TIME DEFICITS AND POVERTY: THE LEVY INSTITUTE MEASURE OF TIME AND CONSUMPTION POVERTY FOR TURKEY*

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The Levy Institute Measure of Time and Consumption Poverty for Turkey

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Policy Brief**

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Acknowledgments

This policy brief presents the key findings from the research project "Research and Policy Development on Time Use and Poverty" that the Levy Economics Institute undertook in collaboration with the United Nations Development Programme—Turkey. The research was conducted jointly by scholars in the Distribution of Income and Wealth and Gender Equality and the Economy programs. We wish to express our gratitude to the United Nations Development Programme—Turkey, and especially to Berna Bayazit, for the financial and intellectual support without which this undertaking would not have been possible. We are also grateful to our colleague and director of the Gender Equality program at the Levy Institute, Rania Antonopoulos, for her valuable support provided to the research conducted in this project. In addition, we would like to convey our thanks to Özlem Sarıca and Mehmet Ali Karadağ at the Turkish Statistical Institute who helped us gather the necessary information about the datasets we used. We also want to thank A. Mert Yakut for excellent research assistance.

1 Introduction

Standard measurements of poverty ignore the fact that unpaid household production contributes to the fulfillment of material needs and wants that are essential to attaining a minimum standard of living. In effect, they rest on the implicit assumption that all households and individuals have enough time to adequately attend to the needs of household members—including, for example, caring for children. But for numerous reasons, some households may not have sufficient time, and they thus experience "time deficits." If a household experiencing a time deficit cannot afford to cover it by buying market substitutes (e.g., hiring a care provider), the official threshold would be an understatement of the requirements of that household for attaining a minimum standard of living. In addition, time deficits constitute a form of deprivation in themselves, especially when they occur in combination with other types of social and economic disadvantages faced by those at the bottom rungs of the economic ladder. Measurement and analysis of poverty on the basis of a two-dimensional measure of deprivation that would reflect both income/consumption deficits and time deficits is important for the design and evaluation of public policies in a range of intersecting areas: income assistance, increasing female labor force participation, and public provisioning, including the provisioning of social care.

It appears that, until recently, not much attention has been paid in the policy agenda to income inequality and poverty in Turkey. Partly due to the presumption that economic growth would reinforce poverty reduction, policies have focused almost exclusively on higher growth. In fact, in recent years, promoting women's employment as a contributor to higher economic growth has become a key priority for policymakers in Turkey. The draft document of the Turkish Ministry of Labor and Social Security's "National Employment Strategy" for 2012–2023 determined the target rate for women's labor force participation in 2023 at 35 percent, which was later revised and increased to 38 percent (KEIG 2013). Nonemployed women are considered as an untapped resource to be mobilized and become fuel for economic growth. This was openly put forward by the Ministry of Family and Social Policies when it adopted "Women's Employment, the New Dynamics of Turkish Economy" as a motto.

We believe that the assessment of the policy agenda as well as the situation of low-income families in Turkey should not be conducted solely on basis of the official poverty thresholds. To this end, we have developed the Levy Institute Measure of Time and Consumption Poverty (LIMTCP), a two-dimensional measure that takes into account *both* the necessary consumption expenditures and the household production time needed to achieve a minimum living standard. In the context of the current policy

agenda, our findings on the LIMTCP measure highlight the potential of carefully designed employment-centered poverty policies to achieve inclusive economic growth, provided that such policies are accompanied by adequate attention to the provision of social care and social assistance. Our results highlight the interconnections between three domains of challenges facing the Turkish economy today: overcoming the shackles of jobless growth, increasing female labor force participation, and confronting the growing deficit in social care services.

2 A synopsis on the trends in employment, income distribution, and poverty in Turkey

The onset of the 2008–2009 economic crisis raised the priority of combating poverty in policy agendas across the globe, including in Turkey. Prior to the crisis, during the 2000s, the economy experienced relatively high growth rates of real GDP, but the recent period has been described as one of "jobless growth," with growth in employment lagging behind output growth by a substantial margin. The low employment rate, low rates of labor force participation (particularly of women), high income inequality and economic vulnerability appear to be the structural and persistent aspects of the recent phase of economic development in Turkey, all of which are closely linked with poverty.

The employment rate in Turkey is currently the lowest (48 percent) among the OECD countries (66 percent on average). Growth in employment has lagged behind output growth by a substantial margin in the recent past. Between 2002 and 2013, the average quarterly growth rate of GDP was 5.2 percent, whereas the rate of change in employment averaged only 1.4 percent. The tardy growth in employment suggests that although Turkey now enjoys a demographic window of opportunity for accelerated economic growth—the combination of a relatively large working-age share of the population, a significant increase in the size of the labor force, and slow overall population growth—the potential may not be realized unless employment-centered policies are in place. In addition, the unemployment rate rose sharply during the early 2000s and has remained stubbornly high (around 10 percent) since then.

Despite a recent rise¹, an exceptionally low female labor force participation rate—far lower than the OECD average—still remains as a "Turkish Puzzle." A little under two-thirds of women that are out of the labor force cite "being a housewife" as the main reason for their nonparticipation. One underlying factor

¹ A significant portion of this rise comes from a statistical classification change by TUIK. Since 2011, TUIK counts female beneficiaries of a Ministry of Family and Social Policies program that pays women for their care services in the home (taking care of the elderly, the sick, and people with disabilities) as employed.

behind this low labor force participation has been the strong pattern of sex segregation in employment, which is visible not just in terms of the sectoral composition of employment but is also evident in the occupational distribution of employment that contributes to the economic vulnerability of women workers in Turkey. Greater concentration of employed women in agriculture, in conjunction with the gender bias in intrahousehold power relations, is associated with the fact that a much larger proportion of women serve as unpaid female family workers as compared to men (34 versus 5 percent in 2012). The profile of the new jobs created for women have not led to any transformation in occupational segregation. The share of employed women working in elementary occupations, agricultural work, and services and sales work made up about 60 percent in 2006, compared to 40 percent of employed men. It appears that the lower coverage of social security among women workers compared to men (46 versus 67 percent) stems mainly from the large proportion of agricultural, unpaid family workers among the former. The absence of social security leaves workers out of a system that could protect them when faced with serious health issues and in old age; moreover, they are deprived of using their rights in employment termination. Another contributing factor to women's vulnerability in employment derives from the type of workplaces in which they tend to be employed: about 60 percent of women workers (58 percent) in 2011 were employed in places such as houses, fields, or mobile workplaces.

Income inequality in Turkey is generally considered much higher than in most OECD countries (OECD 2008,), even though the Gini coefficient of household income has declined from 0.40 to 0.38 between 2006 and 2011. Recent research has highlighted the role of gender disparities in understanding income inequality in Turkey. Dayloğlu and Başlevent (2012) estimated that women have both less labor and non-labor income and constitute a higher proportion of lower income brackets. The authors show that a significant proportion of women (63 percent) does not receive any personal income and constitute over 90 percent of working-age adults with no personal income. In addition, employed women earn considerably less than men: on average, women's annual earnings are about 55 percent of men's, and earnings are more unequally distributed compared to men's. The majority of recipients of non-labor income are men (75 percent), and women constitute only a small percentage (19 percent) of recipients of asset income, suggesting a greater control of assets by men.

