that add up to only a small portion of household incomes in Turkey.

Before the household incomes are entered into an inequality analysis, they need to be adjusted for household size and composition with an "adult equivalence scale" so that they more accurately reflect the material well-being of the households. In line with common practice, we use the Eurostat (a.k.a. the modified OECD) scale, which distinguishes between adults and children, to obtain the effective number of adults (or adult equivalents) in the household is calculated by counting the first adult in the household as one person and each other adult as the equivalent of 0.5 adult. The children (i.e., below 15) are counted as 0.3 adults. In the remainder of our empirical work, the income figures on which the households' rankings and the inequality measures will be based will be the amounts obtained after the raw-income figures are divided by the number of adult equivalents.

Having obtained the equivalized household incomes and sorted the households according to those adjusted income figures, we first look at the mean values of several variables in income quintiles to get a better idea of what kind of households are placed towards the bottom or the top of the income distribution. According to the figures presented in Table 3, larger households are more likely to be found in the lower end of the distribution. The average household size declines from 4.6 to 2.8, from the bottom to the top quintile. Similarly, the average number of children per household falls from 1.6 to 0.5. The rate of home ownership is found to be 56% in the bottom quintile, as opposed to 74% in the top quintile. Interestingly, female-headed households are not worse-off than male-headed ones. In fact, the share of female-headed households is the largest in the top quintile (15.8%). The share of households with one or more informally-employed members reveals a strong association between informality and well-being. While nearly half of the households in the bottom quintile have a member who is in informal employment, the corresponding figure for the top quintile is 16.1 (which, actually, is also quite large).

Quintiles					-	
	Bottom	2^{nd}	3 rd	4^{th}	Тор	All

Table 3. Means of Various Household Characteristics by Income

	Bottom	2^{na}	3^{ra}	4 th	Тор	All
Household size	4.6	3.7	3.4	3.1	2.8	3.5
No. of children	1.6	0.9	0.6	0.5	0.5	0.8
Home owners (%)	55.5	69.1	74.7	76.8	74.2	70.1
Female head (%)	13.2	13.7	17.9	16.7	15.8	15.5
Informal empl. (%)	47.8	36.9	33.1	24.9	16.1	31.5

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Another exercise we carry out with the quintile assignments of households is to look at how each subcomponent of income is allocated among the income quintiles. According to the figures presented in Table 4, households in the top quintile receive almost 47% of total household income. With figures above 60%, the share received by the top quintile is the largest in the case of rental and financial income, female self-employment income, and female wage and salary income. Households in the bottom quintile, on the other hand, receive only 2-3% of these types of income. The highly unequal distribution of female labor-market earnings is primarily a reflection of the low female participation rate, especially among those with low levels of education. It also demonstrates how closely household well-being is linked with female labor market activity in Turkey.

The bottom quintile also gets only a minor portion of retirement payments, while the retirement incomes of both males and females are quite evenly distributed across the remaining four quintiles. This pattern implies that retirement serves as an effective social-protection mechanism, as it turns out to be highly unlikely that a household receiving a retirement benefit will fall into poverty (at least in relative terms). As would be expected, income from socialassistance programs goes mainly to households in the bottom quintile. However, the non-negligible presence of recipients even in the top quintile casts some doubt on the efficiency of those programs in terms of providing aid to only those in need.

	Bottom	2^{nd}	3 rd	4^{th}	Тор
Male wage and salary	9.0	13.0	15.2	21.3	41.5
Female wage and salary	2.6	5.6	10.0	17.0	64.8
Male self-employment	5.4	7.4	10.9	16.6	59.7
Female self-employment	3.3	5.5	7.8	17.5	66.0
Male retirement	4.5	15.5	23.0	26.5	30.5
Female retirement	3.2	9.0	19.1	29.9	38.9
Male disability	21.0	27.0	26.2	18.6	7.2
Female disability	33.3	18.3	27.0	16.1	5.0
Imputed rents	7.9	14.0	19.1	23.7	35.4
Rental and financial	2.3	5.2	9.8	16.5	66.3
Unemployment benefits	4.8	8.7	10.5	18.9	57.1
Social assistance	64.8	19.6	6.0	4.5	5.1
Family assistance	12.0	14.4	18.9	22.0	32.7
Other	6.6	7.3	6.7	10.4	68.9
Total Income	6.5	10.9	14.9	20.9	46.8

