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HOW POOR IS TURKEY? AND WHAT CAN BE DONE ABOUT IT?

AJIT ZACHARIAS, THOMAS MASTERSON, and EMEL MEMIŞ

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Preface

Gauging the severity of poverty in a given country requires a reasonably comprehensive measurement of whether individuals and households are surpassing some basic threshold of material well-being. This would seem to be an obvious point, and yet, in most cases, our official poverty metrics fail that test, often due to a crucial omission. In this policy brief, Ajit Zacharias, Thomas Masterson, and Emel Memiş present an alternative measure of poverty for Turkey and lay out the policy lessons that follow. Their research reveals that the number of people living in poverty and the severity of their deprivation have been significantly underestimated. This report is part of an ongoing Levy Institute project on time poverty (the Levy Institute Measure of Time and Income Poverty), which has produced research on Latin America, Korea, and now Turkey, with the aim of extending this approach to other countries.

The distinguishing feature of the Levy Institute Measure of Time and Consumption Poverty (LIMTCP) for Turkey is that, along with consumption expenditures, LIMTCP takes into account the time required to carry out household production activities necessary to maintaining a basic standard of living. Households hovering around the official consumption poverty line that lack sufficient time to care for their children or perform basic household maintenance—or the money to buy substitutes for this necessary labor—are deprived of something crucial to a minimally decent life. Yet their unmet needs are ignored by the official measures; their poverty is “hidden.”

While 24 percent of Turkish households were officially classified as poor in 2006, this rose to 35 percent using the LIMTCP measure. The difference between these two poverty rates amounts to 7.6 million persons (or 1.8 million households) whose poverty was overlooked in the official count. Moreover, among those who were considered poor according to the official measure, the LIMTCP shows that their unmet consumption needs were 2.4 times greater than officially estimated.

As the authors explain, the lesson of the LIMTCP is not just that the poor in Turkey are more numerous and worse off than we thought, but that many of the conventional instruments proposed to alleviate their condition are bound to fail. The problem, again, is a neglect of the impact of time deficits—of insufficient time for

basic household production (or income to purchase market substitutes). Of late, several Turkish policy programs have coalesced around the goal of increasing female labor force participation—which is the lowest among OECD nations—as a means of boosting economic growth. The proposals currently being considered include increasing women’s education levels, expanding job training, and encouraging more “flexible” work arrangements. This policy brief demonstrates that we need to do far more than this if we are going to effectively make a dent in the poverty rate.

The authors devised a simulation to measure the likely effects on time and consumption poverty of giving all employable adults not currently employed a paid job. Under such hypothetical circumstances, the *official* poverty rate for households with job recipients would be 17 percent. However, the official rate ignores time deficits. For the majority of job recipients—largely women—the amount of money earned through new employment would not cover the amount needed to buy substitutes for displaced household production. Using the LIMTCP, the poverty rate for households with newly employed members would be *59 percent*—a drastic discrepancy that demands the attention of policymakers.

Given the prevailing labor market conditions, availability of care services, and distribution of household labor in Turkey, simply increasing employment will be insufficient. Due to time deficits, the large majority (73 percent) of consumption-poor households in Turkey would remain poor even if all employable adults were employed. Expanding access to paid employment is crucial, but the authors’ research indicates that, to make a credible attempt at fighting poverty in Turkey, we need to consider supplementary actions in multiple policy domains, including: (1) limiting or reducing hours of employment in order to minimize time deficits; (2) raising wages, particularly for women, in order to increase the ratio of earnings to the monetized value of time deficits; (3) expanding access to social care services; and (4) designing social assistance programs to account for the greater depth and breadth of poverty as revealed by the LIMTCP.

Dimitri B. Papadimitriou, *President*
May 2014

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 and the Economy program at the Levy Institute, Rania Antonopoulos, for the valuable support she provided to the research conducted as part of this project. In addition, we would like to convey our thanks to Özlem Sarıca and Mehmet Ali Karada of the Turkish Statistical Institute, who helped us gather the necessary information about the datasets we used. We would also like to thank İpek İlkkaracan for her insightful comments, and A. Mert Yakut for his excellent research assistance.

Introduction

Standard measurements of poverty, including the official measure used for Turkey, 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 poverty threshold would be an understatement of the requirements of that household for attaining a minimum standard of living. In addition, time deficits themselves constitute a form of deprivation, especially when they occur in combination with other types of social and economic disadvantages faced by those on the bottom rungs of the economic ladder.

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 the 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 consumption expenditures *and* the household production time needed to achieve a minimum living standard. 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. We do not present a set of detailed policy proposals for reducing poverty as measured by the LIMTCP. Rather, in addition to highlighting the official underestimation of the breadth and depth of poverty in Turkey, this policy brief provides a framework for evaluating and designing policy strategies and identifies the limitations of the Turkish government’s current initiatives. General recommendations for supplementing these initiatives across multiple policy domains are given, with a focus on addressing the blind spots created by the neglect of time deficits.