The incidence of consumption poverty² remained stable at about 18 percent between 2006 and 2009 (the latest year for which we have official consumption poverty data) for the country as a whole (Table 1). However, there was a stark contrast between the urban and rural areas. While the poverty rate in the urban areas actually declined (from 9.3 to 8.9 percent), rural poverty increased dramatically (from 32 to 39 percent). Poverty rates based on a "relative" definition also showed virtually the same pattern. Despite the fact that measures of poverty constructed based on per capita household consumption cannot provide complete information on the poverty of individuals within these households, statistics disaggregated by sex reveal higher poverty rates for women (Figure 1). Between 2006 and 2009, women's poverty rate was above that of men but the difference widened in 2009, when women's poverty rate increased to 19 percent while the rate among men was 17 percent.

Table 1 Trends in Poverty

	TURKEY		UI	RBAN	RURAL		
Year	Complete poverty (3)	Relative poverty ^{(1) (3)}	Complete poverty (3)	Relative poverty ^{(1) (3)}	Complete poverty (3)	Relative poverty ^{(1) (3)}	
2002	26.96	14.74	21.95	11.33	34.48	19.86	
2003	28.12	15.51	22.3	11.26	37.13	22.08	
2004	25.6	14.18	16.57	8.34	39.97	23.48	
2005	20.5	16.16	12.83	9.89	32.95	26.35	
2006	17.81	14.5	9.31	6.97	31.98	27.06	
2007 ⁽	17.79	14.7	10.36	8.38	34.8	29.16	
2008	17.11	15.06	9.38	8.01	34.62	31	
2009	18.08	15.12	8.86	6.59	38.69	34.2	

Source: 2011 Results of Poverty Study, TUIK.

Notes: (1) Poverty line is 50% of equivalised median consumption expenditure. (2) New population projections have been used since 2007. (3) Complete poverty refers to food plus non-food poverty rates. The rates are not available since 2010, due to the methodological revision studies.

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² Following the two basic approaches to poverty measurement, TUIK currently provides both the absolute and relative poverty measures for Turkey. These measures were developed based on the methodology prepared jointly by TUIK and World Bank in 2003 and were approved at the World Bank Concept Paper Review meeting (WB and TUIK, 2005).

■Total ■■ Men ■■ Women 19.0 18.3 18.3 18.1 17.5 17.8 17.1 17.3 17.3 17.1 16.7 2006 2007 2008 2009

Figure 1 Poverty Rates, 2002-2011

Source: Turkish Statistical Institute (TUIK), Household Budget Surveys.

Research on Turkey has established important links between women's poverty and their labor force participation, lack of social security, and lower education levels. Each of these factors' contribution to poverty has been argued to be closely related to the uneven, gender-based unpaid work burden distribution, making the issue an integral aspect of public policy design. Our study will contribute to this body of literature by introducing the household production needs of low-income families as integral to the assessment of poverty.

3 Methodology

Our model builds on earlier models that explicitly incorporate time constraints into the concept and measurement of poverty (Vickery 1977; Harvey and Mukhopadhyay 2007). The key differences between our approach and the earlier models are that we explicitly take into account intrahousehold disparities in time allocation and do not rely on the standard neoclassical model of time allocation. A detailed comparison of the alternative models has been discussed elsewhere (Zacharias 2011).

In the first step, we identified a "poverty-level time requirement" for household production.³ This is defined as the amount of time that needs to be spent by a household on household production activities to survive with consumption expenditures around the official poverty line. The thresholds for household

³ A detailed description of the methodology, data sources and findings can be found in the accompanying research project report (Zacharias, Masterson, and Memis 2014).

production represent the average amount of household production that is required to subsist at the poverty level of consumption expenditures.⁴

In the second step, we identified whether each household has adult members with sufficient time to meet the poverty-level time requirements. For this purpose, we estimated time deficits for individuals aged 18 to 70 years. To estimate time deficits, we begin with an accounting identity: the physically fixed total number of hours available to any individual (i.e., 24 hours in a day or 168 hours in a week) equals the sum of time spent on income-generation activities, household production, personal maintenance, nonsubstitutable household production, and everything else (e.g., volunteer work, watching TV, etc.). We next define the committed time of the individual as the sum of (1) required weekly hours of personal maintenance⁵ and nonsubstitutable household production⁶; (2) required weekly hours of household production; and, (3) the actual weekly hours the individual spends on income generation. An individual suffers from a time deficit if their committed time is greater than the number of hours in a week. These steps yielded information sufficient to estimate the time deficits at the individual level. The household-level value of time deficits can then be obtained in a straightforward manner by summing the time deficits of individuals in the household. We designated a household as time-poor if at least one member of that household had a time deficit.

After time deficits are determined, in the third step we proceeded to check whether time deficits are poverty-inducing. This requires the modification of the official threshold. The modification consists of adding the monetized value of the household time deficit to the threshold. We assume that the hourly value of the time deficit is equal to the average hourly wage of domestic workers, an assumption that is widely made in research on the valuation of household production. Both the official poverty line⁷ and

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⁴ We determined the reference group in constructing the thresholds as the households with at least one nonemployed adult and consumption around the poverty line. Our definition of the reference group is motivated by the need to estimate the amount of household production implicit in the official poverty line. Since poor households in which all adults are employed may not be able to spend the amount of household production implicit in the poverty line, we excluded such households from our definition of the reference group. We divided the reference group into 24 subgroups based on location (urban vs. rural), the number of children (0, 1, 2, and 3 or more) and number of adults (1, 2, and 3 or more) for calculating the thresholds. The thresholds were calculated on the basis of the average values of the time spent on household production by households in each subgroup of the reference group.

⁵ The minimum required weekly hours of personal maintenance were estimated as the sum of minimum necessary leisure and the weekly average of the time spent on personal care, estimated from the time use survey separately for the urban and rural areas.

⁶ For a detailed explanation on the assumptions and estimation please see the final report of the project.

⁷ Please see the final report of the project for other adjustments made in the measurement of the official poverty line.

the poverty line adjusted by the value of time deficits are compared against a measure of household consumption expenditures to assign poverty status.

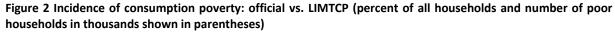
The measurement of time and consumption poverty requires microdata on individuals and households, with information on time spent on household production, time spent on employment, and household consumption expenditures. Good data on all the relevant information required is not available in a single survey. But good information on household production was available in the time use survey (ZKA 2006), and good information regarding time spent on employment and household consumption expenditures was available in the income and expenditure survey (HBA 2006). Our strategy was to statistically match the HBA and ZKA surveys so that hours of household production can be imputed for each individual aged 15 years and older in the HBA (Masterson 2013). Time deficits were calculated for persons between the ages of 18 and 70 because they constitute the overwhelming bulk of the labor force. Our study population consists of individuals between the ages of 18 and 70 and their households.