 Table 4. Allocation of Subcomponents of Income Into Income Ouintiles (% Shares)

Examination of the distribution of the various types of income into income quintiles provides only a rough idea on which sources enhance inequality and which ones work against it. In order to quantify the contributions of these 'factors' to household income inequality, there are several decomposition techniques that can be used. The technique developed in Shorrocks (1982) is a relatively simple one that considers all of the components simultaneously and measures their "proportionate contributions". The formulation is based on the covariances between the values of the factors and total income, and it is independent of the choice of the measure of inequality. As defined, the sum of the proportionate contributions is 100 percent, with positive values implying a positive impact of the factor on overall inequality.

All of the different types of income presented earlier are treated as separate factors in our decomposition analysis. We are primarily be interested in the contributions of retirement benefits and social assistance income. The proportionate contribution figures are presented in the second-to-last column of Table 5. Most of these figures are positive, meaning that the income type in question is positively correlated with total household income. It turns out that about two-thirds of the households have a male wage and salary earner, but the incomes of these members account for about one-fourth of total inequality. Considering the fact that the share of this factor in total income is 37 percent, the proportionate contribution is small in relation to its magnitude.

The only factors with a negative proportionate contribution are social assistance payments and disability incomes of males and females. However, since the share of these factors in total income is very small, their impact on overall inequality is only marginal. This finding is line with the Jesuit and Mahler (2004) assertion that redistribution is more strongly related to the size of a social program than to its target efficiency. The contribution of female labor market earnings to inequality is not only positive, but also larger in magnitude than male earnings after they are divided by their respective shares in total income. According to these 'per-unit contribution' figures given in the last column of Table 10, the contribution of female self-employment earnings is especially large. This is consistent with our earlier observation that female labor market earnings are highly concentrated in the top quintile. As would be expected, the per-unit contribution of rental and financial income is also quite large. The proportionate contribution of this type is nearly 18 percent despite the fact that its share in total income is only 7 percent. Apparently, the wealth distribution, which is known to be highly unequal, is having a considerable impact on the income distribution as well.

	Share of households receiving factor (%)	Share of factor in total income (%)	Coefficient of variation for factor	Proportionate contribution of factor to inequality (%)	Per-unit contribution of factor
Male wage and salary	65.7	36.7	1.4	24.9	0.7
Female wage and salary	30.1	12.9	2.6	15.0	1.2
Male self- employment	18.3	12.2	4.0	24.9	2.0
Female self- employment	4.7	1.4	11.4	4.0	2.8
Male retirement	27.0	10.1	2.0	3.3	0.3
Female retirement	17.0	6.2	2.9	2.9	0.5
Male disability	1.4	0.2	10.9	-0.03	-0.2
Female disability	0.7	0.1	14.5	-0.02	-0.3
Imputed rents	70.1	9.2	1.1	4.6	0.5
Rental and financial	41.3	6.7	4.5	17.7	2.6
Unemployment benefits	3.5	0.4	14.2	0.5	1.2
Social assistance	8.3	0.2	5.9	-0.1	-0.5
Family assistance	17.6	2.7	4.5	0.7	0.3
Other	8.0	1.0	11.1	1.6	1.6

Table 5. The Contribution of Subcomponents of Income to Household-Level Inequality

Notes: The figures reported here are based on amounts adjusted by the adult equivalence scale. The per-unit contributions reported in the last column are obtained by dividing the proportionate contributions by these shares. The Gini coefficient of total household income is 0.395. The exercise was carried out using software package STATA.