The onset of the 2008–09 economic crisis raised the priority of combating poverty in policy agendas across the globe, including in Turkey. Prior to the crisis, during the early to mid-2000s, the economy experienced relatively high rates of real GDP

growth, but the more recent period has been described as one of “jobless growth,” with growth in employment lagging behind output growth by a substantial margin. Turkey’s low employment rate (at 48 percent, currently the lowest among OECD countries, which average 66 percent), its exceptionally low female labor force participation rate (31 percent, far lower than the OECD average), and its high levels of income inequality and economic vulnerability—all of which are closely linked with poverty—appear to be the structural and persistent aspects of the recent phase of economic development in Turkey.

Until recently, income inequality and poverty had not been high on the policy agenda in Turkey. Partly due to the presumption that economic expansion would reinforce poverty reduction, policies have focused almost exclusively on higher growth. In fact, this presumption appears to lie behind the initiatives in recent years to promote women’s employment as a contributor to higher economic growth. The draft document of the Turkish Ministry of Labor and Social Security’s National Employment Strategy for 2012–23 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 an untapped resource that can be mobilized to help fuel economic growth, as exemplified by the Ministry of Family and Social Policies’ adoption in 2013 of the motto “Women’s Employment, the New Dynamics of the Turkish Economy.”

In the context of the current policy agenda, our findings using 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 attention to the provision of adequate social assistance and social care services. The latter point is crucial. An approach to poverty alleviation that is focused on employment alone will fall short. Our dual measure of time and consumption poverty reveals that, for most, securing paid employment would not represent a ticket out of poverty: in 2006, given prevailing labor market arrangements, almost 75 percent of all consumption-poor households would have remained poor even if all employable adults in the household had secured paid employment. Employment promotion needs to be combined with greater access to social care services, expanded social assistance coverage and benefit levels, increased minimum wages, and the enforcement (or reduction) of limits on working hours.

1. Methodology

Our model builds on earlier models that 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 theory of time allocation. (A detailed comparison of the alternative models is provided in Zacharias 2011.)

In the first step, we identified a “poverty-level time requirement” for household production.¹ This is defined as the amount of time that a household with consumption expenditures around the official poverty line needs to spend on household production to survive.² 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 began 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-generating activities, household production, personal maintenance, nonsubstitutable household production, and everything else (e.g., volunteer work, watching TV, and so on). We next defined the committed time of the individual as the sum of (1) the *required* weekly hours of personal maintenance³ and nonsubstitutable household production⁴; (2) the *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 were determined, we proceeded to check whether time deficits were poverty inducing. To do this, we modified the official threshold by adding the monetized value of the household time deficit. We assumed that the hourly value of the time deficit was 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 line⁵ and the poverty line as adjusted for the value of time deficits

were compared against a measure of household consumption expenditures to assign poverty status. All estimates from our study are for the year 2006.⁶

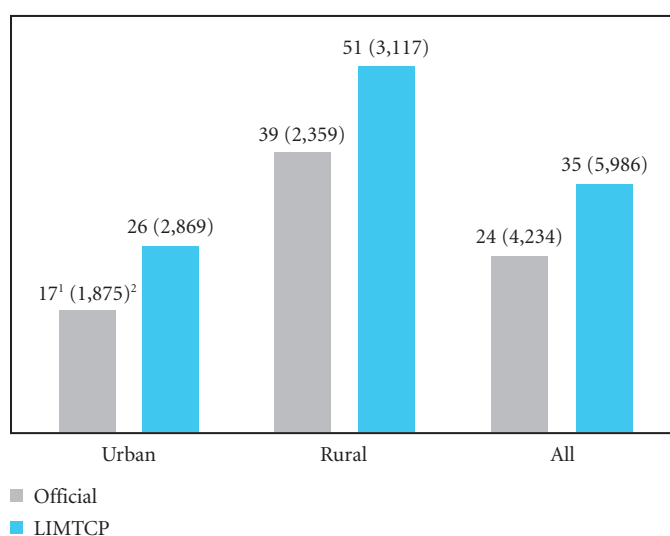
2. Time and Consumption Poverty in Turkey: Key Findings

2.1 Hidden poverty

Revising the poverty line to account for time deficits would have no impact on the measured poverty rate if none of the official nonpoor were prone to time poverty. However, this is far from the truth. Almost 45 percent of households that were officially nonpoor in 2006 were time-poor. Out of these, 30 percent had consumption expenditures that were below the LIMTCP poverty line (the official threshold adjusted for the monetized value of the time deficit). The combination of these two factors produced a substantial gap between the official and LIMTCP poverty rates for households and individuals (Figure 1 and Table 1).