4 Time and Consumption Poverty in Turkey: Key Findings

4.1 Hidden poverty

The revision of the poverty line to account for time deficits would have no impact on the measured poverty rate if none of the officially nonpoor were prone to time poverty. However, this is far from the truth. Almost 45 percent of households that were officially nonpoor were time-poor. Out of these, 30 percent could not afford to have consumption expenditures that were above the LIMTCP poverty line (the official threshold adjusted by the monetized value of the time deficit). The combination of these two factors produced a substantial gap between the official and LIMTCP poverty rates of households and individuals (Figure 2 and Table 2).

Taking time deficits into account resulted in a household poverty rate of 35 percent. In contrast, the official poverty rate was "only" 24 percent. The gap implies that about 1.8 million households (or 7.6 million persons) were misclassified as nonpoor by the official measure. For urban areas, the official poverty rate was 17 percent, whereas the LIMTCP poverty rate stood at 26 percent with one million additional households found to be in poverty. In rural areas, 800,000 households entered the ranks of poor households, representing a poverty rate of 51 percent, compared to the official rate of 39 percent. The number of poor households increased by 53 and 31 percent, respectively, in urban and rural areas when time deficits were taken into account; for the nation as a whole, the increase was 41 percent.



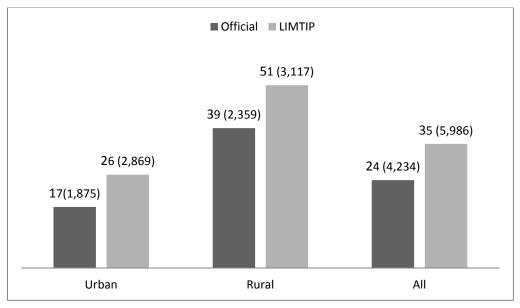


Table 2 Poverty of individuals: Official vs. LIMTCP

		Rate (pe	rcent)	Number (thousands)			
	Official	LIMTCP	Hidden poor	Official	LIMTCP	Hidden poor	
TURKEY	30	40	11	21,406	29,035	7,629	
Men	24	35	11	5,342	7,670	2,328	
Women	26	36	10	6,243	8,722	2,480	
Children	38	49	11	9,822	12,643	2,822	
URBAN	20	30	10	9,225	13,546	4,320	
Men	16	26	9	2,295	3,582	1,287	
Women	17	26	9	2,667	4,030	1,363	
Children	27	38	11	4,263	5,934	1,670	
RURAL	45	58	12	12,181	15,490	3,309	
Men	38	51	13	3,047	4,088	1,041	
Women	40	53	13	3,576	4,692	1,116	
Children	56	67	12	5,558	6,710	1,152	

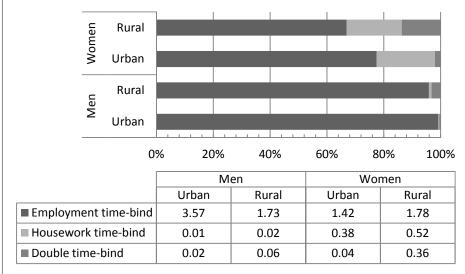
Taking time deficits into account affects not only the measured rate of consumption poverty but also the measured size of unmet consumption needs. The latter is usually referred to as a consumption deficit and calculated by subtracting actual consumption expenditures from the poverty line. A little over half of the officially poor households suffered from time deficits. When their poverty lines were revised to account for time deficits, we found that their actual consumption deficit was 2.4 times larger than the

official estimate. Although the official measure recognizes these households as poor, it grossly understates their unmet consumption needs. Our estimates for all poor (that is, officially poor plus hidden poor) households showed that the average LIMTCP deficit was, respectively, 1.6 and 1.8 times higher than the official deficit in urban and rural the areas.

4.2 The extent and the type of time poverty

The most common type of time deficit occurs because hours of employment exceed the time available after setting aside the required hours of personal care and household production ("employment time-bind"). However, in our framework, time deficits can occur even before the hours of employment are taken into account, due to excessive burdens of household production ("housework time-bind"). The standard approach to the measurement of time poverty fails to capture this source of time deficits and focuses entirely on the employment time-bind. Housework time-bind can be the result of highly inequitable division of household work or inordinately high demands of household production, or a combination of both. Indeed, some individuals might suffer from both types of time poverty ("double time-bind").

Figure 3 Type of time poverty by sex and location (percent distribution and the number of time-poor persons in millions)



Note: The numbers in the table are in millions.

While employment time-bind is the predominant type of time poverty, housework time-bind is also a substantial source: out of the nearly 10 million time-poor persons, nearly one million encountered the housework time-bind (Figure 3). That is, conventional measures of time poverty would have missed

about one million people from the ranks of the time-poor and classified them as time-nonpoor. The hidden time-poor were almost entirely women, which is not surprising given the gendered division of housework. Rural women in Turkey appear to be far more vulnerable to the double time-bind than any other group of men or women shown in Figure 3. Approximately 14 percent of rural women were engaged in paid work activity, even though they were time-poor by our measure, as a result of their high required levels of household production.

Since the predominant source of time deficits arises in the form of employment time-bind, we would naturally expect the employed population to have higher time poverty rates than the nonemployed. In addition, time poverty rates can be expected to display marked differences by gender, location (urban versus rural), and poverty status of the household. Three salient findings emerge in this respect (Table 3). First, the highest time poverty rates occur among poor employed women, which, surprisingly, do not show any urban-rural disparity. Second, the gender disparity in time poverty is markedly different according to location and poverty status. On both sides of the consumption poverty line, men have a higher time poverty rate than women in urban areas. On the other hand, in rural areas, time poverty rates for men and women are similar among the nonpoor, and among the poor, the time poverty rate of women is actually higher than men. Third, consumption-poor persons have higher rates of time poverty than consumption-nonpoor persons. Both in rural and urban areas, poor men and women have markedly higher time poverty rates than their nonpoor counterparts.

Table 3 Time poverty rates of adults by sex and poverty status

			All	Employed
	Nonpoor	Men	21	29
Turkey	Nonpoor	Women	12	48
Turkey	Poor	Men	34	42
	FUUI	Women	32	68
	Nonpoor	Men	21	29
Urban	Νοπροσι	Women	11	48
Orban	Poor	Men	33	42
		Women	21	68
	Nonnoor	Men	19	24
Rural	Nonpoor	Women	18	42
	Poor	Men	29	34
	F 001	Women	44	67

4.3 Hours of employment, time deficits, and earnings

The overwhelming bulk (about 90 percent) of time-poor persons is employed. As we would expect, the rates of time poverty increase as the weekly hours of employment rise for both men and women. But the gender gap is visible in every hours interval, except at the top interval (61 hours or more), where time poverty is practically universal (Figure 4). For the nation as a whole, among those who worked part-time (less than 35 hours per week), 4 percent of men were time-poor compared to 37 percent of women; the gap is quite large, at 33 percentage points (70 percent of women versus 37 percent of men), among full-time workers too. The largest concentration of men and women workers (a little over 40 percent) was in the 36 to 50 hours per week group. Here, the rate of time poverty among women was 6.1 times as high as among men.