In interpreting the contribution figures, we should keep in mind that a positive proportionate contribution does not necessarily mean that the income type in question makes income inequality worse than it would have been in its absence. The retirement payments of both males and females, for example, have positive contributions, but they have small per-unit contributions, which means that inequality would have been even larger if no retirement payments existed (holding everything else constant). Furthermore, if we were able to separate the old-age payments made within social assistance programs from

those made to retirees and survivors, we would have probably found that the former type of income has a negative proportionate contribution, i.e. an unambiguous equalizing impact on income distribution.

The finding that unemployment benefits have a large positive per-unit contribution is an unexpected one. However, if one takes into account the current situation in Turkey that only those with strong prior attachments to the labor force, e.g. the formally and regularly employed, are eligible for these benefits, the finding is not that surprising. If the conditions for unemployment benefit recipiency are relaxed by the government, we are eventually likely to see a change in this pattern.

Yet another interesting finding from a social protection perspective is that the income source labeled here as 'family assistance' amounts to a much larger share of total income than 'social assistance' does. While the share of the former type (received by nearly 18 percent of households) is 2.7 percent, social assistance (received by 8 percent of households) accounts for only 0.2 percent of total income. This finding suggests that inter-household transfers between relatives play a non-negligible role in enhancing social justice. Considering the importance of traditional socio-cultural norms, a key element of which is strong family ties, this finding does not come as much of a surprise in the context of a predominantly Muslim society. Our finding is also in line with assertion made in Grütjen (2008) that the most significant common trait of the welfare regimes in Turkey is the consideration of the family as a main institution of welfare.

4. Conclusion

The main objective of this study was to observe the redistributive effect of social transfers in Turkey to help assess the idea that these transfers have had a considerable impact on political outcomes. During a period in which employment opportunities have been limited, increased social spending by the government has indeed been seen by many as a key factor in the Justice and Development Party's electoral success. A decomposition analysis which yielded the proportionate contributions of various income types revealed that the redistributive effect of social assistance payments is unambiguously positive, i.e. they alleviate income inequality. The same was true of the disability incomes of males and females. However, since these three income types combined for only 0.5 percent of total household income, their impact on overall inequality – as measured by their proportionate contributions – was quite small. The contributions of retirement and unemployment benefits, on the other hand, were positive, meaning that the correlation of these factors and

total household income is positive. Given that more than half of unemployment benefits and about a third of retirement payments are currently received by households in the top quintile, it might take quite a while for these sources to have an equalizing impact on Turkey's income distribution.

Due to the fact that some types of social benefits are lumped with some other income types and also that some benefits – such as health insurance premiums paid by the state – are not recorded at all, the Survey of Income and Living Conditions we utilized here was actually not very suitable for finding a reliable answer to our main research question. The redistributive effect of what is generally agreed upon as social assistance in the Turkish context is probably quite larger than our findings suggest. Taking into account the socioeconomic importance and the political relevance of the topic, the Turkish Statistical Institute might consider revising the survey so that it can provide more insights regarding the links between social spending and income inequality.

One issue that can be tackled is the underreporting of social assistance income. By our calculations, the total amount of disability income reported in the SILC (close to 1.7 billion TL in 2012) is roughly the same as the amount reported in the statistical bulletins of the Ministry of Family and Social Policies. However, the total social assistance income reported in the survey is much smaller than what the administrative data suggest. A more detailed inquiry into the in cash and in kind assistance received by households should be useful in capturing a larger proportion of state-funded aid that ranges from free textbooks to all students in primary and secondary education to financial support to families that have members in compulsory military service. As far as health insurance premiums paid by the state are concerned, the respondents will most probably not be able report the amount of the aid, but a survey item may question whether the household head took the 'income test' (which is a precondition for getting that service) and what the outcome of the test was. The amount of premium paid by the state can then be determined by TUIK (or the researcher working with the data).

The currently available survey data are also not conducive to uncovering the link between social spending and political outcomes. Surveys that inquire about both political preferences and access to social assistance would definitely be instrumental in finding out how much the incumbent parties benefit from greater social spending. These findings, in turn, might give rise to discussions on whether the political gains are large enough to cover the cost of alienating some higher-income voters as well as the social and economic costs associated with the disincentives to work among the recipients.

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