Taking time deficits into account resulted in an overall 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. We refer to these households as the *hidden poor*. For urban areas, the official poverty rate

Figure 1 Incidence of Consumption Poverty: Official vs. LIMTCP



¹ Percentage of all households

² Number of poor households (in thousands)

Source: Authors' calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

Table 1 Poverty of individuals: Official vs. LIMTCP

	Rate (in percent)			Number (in 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

Source: Authors' calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

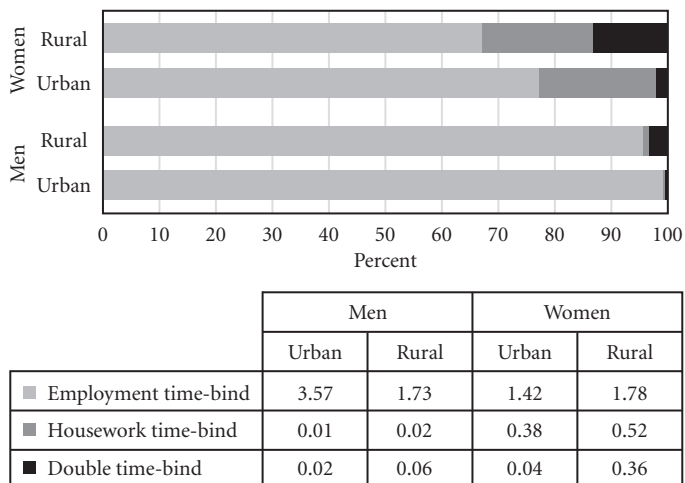
was 17 percent, whereas the LIMTCP poverty rate stood at 26 percent, with one million additional households found to be in poverty. In rural areas, an additional 800,000 households were found to be poor, representing a poverty rate of 51 percent, compared to the official rate of 39 percent. The number 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.

Taking time deficits into account also affects the measured size of unmet consumption needs. This “consumption deficit” is calculated by subtracting actual consumption expenditures from the poverty line. A little over half of the officially poor households suffered from time deficits, and we found that their actual consumption deficit was 2.4 times larger than the official estimate. Thus the official measure grossly understates these households’ unmet consumption needs. Our estimates for all poor (that is, officially poor plus hidden poor) households showed that the average LIMTCP deficit was 1.6 and 1.8 times higher than the official deficit in urban and rural areas, respectively.

2.2 The extent and type of time poverty

The most common type of time deficit occurs because hours of employment exceed the time available after the required hours for personal care and household production are set aside

Figure 2 Type of Time Poverty, by Sex and Location (percent distribution and the number of time-poor persons, in millions)



Source: Authors' calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

(“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. The housework time-bind can be the result of a highly inequitable division of household work or inordinately high demands of household production, or a combination of both. Finally, some individuals suffer from both types of time poverty (“double time-bind”).

While the employment time-bind is the predominant type of time poverty, the 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 2). 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 men or urban women. Approximately 14 percent of rural women were engaged in paid work activity even though they were time-poor as a result of their high levels of required household production.

Since the predominant source of time deficits arises in the form of the 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 2). 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 among the nonpoor are similar for men and women, and among the poor, the time poverty rate for women is actually higher than for men. Third, consumption-poor persons have higher rates of time poverty than consumption-nonpoor persons. Both in rural and urban areas, poor men and poor women have markedly higher time poverty rates than their nonpoor counterparts.

2.3 Hours of employment, time deficits, and earnings

The overwhelming bulk (about 90 percent) of time-poor persons is employed. As one would expect, the rates of time poverty increase for both men and women as the weekly hours of

employment rise (Figure 3). But the gender gap is visible in every interval of hours worked, except at the top interval (61 hours or more), where time poverty is practically universal. 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 (37 percent of men versus 70 percent of women), among full-time workers too.⁷ 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 the rate among men.

One 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 face 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 4). Average hours of household production

Table 2 Time Poverty Rates of Adults, by Sex and Poverty Status

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

Source: Authors' calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

Figure 3 Incidence of Time Poverty, by Weekly Hours of Employment and Sex (in percent)