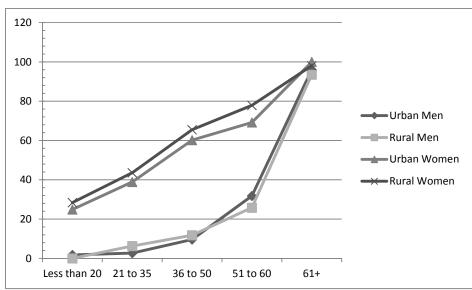


Figure 4 Incidence of time poverty by weekly hours of employment and sex (percent)

A group of people could have a higher rate of time poverty vis-à-vis another group because of the difference in the hours of required household production (e.g., people with higher hours of employment may have a higher time poverty rate if they also faced higher hours of required household production than those with lower hours of employment). However, this does not seem to be the case. Longer hours on the job, rather than higher housework burdens, lie behind the positive correlation between hours of employment and time poverty rates. On the other hand, the gender disparity in the incidence of time poverty within each interval of hours of employment was accompanied by a stark difference in the hours of required household production (Figure 5). Average hours of household production by employed

⁸ Part-time work is much more prevalent among women than men (35 versus 7 percent).

women stood at 31 hours per week, compared to seven hours by employed men.

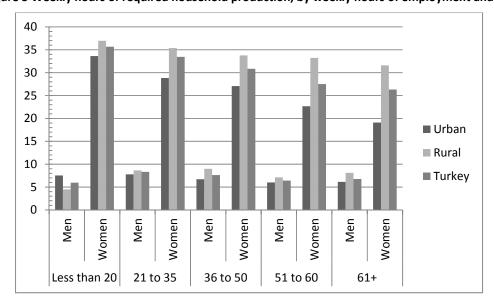


Figure 5 Weekly hours of required household production, by weekly hours of employment and sex

The potential impact that time deficits may have on the consumption poverty status of low-income earners and their families can be seen by considering the ratio of monetized value of the time deficit to earnings, expressed in percentage terms. Strikingly, we found that the median value of the ratio for rural and urban women, as well as urban men in the bottom, was *greater than one* (Table 4). That is, the average worker from any of these groups will not be able to compensate for their time deficit with their earnings and, in order to stave off time poverty, would have to draw on the other sources of household income, if available. Even the average female worker with "middle-class" earnings (i.e., those in the middle quintile) would have to spend almost 45 percent of her earnings on purchasing market substitutes to avoid time poverty. The ratio of time deficits to earnings was consistently higher for women than men, reflecting the gender disparity in time deficits and earnings.

Table 4 Median values of the ratio of monetized value of time deficit to earnings, by sex and earnings quintile (ratio x 100)

	Urban	Urban	Rural	Rural
	Men	Women	Men	Women
Bottom	116	234	64	195
Second	43	73	26	80
Middle	28	45	16	44
Fourth	21	40	14	31
Тор	12	22	5	23

Note: National earnings quintiles were calculated using the data on all employed persons with positive earnings. However, estimates shown in the table were computed using data on all employed persons.

4.4 Status in employment, consumption poverty, and time poverty

Compared to OECD countries, a remarkable aspect of women's employment in Turkey is the high proportion of employed women that fall into the "unpaid family worker" category: 42 percent of all employed women were in this status, compared to only 5 percent of all employed men. Over 90 percent of all female unpaid family workers lived in the rural areas—a reflection of the fact that their employment is most likely to be in the family farm or small family enterprise. The next largest concentration of employed women was found in the status of regular wage/salary earner: 33 percent of all employed women versus 55 percent of all employed men. In contrast to the situation with female unpaid family workers, most female wage/salary earners (82 percent) lived in the urban areas. Self-employed women constituted 14 percent of all employed women (as compared to 24 percent of all employed men) and casual wage earners made up about the same proportion of employed men and women (10 percent).

Table 5 Poverty rate of employed persons by status in employment (percent): Official vs. LIMTCP

			Hidden
	Official	LIMTCP	poor
All			
Wage/salary earner	14	26	12
Casual	45	60	15
Self-employed	36	54	18
Unpaid family worker	46	67	21
All persons	26	41	15
Men			
Wage/salary earner	15	25	10
Casual	50	62	12
Self-employed	35	54	18
Unpaid family worker	44	61	17
All men	25	37	12
Women			
Wage/salary earner	9	29	20
Casual	32	56	23
Self-employed	37	56	18
Unpaid family worker	47	69	23
All women	31	53	21

Turning to the consumption poverty rates of all workers by employment status, it appears that the official and LIMTCP measures result in the same ranking: the lowest incidence of poverty is among regular wage/salary earners, followed by the self-employed, casual wage workers, and unpaid family workers (Table 5). However, the accounting of time deficits produces some interesting changes in the gender disparity in poverty rates. Most striking is the change among regular wage/salary workers: the official measure registers a higher poverty rate for men while the LIMTCP measure reveals a higher poverty rate for women.

The changes in gender disparity result from the gender difference in the size of the hidden poor: 12 percent of all employed men versus 21 percent of all employed women. The higher incidence of hidden poverty among employed women reflects the fact that a larger proportion of households with employed women are likely to appear as consumption-poor when their time deficits are taken into account, although the official measure categorizes them as consumption-nonpoor. In turn, hidden consumption poverty is accompanied by time deficits. Not surprisingly, therefore, the gender gap in time poverty was the largest among regular wage/salary earners (62 versus 32 percent)—precisely the group within which we observed the reversal of the gender gap in consumption poverty rates. Overall, we estimated that the majority—59 percent—of employed women were time-poor, while the incidence was far lower, at 34 percent, among men.

4.5 Household structure, consumption poverty, and time poverty of employed households

We consider a household to be an employed household if either the head or spouse or both are employed. Employed households made up about 73 percent of all households in our study population. Focusing on this group of households is useful because the overwhelming bulk of time-poor households (88 percent) were employed households. Given the evidence we have already presented regarding employment time-bind as the main source of time deficits, it should hardly be surprising that time-poor households consist mostly of employed households.

Table 6 Household structure and rates of time and consumption poverty (percent)

	Share	Time poverty	Consumption poverty			
	Silate	Time poverty	Official	LIMTCP	Hidden	
Married-couple households						
Married male head with nonemployed spouse	66.8	44	22	30	8	
Employed head and spouse	26.1	85	32	56	24	

Nonemployed male head with employed spouse	2.6	69	35	50	15
Single-headed households					
Unmarried employed male head	1.6	51	20	28	8
Unmarried employed female head	2.9	67	34	51	17
All	100	56	25	38	13

Our typology of household structure is based on the employment status of the head of the household and his/her spouse as well as the marital status of the head. As can be seen from Table 5 (column labelled "Share"), the type of household headed by a married male with a nonemployed spouse (male breadwinner household) constitued a clear majority (67 percent) of all employed households. The second predominant type (26 percent) is the household in which both the head and spouse are employed (dual-earner household). Unlike in many other OECD countries, employed households headed by a single person are a tiny minority in Turkey.

Given the higher incidence of time poverty among employed women compared to employed men, it should not come as a surprise that dual-earner households register a much higher time poverty rate than male breadwinner households (85 versus 44 percent). Households headed by single females and single males had a lower incidence of time poverty than dual-earner households but a higher incidence than male breadwinner households. Intuitively, this pattern is comprehensible because a single head is likely to carry a greater burden of household production than the male breadwinner, on average. On the other hand, dual-earner households are more prone to time poverty because the employed wife will also have to shoulder the greater proportion of household production tasks and the employed husband may be spending long hours at the job.

The higher incidence of time poverty among dual-earner households contributes to their higher rate of hidden poverty. As a result, the gap between the official and LIMTCP poverty rate was the largest for this group of households (32 versus 56 percent, a difference of 24 percentage points). Dual-earner households had the highest poverty rate once time deficits were taken into account. On the other hand, male breadwinner households had the lowest rate (8 percent) of hidden poverty, a reflection of their low risk of time poverty. They, along with households headed by a single male, had the lowest rate of official (about 20 percent) and LIMTCP poverty (about 30 percent). Households headed by a single

⁹ We have omitted from our table households headed by an employed female with nonemployed spouse because such households made up a very small number (less than 0.5 percent of all employed households).

female and households with a nonemployed head and employed spouse had similar rates of official poverty (roughly 34 percent) and similar rates of LIMTCP poverty (about 50 percent).

4.6 Employment simulation

The aim of this exercise is to assess how the picture of time and consumption poverty would change if employable persons in poor households (i.e., households below the LIMTCP poverty line) who are not currently employed become employed for pay. Our simulation model assigns each such individual a job and earnings that they are most likely to obtain, given their characteristics such as age, sex, and educational attainment. This required us to subsequently re-assign household production hours for all individuals in households with job recipients, as the total amount as well as the intrahousehold allocation of household production would certainly be affected by the change in employment status of some of the members of those households. 10 Because the metric used for assigning poverty status in Turkey is consumption expenditures, we also need to translate the estimated change in household income as a result of the added earnings into the expected change in household consumption expenditures. We used the relationship that can be deduced between household income and consumption from the data (i.e., HBA 2006) to assign new levels of consumption expenditures to households with job recipients. 11 The results of this simulation should not be understood as an estimate of the effect of a comprehensive set of full-employment policies, but rather as an aggregation of the impact on individual consumption-poor households of all the non-employed adults in those households receiving the paid jobs they are most likely to receive given actual labor market conditions prevailing in Turkey in 2006.

Changes in employment status will affect the time and consumption poverty of individuals and households in a number of ways. The first and most obvious way is the additional earnings brought in by the job recipient(s), which can reduce the consumption deficit of a poor household if at least some of the additional earnings are spent on the items in the poverty consumption basket. However, if the additional earnings come at the expense of substantial time deficits, the poor household may not be able to cross the LIMTCP poverty line. Whether the household makes the transition to nonpoor status

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¹⁰ It should be noted that household production thresholds will not change as a result of the simulation. Only its apportionment among persons in the household would.

It turned out that predicted consumption expenditures were lower than actual consumption expenditures for some recipient households. In these cases, we simply assumed that the increase in earnings resulted in an equivalent increase in consumption expenditures. Such an assumption reduces the risk of understating the impact of employment on poverty alleviation.

would also depend on their initial consumption deficit: if it proves to be larger than the likely additional earnings, the household is likely to remain in poverty.

The simulation results are largely driven by the characteristics of the job recipients. The vast majority of the recipients are women: 86 percent in the urban areas and 84 percent in the rural areas. This is a reflection of the fact that the overwhelming bulk of consumption-poor men are already employed—77 percent in the urban areas and 84 percent in the rural areas—and, therefore, only a minority of them receive jobs in the simulation. The earnings penalty faced by women in general thus limits the extent to which family income can be augmented by increased female employment. Additionally, the female job recipients have markedly low educational attainment: about 88 percent of rural female recipients and 83 percent of urban female recipients had educational attainment of primary school or less. 12 Educational disadvantages faced by consumption-poor women further limit the extent to which their employment can raise the family income.

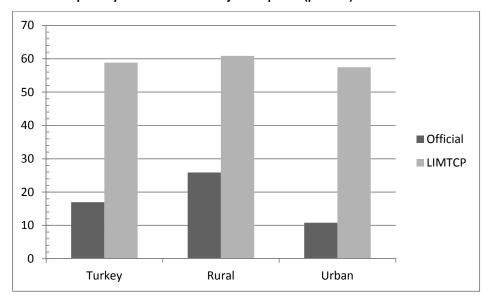


Figure 4 Post-simulation poverty of households with job recipients (percent): Official vs. LIMTCP

In spite of these limitations faced by the newly employed, our simulation suggests that a substantial proportion of consumption-poor households with job recipients would manage to escape consumption poverty. However, the official measure would grossly overstate the reduction in poverty. For the nation as a whole, the official poverty rate of households with job recipients would be only 17 percent, in

¹² Among employed women between the ages of 18 and 70, a similar percent (86 percent) in rural areas also had educational attainment of primary school or less. However, among the urban employed women this proportion is markedly lower than the recipients—44 percent.

contrast to the LIMTCP poverty rate of 59 percent (Figure 4). The huge difference between the two measures stems from the fact that the newly employed consist mostly of women. As we reported (Table 3), the time poverty rate among employed women is rather high and the rate for newly employed women was comparable, at about 60 percent. Time deficits incurred by them are ignored in the official measure, and hence the latter overstates the impact of new employment on poverty reduction. Once time deficits are accounted for, it would emerge that the majority of households with job recipients—rather than a sizeable minority as indicated by the official measure—would remain consumption-poor in both urban and rural areas.

The role of time deficits in constraining transition out of poverty can be seen clearly by comparing the profiles of female job recipients who made the transition to those who did not in our simulation. In terms of average earnings, the women in both groups were very similar, but women who did not transition out of poverty upon employment suffered from notably higher time deficits (Figure 5, Panel A). In fact, on average, the monetized value of their time deficits exceeded their earnings—a situation of impoverishing employment. The higher time deficits occurred *not* because they lived in households with higher thresholds of household production than women who made the transition out of poverty (Figure 5, Panel B). Rather, they arose from the higher share of the household production requirements borne by them as a result of a more skewed intrahousehold division of domestic labor. Further, the women who did not make the transition also had higher hours of employment. In sum, longer hours of work, on the job and at home, contributed to keeping 60 percent of all female job recipients in the grip of consumption poverty.

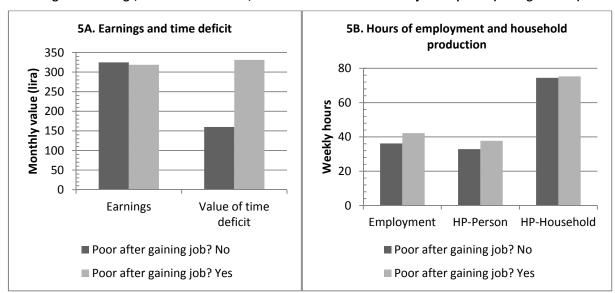


Figure 5 Earnings, value of time deficit, and time allocation of female job recipients (average values)

Key: HP-Person = person's required hours of household production; HP-Household = household's threshold hours of household production.