Source: Authors' calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

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

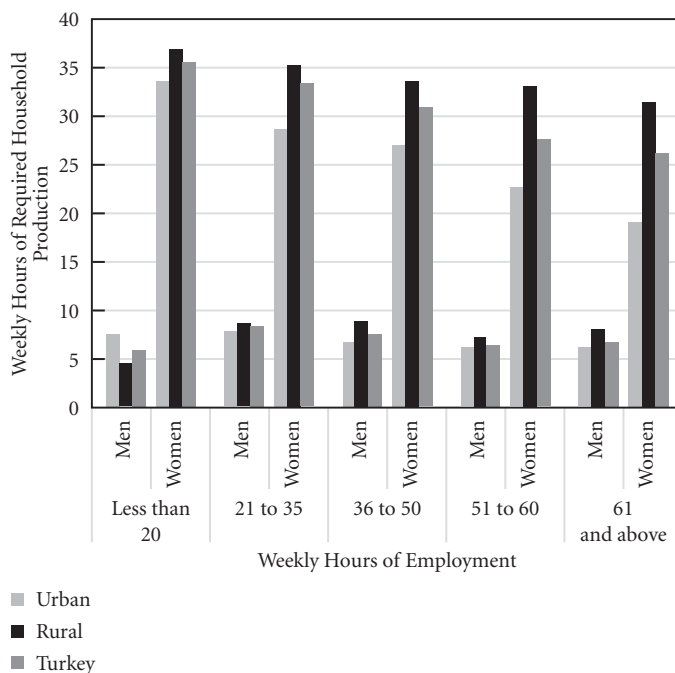
The impact that time deficits may have on the consumption poverty status of low-income earners and their families can be seen by considering the ratio of the monetized value of the time deficit to earnings, expressed in percentage terms. Strikingly, we found that in the bottom earnings quintile the median value of the ratio for rural and urban women, as well as for urban men, was *greater than 100 percent* (Table 3). That is, the average worker in 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 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 in order 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.

2.4 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: in 2006, the year covered by our study, 42 percent of all employed women held this status, compared to only 5 percent of all employed men. Over 90 percent of all female unpaid family workers lived in rural areas—a reflection of the fact that their employment is most likely to be in the family farm or small family enterprise.⁸ 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 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).

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 earners, and unpaid family workers (Table 4). However, the accounting of time deficits produces some interesting changes in the gender disparity in poverty rates.

Figure 4 Weekly Hours of Required Household Production, by Sex and Weekly Hours of Employment



Source: Authors’ calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

Table 3 Median Values of the Ratio of the Monetized Value of Time Deficit to Earnings, by Sex and Earnings Quintile (in percent)

	Urban Men	Urban Women	Rural Men	Rural Women
Bottom	116	234	64	195
Second	43	73	26	80
Middle	28	45	16	44
Fourth	21	40	14	31
Top	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.

Source: Authors’ calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

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. The higher incidence of hidden poverty among employed women—21 percent of all employed women versus 12 percent of all employed men—reflects the fact that a larger proportion of households with employed women are likely to have time deficits large enough to put them into consumption poverty by our measure. Not surprisingly, therefore, we found that the gender gap in time poverty was the largest among regular wage/salary earners (62 percent 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.

2.5 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 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.

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.⁹ As can be seen from Table 5 (the column labeled “Share”), the type of household headed by a married male with a nonemployed spouse (male-breadwinner household) constituted a clear majority (67 percent) of all employed households. The second most predominant type (26 percent) is the household in which both the head and the 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 relative 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 percent versus 44 percent). Households headed by a single female or a single male 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 a 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 on 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 rates 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 (about 30 percent) poverty. Households headed by a single female and households with a

Table 4 Poverty Rates of Employed Persons, by Employment Status (in percent): Official vs. LIMTCP

All	Official	LIMTCP	Hidden Poor
Wage/salary earner	14	26	12
Casual wage earner	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 wage earner	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 wage earner	32	56	23
Self-employed	37	56	18
Unpaid family worker	47	69	23
All women	31	53	21

Source: Authors’ calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

Table 5 Household Structure and Rates of Time and Consumption Poverty (in percent)

	Share	Time Poverty	Consumption 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	100.0	56	25	38	13

Source: Authors' calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

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

2.6 Employment simulation

We ran an employment simulation 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 became employed for pay. Our simulation model assigns each such individual a job and earnings that they are most likely to obtain, given their characteristics (e.g., age, sex, and educational attainment). This required us to subsequently reassign household production hours for all individuals in households with job recipients, since 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 needed to translate the estimated change in household income as a result of the added earnings into the expected change in household consumption expenditures.¹¹

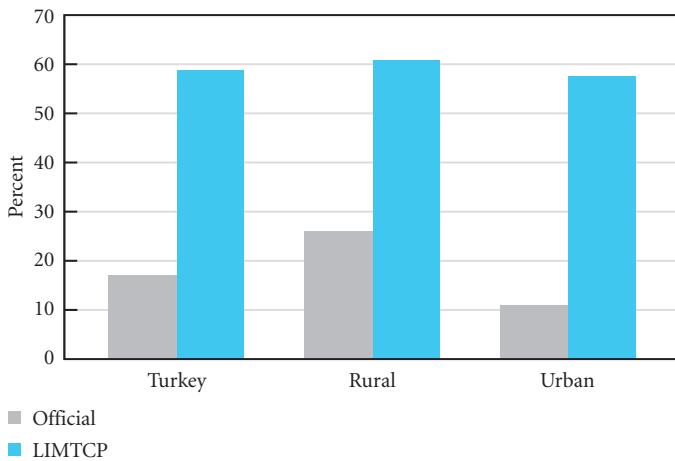
The results of this simulation should not be understood as an estimate of the effect of a comprehensive set of full-employment policies, but rather as an *aggregation* of the impact on individual consumption-poor households of all the nonemployed adults in those households receiving the paid jobs they are most likely to receive given actual labor market conditions prevailing in Turkey in 2006.

Changes in employment status 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 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 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 urban areas and 84 percent in rural areas. This is a reflection of the fact that the overwhelming bulk of consumption-poor men are already employed—77 percent in urban areas and 84 percent in 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 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.

In spite of these limitations faced by the newly employed, our simulation suggests that a substantial proportion of con-

Figure 5 Postsimulation Poverty of Households with Job Recipients (in percent): Official vs. LIMTCP



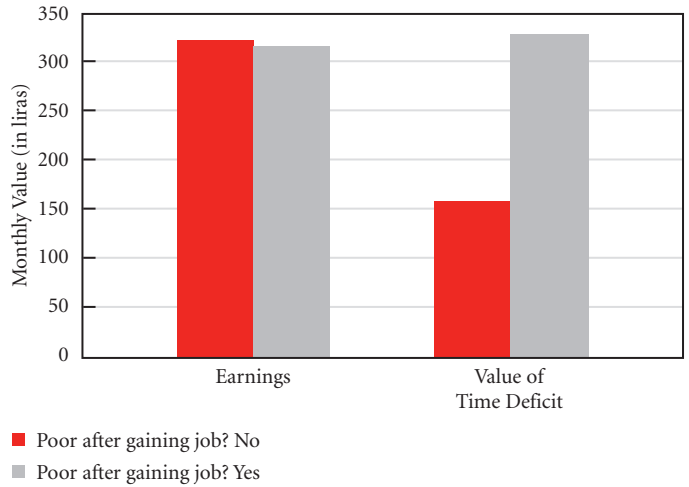
Source: Authors' calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

sumption-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 contrast to the LIMTCP poverty rate of 59 percent (Figure 5). The huge difference between the two measures stems from the fact that the newly employed consist mostly of women. As we reported (Table 2), 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 is clear that the majority of households with job recipients—rather than a sizable minority as indicated by the official measure—would remain consumption-poor in both urban and rural areas.

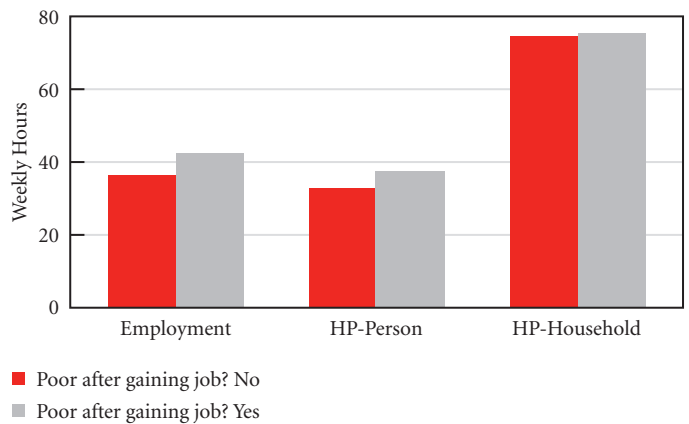
The role of time deficits in constraining transition out of poverty can be seen clearly by comparing the profiles of female job recipients who made the transition to those who did not in our simulation. In terms of average earnings, the women in both groups were very similar, but women who did not transition out of poverty upon employment suffered from notably higher time deficits (Figure 6, 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 did not

Figure 6 Earnings, Value of Time Deficit, and Time Allocation of Female Job Recipients (average values)

6A. Earnings and Time Deficit



6B. Hours of Employment and Household Production



HP-Person = individual's required hours of household production

HP-Household = household's threshold hours of household production

Notes: (6a) Earnings refer to the monthly earnings assigned to job recipients in the simulation. Value of time deficit is the monetized monthly value of postsimulation time deficits. (6b) Hours of employment and household production are weekly values.