Note: (i) Earnings refer to the monthly earnings assigned to job recipients in the simulation. Value of time deficit is the monetized monthly value of post-simulation time deficits. (ii) Hours of employment and household production are weekly values.

In addition to the time deficits of the newly employed, the time deficits of other members of their household are also subject to change, with most of the changes occurring among newly employed wives and already employed husbands. As noted above, our simulation model attempts to account for these changes explicitly by determining the hours devoted to household production by all members of the recipient household. Consequently, with the simulation, household-level time deficits become subject to two sources of change. Newly employed persons who previously had no time deficit may now encounter a time deficit. The reallocation of household production requirements within the household would generally result in a decline in the share contributed by the newly employed to meeting the requirements. As a result, other members of the household would see an increase in their shares of household production requirements that, in turn, could worsen an already existing time deficit or give rise to a new one. Both these factors contributed to an increase in the household-level time deficits among the recipient households (Table 7).

¹³ Married-couple households constituted 85 percent of all recipient households. Before simulation, only 7 percent of recipient households had employed spouses; once the jobs were assigned, the proportion of such households rose to 77 percent.

Table 7 Household time deficits of households with job recipients before and after simulation, by poverty status after simulation (average weekly hours)

	Pre-simulation	Simulation				
Poor after			employed	Other		
gaining job?	Household	Household	members	members		
No	9	23	14		9	
Yes	12	46	29		17	

Note: Numbers reported under the column: (i) "Household" refers to the sum of time deficits of all members of the household; (ii) "Newly employed members" refers to the sum of time deficits of all members of the household that were assigned jobs in the simulation; and, (iii) "Other members" refers to the sum of time deficits of all members of the household that were not assigned jobs.

Among households that escaped poverty, the average weekly time deficit rose from 9 to 23 hours with the change in employment status and reallocation of household production—an increase that was entirely due to the time deficits of the new employed. A more drastic increase occurred in the average time deficit of households that remained poor (from 12 to 46 hours), and part of that increase (5 hours or 15 percent) was due to the reallocation of household production causing an increase in the time deficits of other members of the household. Hence, for this group of households, the increase in time deficits driven by the change in the intrahousehold division of domestic labor also acted as an impoverishing force.¹⁴

Households with job recipients that remain consumption-poor belong to the group that we describe as "hard-core poor." The latter is also made up of households that had no employable adults because all adults were already employed. Together, they constituted 94 percent of the poor in both urban and rural areas. Urban and rural areas differed in terms of the composition of the hard-core poor: in urban areas, households with job recipients were the majority (71 percent) while in the rural areas they were a minority (39 percent). This is a reflection of the lower employment rates among urban consumption-poor women in Turkey, so that, compared to rural areas, there are more employable individuals among them. In our simulation, we assigned jobs to at least one individual in 66 percent of all consumption-poor households, but the percentage was much higher in urban than rural areas (81 versus 52 percent).

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¹⁴ Two other factors played a role in restraining the transition from poverty. Recipient households that remained poor had a larger initial (i.e., pre-simulation or actual) consumption deficit than households that escaped poverty upon additional employment. On average, the simulated increase in consumption expenditures was lower than the increase in household earnings for recipient household that remained poor. This is not an unrealistic result since poor households may spend some of the additional income on needs that are not reflected in the poverty basket (e.g. paying down debt or purchasing a much-needed durable good). In any case, the size of the discrepancy was not that large. Assuming that the entire increase in household earnings goes toward increased consumption, reduced the proportion of recipient households that remained poor from 59 percent to 49 percent.

Table 8 Poverty of households, actual and simulated

		Poverty rate	Post-simulation			
						ercent of
	Official		L	MTCP	actual poor)	
	Actual	Simulation	Actual	Simulation	Official	LIMTCP
Turkey	24	11	35	25	43	73
Urban	17	4	26	17	24	65
Rural	39	23	51	41	59	80

The differences in the proportion of households that received jobs in the assignment helps explain the larger proportion of households that escaped consumption poverty in the urban as compared to rural areas. In addition, the greater initial (i.e., pre-simulation) consumption deficits and lower earnings in the rural areas also contributed to the urban and rural disparity in the rate of exit from poverty. Our estimates showed that 65 and 80 percent, respectively, of the consumption-poor households in urban and rural areas would remain poor in spite of the additional employment procured by them. For the nation as a whole, we estimate that, under the labor market arrangements prevalent in 2006, 73 percent would continue to be poor even if all employable adults were employed. The official measure would indicate a much higher rate of exit from poverty than our measure, reflecting the discrepancy between the two measures in gauging the poverty among job recipients that we discussed earlier (Figure 4). Since the main source of the discrepancy between the two measures stems from the neglect of time deficits in the official measure, let us turn to examine the changes in the joint distribution of time and consumption poverty status.

Table 9 Distribution of households according to time and consumption poverty status, actual and simulated A. Rural households

	Distribution of households according to time and consumption poverty, after simulation						
Distribution of households according to time and consumption poverty	Time and consumption-poor	Time- nonpoor and consumption- poor	Time-poor and consumption- nonpoor	Time- nonpoor and consumption- nonpoor	Total		
Time and consumption-poor	31.6%	0.2%	3.7%	0.5%	35.9%		
Time-nonpoor and consumption-poor	5.9%	3.1%	4.6%	1.6%	15.2%		
Time-poor and consumption-nonpoor			19.7%		19.7%		
Time-nonpoor and consumption- nonpoor				29.2%	29.2%		

B. Urban households

	Distribution of households according to time and consumption poverty, after simulation					
	Time and	Time- nonpoor and	Time-poor and	Time- nonpoor and	T	
Distribution of households according to time and consumption poverty	consumption -poor	consumption -poor	consumption -nonpoor	consumption -nonpoor	Total	
Time and consumption-poor	11.1%	0.0%	3.9%	0.3%	15.2%	
Time-nonpoor and consumption-poor	4.7%	1.0%	3.3%	1.5%	10.4%	
Time-poor and consumption-nonpoor			26.4%		26.4%	
Time-nonpoor and consumption- nonpoor				47.9%	47.9%	
Total	15.8%	1.0%	33.6%	49.7%	100.0%	

Starting with the rural areas, the percentage of rural households that were time and consumption poor actually *rose* as a result of the simulation, from 35.9 percent to 37.5 percent (Table 9, Panel A). The percentage of rural households that were consumption-poor but not time-poor was greatly reduced, from 15.2 percent to 3.3 percent. So overall, most of the movement was from this group, either out of consumption poverty or not, but mostly into time poverty. Of those households that are consumption and time poor according to our measure, 20 percent (10 percent of rural households) escaped consumption poverty, but only 4 percent (2.1 percent of all rural households) also escaped time poverty. Very few rural households that were time and consumption poor escaped time poverty but not consumption poverty. Of those rural households that were consumption poor but not time poor, 41 percent (6.2 percent of rural households) escaped consumption poverty. Of those, 30 percent (4.6 percent of all rural households) fell into time poverty. The largest group, 39 percent (5.9 percent of rural households) fell into time poverty without escaping consumption poverty.