Source: Authors' calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

Table 6 Poverty of Households, Actual and Simulated

	Poverty Rate (in percent)				Postsimulation Poor (percent of actual poor)	
	Official		LIMTCP		Official	LIMTCP
	Actual	Simulation	Actual	Simulation		
Turkey	24	11	35	25	43	73
Urban	17	4	26	17	24	65
Rural	39	23	51	41	59	80

Source: Authors' calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

occur because they lived in households with higher thresholds of household production than women who made the transition out of poverty (Figure 6, 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.

Households with job recipients that remain consumption-poor belong to the group that we describe as “hard-core poor.” This group 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 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 in rural areas (81 percent versus 52 percent).

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 urban as compared to rural areas. In addition, the greater initial (i.e., presimulation) consumption deficits and lower earnings in rural areas also contributed to the urban–rural disparity in the rate of exit from poverty (Table 6). Our estimates showed that 65 per-

cent 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 5). 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 an examination of the changes in the joint distribution of time and consumption poverty status.

Starting with rural areas, the percentage of households that were time- and consumption-poor actually *rose* as a result of the simulation, from 35.9 percent to 37.5 percent (Table 7, 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 were 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 7, 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 that were 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 (or 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

Table 7 Distribution of Households According to Time and Consumption Poverty Status, Actual and Simulated (in percent)

A. Rural Households

Distribution of households according to time and consumption poverty	Distribution of households according to time and consumption poverty, postsimulation				
	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
Total	37.5	3.3	28.0	31.2	100.0

B. Urban Households

Distribution of households according to time and consumption poverty	Distribution of households according to time and consumption poverty, postsimulation				
	Time- and consumption-poor	Time-nonpoor and consumption-poor	Time-poor and consumption-nonpoor	Time-nonpoor and 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

Source: Authors' calculations based on the statistically matched HBA-ZKA file (Masterson 2013)

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 consumption 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.

3. Policy Considerations

The high rates of LIMTCP poverty point to the necessity of devoting more resources to poverty alleviation. They also war-

rant 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 rural areas, is unlikely to be ameliorated in a sustainable manner via social assistance programs alone, 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.

We discuss below the policy implications of our findings for providing employment opportunities, achieving decent work conditions, establishing widespread public social care services, and instituting 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.

3.1 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, 73 percent of urban men and 80 percent of rural men were employed, compared to 17 percent 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, despite a recent rise,¹³ is markedly low. Another such anomaly is the high proportion (42 percent) of employed women that work without pay. The bulk of all female unpaid family workers live in rural areas, which is intimately linked to the higher rates of poverty in rural Turkey.

In recent years, promoting women's employment in Turkey has become a key priority for policymakers, as noted in the introduction. To this end, several action plans and programs have been prepared.¹⁴ These focus mainly on increasing women's education levels, upgrading their skills through training, "flexibilization" of the labor market, and promoting entrepreneurship,¹⁵ 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, for the simple fact that the vast majority of employable adults in poor households are women. In our simulation exercise we 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 important, 60 percent of households with job

recipients remained poor. We found that a key factor inhibiting 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 the 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 major factor behind the lower earnings for women. Women with higher educational attainment are, everything else equal, also more likely to enter the labor force. Measures to enhance women's education are given a priority in the policy documents, and effective policies are needed on this issue. However, the 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 level of education, depending on their marital status (married women participate less, especially at lower levels of educational attainment; see İlkkaracan 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 without a complementary 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 address the issue. The performance of vocational training programs implemented by the Turkish Public Employment Agency (ISKUR) has been rather unsatisfactory on this front, even though the majority of participants were women. Women are primarily directed to vocational training in hair-dressing, needlework, and caring for the sick and elderly—typically considered "women's jobs"¹⁶ (KEIG 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 also, by design, does not provide permanent jobs, nor does it include any specific measures to transform gender-biased structures (KEIG 2012). Other programs aimed at promoting women's employment have also been characterized by similar failures, suggesting the need for 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 (see Toksöz 2012) 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, and so on. However, our findings cast doubt on the desirability of such an employment expansion strategy as a means to alleviate poverty. The majority of casual workers (60 percent) are consumption-poor by the LIMTCP measure—reflecting the earnings disadvantage faced by this group of workers. A large portion of part-time women workers also suffer time deficits, which make their earnings insufficient to escape consumption poverty.

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 (2008–13) emphasizes microcredit schemes to address women's poverty. Supporting women's entrepreneurship is also mentioned as a target by the National Action Plan (2012–16) 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 it may carry a considerable penalty from the impoverishing effects of time poverty.