Looking next at the simulated experience of urban households (see Table 9, Panel B), we see patterns that are generally similar to those of rural households. The percentage of urban households in both time and consumption poverty increased slightly from 15.2 percent to 15.8 percent. Of the 15.2 percent of urban households originally time and consumption poor, 11.1 percent remained so after the simulation. Most of the households from this group escaping consumption poverty—3.9 percent (25 percent of all time and consumption poor urban households)—did not escape time poverty. Only 2 percent of urban time and consumption poor households escaped both time and income poverty in the simulation. Of the 10 percent of urban households that were consumption but not time poor in 2006, the largest share—

4.7 percent (45 percent of the total)—fell into time poverty without escaping time poverty. The next largest group—3.3 percent (31 percent of urban consumption poor, time nonpoor households)— escaped consumption poverty only to fall into time poverty. Of the rest, 1 percent became both time and consumption poor and 1.5 percent escaped both time and consumption poverty.

5 Policy considerations

At a very broad level, the size of the discrepancy between official and LIMTCP rates points to the necessity of devoting more resources to poverty alleviation. We believe that it should also warrant a reconsideration of the strategy of economic development pursued in Turkey, since the extent of poverty that is revealed to exist when time deficits are accounted for, especially in the rural areas, is unlikely to be ameliorated via social assistance programs, irrespective of how well-designed they are. Consumption-poor individuals and households encountered higher rates of time poverty than the consumption-nonpoor. Given that other types of social and economic disadvantages tend to accompany consumption poverty, it is quite likely that the negative effects of time poverty will affect the consumption-poor disproportionately compared to the consumption-nonpoor. The interlocking of time and consumption deficits suggest the need for an integrated approach addressing multiple domains.

We discuss below the policy implications of our findings in providing employment opportunities, achieving decent work conditions, widespread public provisioning of social care services, and social policies to achieve poverty reduction in terms of both consumption and time. Inequalities and inadequacies along these axes shape the contours and depth of consumption and time poverty. Combating poverty requires designing effective policies that target the combined effect of disadvantages in multiple domains.

5.1 Expanding employment opportunities for women

It is well known that there is a notable gender gap in the employment rates of men and women in Turkey: among persons between the ages of 18 and 70 years, 73 percent of urban and 80 percent of rural men were employed compared to 17 and 43 percent of their female counterparts. Compared to countries with similar levels of per capita GDP, the female labor force participation rate in Turkey is markedly low. Another such anomaly is the high proportion (42 percent) of employed women that work without pay. The overwhelming bulk of all female unpaid family workers live in the rural areas, which is intimately linked to the higher rates of poverty in rural Turkey.

Over the recent years promoting women's employment in Turkey has become a key priority for policymakers, as we noted in the introduction.¹⁵ To this end, several action plans and programs have been prepared. They focus mainly on increasing women's education levels, upgrading their skills by training, "flexibilization" of the labor market, and promoting entrepreneurship¹⁶, but they neglect to establish links with poverty reduction. However, a great deal of recent research has highlighted the potential of employment-centered poverty policies to achieve inclusive economic growth.

Women's conditions of employment hold the key to the impact that employment growth is likely to have on poverty alleviation because of the simple fact that the vast majority of employable adults in poor households are women. Our simulation exercise constructed a scenario in which every nonemployed but employable adult gains paid employment under the current labor market conditions and care provisioning arrangements. A substantial minority—about 40 percent—of households with such individuals are likely to escape consumption poverty. However, this reduction comes at the cost of time poverty: a majority of the newly employed who escaped poverty became time-poor. More importantly, 60 percent of households with job recipients remained poor. We found that a key factor constraining their transition out of poverty was the high time deficits faced by the newly employed women: on average, the monetized value of their time deficits exceeded their earnings. Time deficits arise due to inequitable intrahousehold division of labor, inadequate social provisioning of care, and long hours on the job. They become impoverishing when coupled with the earnings disadvantage faced by poor women.

Inequality in educational attainment is a main factor behind the lower earnings for women. Women with higher educational attainment are, everything else equal, also more likely to enter the labor force.

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¹⁵ Several pieces of legislation and action plans have been introduced in order to undertake this mission. See KEIG (2013) for legislation introduced by the General Directorate of Women Status and Issues (KSGM) that prepared the Gender Equality National Action Plan (2008-2010). The Prime Ministerial Circular no. 2010/14 on "Increasing Women's Employment and Achieving Equal Opportunity" was issued on the 25th of May in 2010, an important step undertaken to implement this action plan. The main items in the ministerial circular were: forming a National Monitoring and Coordination Committee on Employment of Women; provisioning of vocational training for women in particular sectors; the issue of "equality of opportunity for women and men" to access in-service training programs; monitoring and enforcing child care and day care center obligations; and prioritizing projects on the improvement of social involvement for women who are subject to violence and single women who are divorced or whose husbands have died.

¹⁶ For a comprehensive discussion of the National Employment Strategy draft for women and the young, see Toksöz (2012).

Measures of women's education are given a priority in the policy documents and effective policies are needed on this issue. However, low labor force participation of women in Turkey cannot be explained solely by the gender gap in educational attainment; sharp differences exist among women with the same educational attainment, depending on their marital status (married women participate less, especially at lower levels of educational attainment, see ilkkaracan 2010). Furthermore, entry into the labor force obviously does not guarantee employment. In fact, there is a positive correlation between the female unemployment rate and educational attainment in Turkey. Any education policy that is not complemented with an employment policy would not serve to empower women or men, especially those in poor households.

Gender job segregation is also an important factor behind women's low earnings. Implementation of training programs could play a crucial role in this respect, but they should be designed to specifically adress the issue. Vocational training programs implemented by the Employment Agency (ISKUR) have had a rather unsatisfactory performance on this front, even though the majority of the attendents in training were women. Women are primarily directed to vocational training in hairdressing, needlework, and caring for the sick and elderly—typically considered as "women's jobs" (KEİG, 2012). The ISKUR program has also been characterized by rather low placement ratios and a low likelihood of permanent jobs. The current public works program is also, by design, not providing permanent jobs, and does not include any specific measures to transform gender biased structures (KEİG, 2012). Other programs aimed at promoting women's employment have also been characterized by similar failures, suggesting the need for a comprehensive reform on this front.

Flexible work arrangements are often considered and legitimized as a means to support women's employment. Along these lines, the National Employment Strategy document proposed extending flexible work and providing greater employment security to "flexible" workers—often defined to encompass workers in a variety of work arrangements, including part-time work, subcontracted temporary work, etc. However, our findings cast skepticism on the desirability of such an employment expansion strategy as a means to alleviate poverty. The majority of casual workers (60 percent) are

¹⁷ Women are almost absent in training courses on manufacturing, machinery, and mechanical work (Yücel 2013). As another example, the Skill's 10 Project, introduced with coordination between employers and Specialized Vocational Training Centers (UMEM), provided training courses that were open more to male-dominated fields like machine operating and car repair. Unlike ISKUR's vocational training, 7,856 women compared to 19,453 men attended these courses.

consumption-poor by the LIMTCP measure—reflecting the earnings disadvantage faced by this group of workers.