3.2 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 well-being survey conducted among the 34 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 all employees working even longer (61 hours or more) (OECD 2013a). 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 with 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. 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 greater 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 up as much as 80 percent of poor households. The recently announced minimum wage level for 2014 is 846 Turkish liras (TL), which is only 70 percent of the level proposed by the Turkish Statistical Institute (TUIK). This minimum wage is even lower than the official 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 increase their purchases 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 purchase 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: even

female workers earning enough to put them in the middle quintile would need to devote a substantial portion of those earnings (almost 45 percent) to 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 in order to evade time poverty. Public service provisioning to alleviate time deficits for low earners can be an effective means to combat poverty.

3.3 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 an effective way of relieving their time deficit and hence improving 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 enrollment rates of young children in child-care and early-education services are the lowest among the OECD countries (OECD 2013b). There is almost no service available for children up to three years of age, while average enrollment in the OECD is close to 30 percent. For children over three years of age, preschool services are provided by the Ministry of National Education through both public and privately owned day-care centers. However, overall enrollment of three- to five-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 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, the elderly, and dependent citizens. Services need to be diversified in order to address different regional needs, household types, and employment conditions.¹⁷

3.4 Social assistance

Employment alone is not able to lift all households out of poverty. For those households 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). Uçar (2011) has reported that recipients find direct-assistance amounts to be very low and inadequate, and the majority complain about the irregularity of the payments. Recipients also perceive these services as a favor rather than a right. Total social assistance expenditures constituted only 1.43 percent of GDP in 2012.¹⁸

The current orientation of the reform of the social assistance system puts a great deal of emphasis on active labor market policies. Their design is based upon participation conditionality: that is, in order to receive assistance, the recipient has to participate in vocational training, job search activities, public services, and the like. At the same time, some policies would have the opposite effect. Conditional cash transfers for care work in the household and the proposal to extend maternity leave to six years are counterproductive in terms of moving consumption-poor families out of poverty via increased female labor force participation. Instead, these policies would institutionalize the gendered nature of the current work-life balance in Turkey. In contrast to this approach, proposals that involve coordination between employment agencies and social assistance departments have to be developed. These should increase employment opportunities, with specific services for the recipients or other eligible people in their household. Social assistance programs that feature meaningful employment promotion would help reduce both poverty and social exclusion.

Conclusion

Addressing poverty in Turkey is, if anything, even more complex a task than one would be led to believe by using the official consumption poverty line as a guide. While employment can make an important contribution to alleviating conventionally measured consumption poverty, incorporating time deficits into our understanding of poverty makes it clear that employment alone is largely insufficient to address the issue. Employment opportunities need to be more flexible and rewarding in terms of earnings. Those not currently working for pay need additional education and training in order to be able to secure employment that pays well enough to make a real difference. And social provisioning of care services that can alleviate time deficits need to be in place in order for people to take advantage of employment opportunities.

Notes

1. A detailed description of the methodology, data sources, and findings can be found in the accompanying research project report (Zacharias, Masterson, and Memiş 2014).
2. In constructing the thresholds, we defined the reference group 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 time implicit in the poverty line, we excluded such households from our definition of the reference group. To calculate the thresholds, we divided the reference group into 24 subgroups based on location (urban versus rural), number of children (none, one, two, and three or more), and number of adults (one, two, and three or more). 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.
3. The minimum required weekly hours of personal maintenance were estimated as the sum of the minimum leisure hours required and the weekly average of the time spent on personal care, estimated for urban and rural areas separately using the Time Use Survey (ZKA 2006).
4. For a detailed explanation on the assumptions and estimation, see the accompanying research project report (Zacharias, Masterson, and Memiş 2014).
5. See Zacharias, Masterson, and Memiş (2014) for other adjustments made in the measurement of the official poverty line.
6. 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 are 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 Household Budget Survey (HBA 2006). Our strategy was to statistically match the HBA and ZKA surveys so that hours of household production could be imputed for each individual aged 15 years and older in the HBA survey (Masterson 2013). Time deficits were calculated for persons between the ages of 18 and 70 because they constitute the bulk of the labor force.
7. Part-time work is much more prevalent among women than men (35 percent versus 7 percent).
8. This concentration of women in rural, unpaid family work contributes to the lower coverage of social security among women workers compared to men. 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 their rights regarding termination of employment. Another factor contributing to women's vulnerability in employment derives from the types 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.
9. We have omitted from our table households headed by an employed female with a nonemployed spouse because such households made up less than 0.5 percent of all employed households.
10. It should be noted that household production thresholds will not change as a result of the simulation; only the apportionment of household production hours among persons in the household would.