Our results have some implications for the other main item in the National Employment Strategy—supporting women's entrepreneurship. Microcredit schemes and training programs have been introduced, particularly for the people in poverty who are identified as lacking access to financial credit. The National Gender Equality Action Plan (2008-2013) emphasizes microcredit schemes to address women's poverty. Supporting women's entrepreneurship is also mentioned as a target by the National Action Plan (2012-2016) prepared by the Ministry of Food, Agriculture and Livestock, which aims to support women's empowerment in rural Turkey. In order to combat rural poverty, the employment strategies highlighted in these documents need to be designed to account for the long hours that women tend to spend sustaining their homes. Our results reveal that once time deficits were taken into account, the poverty rate of self-employed women was 56 percent. Self-employment for women may not alleviate poverty to a substantial extent and may carry a considerable penalty from the impoverishing effects of time poverty.

5.2 Lower hours of employment and higher earnings

Our findings suggest that long hours of employment are the main proximate cause of time deficits. A recent wellbeing survey conducted among the 35 OECD countries showed that Turkey is by far the country with the highest proportion (50 percent) of employees working long hours (50 hours or more per week), with nearly a fifth of employees working even longer (61 hours or more) (OECD 2013). In our sample, time poverty was almost universal among those working 61 hours or more, and as high as 74 percent among women working 50 to 60 hours per week. Enforcing compliance to the legal maximum limit of 45 hours is important in alleviating time deficits. Lowering the limit may enable working families to meet their minimum household production needs and help increase the employment rate in Turkey, which is currently the lowest (48 percent) among the OECD countries (66 percent on average). However, we found that the incidence of time poverty is higher among employed women than men even after we control for their hours of employment, which reflects the higher responsibility that women face regarding meeting household production needs. As much as 37 percent of women working fewer than 35 hours per week were time-poor, indicating that time deficits can be potentially impoverishing even for part-time workers and need to be addressed in policies aimed at regulating working hours.

Low earnings coupled with long hours on the job are among the underlying causes of consumption and time-poverty in Turkey. Increasing the minimum wage rates to allow working families to purchase the poverty consumption basket is absolutely essential when we consider the fact that, in our sample, 30 percent of all poor households consist of households in which all adults are employed and households with employed heads made as much as 80 percent of poor households. The recently announced minimum wage level for 2014 is 846 TL, which is only 70 percent of the level proposed by TUİK. This minimum wage is even lower than the complete poverty line for a household with two adults and two children, set at 896 TL for the year 2010. Increasing the minimum wage would also influence the amount of social assistance, as these items are usually set below the minimum wage level. The higher wage rates would enable the individuals to either lower their hours of employment or to increase the purchase of market substitutes to make up for time deficits.

Accounting for the costs of market substitutes that time-poor, low-wage workers have to purchase to overcome time deficits should be incorporated in setting the minimum wage. In the absence of such measures, employment of the individual can impose a drain on family resources, i.e., on other sources of family income, or generate cutbacks on the purchases of essential consumption goods. The ratio of the monetized value of the time deficit to earnings is a simple metric to judge whether time deficits can be impoverishing for time-poor individuals and their households. We found that the average time-poor worker in the bottom quintile of the earnings distribution did not earn enough to offset their time deficit. Women fared especially poorly in terms of the ratio. Even the average female worker with "middle-class" earnings (i.e., those in the middle quintile) would have to spend almost 45 percent of her earnings on purchasing market substitutes to avoid time poverty. Women in the top quintile also had a typical value exceeding one fifth of their earnings—a rather substantial cut that would have to be incurred to avoid time poverty. Public service provisioning to alleviate time deficits for low earners can be an effective means to combat poverty.

5.3 Public provisioning of social care services as a support for employment

The hidden consumption-poor and the time-poor but consumption-nonpoor are groups for which social service support would be effective to relieve their time deficit and, hence, improve their quality of life. Public provisioning of services that substitute for household production can reduce the time poverty of these groups. Weak provisioning of social care services has also been identified as one of the binding constraints on equal employment opportunities for women in Turkey. Turkish enrolment rates of young

children in childcare and early education services are the lowest among the OECD countries. There is almost no service available for children between 0 and 3 years of age, while average enrolment in the OECD is close to 30 percent. For children over 3 years of age, preschool services are provided by the Ministry of National Education through both public and privately owned daycare centers. However, overall enrollment of 3-5 year olds in Turkey is only 24 percent, compared to the OECD average of 70 percent. The poor social provisioning of care forces families to provide most of the care themselves, thus worsening time deficits and/or constraining labor force participation.

Universal and widespread public provisioning of social services plays a critical role for equal accessibility and equal opportunity. It is especially important for the people living under poverty who typically cannot afford to buy care services of an acceptable quality. Alternative models under discussion are more focused on urban areas, such as plans for setting up day care centers in industrial zones. However, our results regarding higher time poverty (as well as consumption poverty) in the rural areas suggest that an urban bias should be avoided. Access to these services should be accepted as a right—a social right realized by all children, elderly, and dependent citizens. Services need to be diversified in order to address different regional needs, household types, and employment conditions. ¹⁸

5.4 Active social assistance

Employment alone is not able to lift all households out of poverty. For those households who are in the hard-core poor group, in-kind or cash transfers are needed in the absence of dramatic and unlikely changes in earnings. The difference between the average LIMTCP and official deficits indicate that the official measure grossly understates the unmet consumption needs of the poor population. From a practical standpoint, this suggests that taking time deficits into account while formulating poverty alleviation programs will alter the focus of both the coverage (including the "hidden poor" in the target population) and the benefit levels (including the time-adjusted consumption deficits where appropriate). However, Uçar (2011) has reported that the recipients find direct assistance amounts to be very low and inadequate. The majority of them complain about the irregularity of the payments as well. Recipients also perceive these services as a favor rather than a right.

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¹⁸ KEIG (2013) has put forward a number of proposals that needs to be seriously considered by policymakers. They pertain, inter alia, to provisioning of care for children and dependent adults as well as the training of care professionals.

Total social assistance expenditures constituted only 1.43 percent of GDP in 2012. Turkey still lacks detailed information about the demographic characteristics of the recipients of social assistance as well as reliable detailed data on program expenditures. An important issue that has been discussed widely in the literature is the potential effects of social assistance programs on labor supply. The current orientation of the reform of the social assistance system puts a great deal of emphasis on "moving people to work" or active labor market policies. Their design is based upon participation conditionality: i.e., in order to receive assistance the recipient has to participate in vocational training, job search activities, public services, etc. Active social assistance proposals suggest coordination between employment agencies and social assistance departments and increase employment opportunities with specific services for the recipients or other eligible people in their household. Active social assistance not only helps reduce poverty but also moves toward eliminating social exclusion.

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¹⁹ A myriad of factors, including the lack of cooperation between different agencies, bureaucratic ineptitude, lack of accountability, non-transparency, and political maneuvering, have been cited as contributing to this situation (see, inter alia, Buğra and Adar, 2007; and, Yentürk, 2013).

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