11. 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. 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. Such an assumption reduces the risk of understating the impact of employment on poverty alleviation.
12. Among employed women between the ages of 18 and 70, a similar percentage (86 percent) in rural areas also had educational attainment of primary school or less. However, among urban employed women the proportion is markedly lower: 44 percent versus the recipients' 83 percent.
13. A significant portion of this rise comes from a change in statistical classification by TUIK in 2011. TUIK now counts female beneficiaries of any Ministry of Family and Social Policies program that pays women for their care services in the home (i.e., taking care of the elderly, the sick, and people with disabilities) as employed.
14. See KEIG (2013) for legislation introduced by the General Directorate on the Status of Women (KSGM), which prepared the Gender Equality National Action Plan (2008–10). Prime Ministerial Circular no. 2010/14, on “Increasing Women’s Employment and Achieving Equal Opportunity,” was issued May 25, 2010, and was an important step in implementing 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.
15. For a comprehensive discussion of the National Employment Strategy draft for women and the young, see Toksöz (2012).
16. Women are almost absent in training courses for manufacturing, machinery, and mechanical work (Yücel 2013). As another example, the Skills’ 10 Project, a coordinated effort 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, far fewer women than men (7,856 women versus 19,453 men) attended these courses.
17. KEIG (2013) has put forward a number of proposals that need 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.
18. Turkey still lacks detailed information about the demographic characteristics of the recipients of social assistance as well as reliable detailed data on program expenditures. Myriad factors—including the lack of cooperation between different agencies, bureaucratic ineptitude, lack of accountability, nontransparency, and political maneuvering—have been cited as contributing to this situation (see, inter alia, Buğra and Adar 2007; Yentürk 2013).

References

- Buğra, A., and S. Adar. 2007. *An Analysis of Social Protection Expenditures in Turkey in a Comparative Perspective*. Istanbul: Boğaziçi University Social Policy Forum.
- Harvey, A., and A. K. Mukhopadhyay. 2007. “When Twenty-Four Hours Is Not Enough: Time Poverty of Working Parents.” *Social Indicators Research* 82(1): 57–77.
- HBA (Household Budget Survey). 2006. Turkish Statistical Institute.
- İlkkaracan, İ. 2010. *Emek Piyasasında Toplumsal Cinsiyet Eşitliğine doğru: İş ve Aile Yaşamını Uzlaştırma Politikaları* (Toward Gender Equality in the Labor Market: Work and Family Life Reconciliation Policies). Istanbul: İTÜ BMT-KAUM, Kadının İnsan Hakları–Yeni Çözümler Derneği.
- KEIG (Women’s Labor and Employment Initiative Platform). 2012. *A Survey on the General Conditions of Women’s Employment in Turkey after the Prime Ministerial Circular no. 2010/14*. Istanbul: KEIG.
- . 2013. *Women’s Labour and Employment in Turkey: Issues and Policy Recommendations II*. Istanbul: KEIG.
- KSGM (General Directorate on the Status of Women). 2008. *National Action Plan: Gender Equality, 2008–2013*. Ankara: KSGM.
- Masterson, T. 2013. “Quality of Statistical Match and Simulations Used in the Estimation of the Levy Institute Measure of Time and Consumption Poverty (LIMTCP)

- for Turkey in 2006.” Working Paper No. 769. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. July.
- Ministry of Food, Agriculture and Livestock. 2012. *Kırsal Alanda Kadının Güçlendirilmesi Ulusal Eylem Planı (2012–2016)* (The National Action Plan on Women’s Empowerment in Rural Areas [2012–2016]). Ankara: Republic of Turkey Ministry of Food, Agriculture and Livestock. November.
- OECD (Organisation for Economic Co-operation and Development). 2013a. *How’s Life? 2013: Measuring Well-Being*. OECD Publishing.
- . 2013b. “Enrolment in Childcare and Pre-schools.” OECD Family Database.
- Toksöz, G. 2012. “Ulusal İstihdam Stratejisi Kadınlar ve Gençler İçin Ne Getiriyor?” (What Is There in a National Employment Strategy for Women and the Young?). In A. Makal, ed. *Ulusal İstihdam Stratejisi: Eleştirel Bir Bakış* (National Employment Strategy: A Critical Review). Ankara: Türk-İş– SBF Sosyal Politika Merkezi.
- Uçar, C. 2011. “Kadın Yoksulluğu ile Mücadelede Sosyal Politika Araçları ve Etkinlikler” (Social Policy to Fight Women’s Poverty: Tools and Actions). Master’s thesis, KSGM.
- Vickery, C. 1977. “The Time-Poor: A New Look at Poverty.” *The Journal of Human Resources* 12(1): 27–48.
- World Bank and SIS (State Institute of Statistics, Turkey). 2005. *Turkey: Joint Poverty Assessment Report*. Report No. 29619-TU. 2 vols. Washington, D.C.: Europe and Central Asia Region of the World Bank.
- Yentürk, N. 2013. “Public Expenditures for the Poor in Turkey.” *METU Studies in Development* 40(2): 433–64.
- Zacharias, A. 2011. “The Measurement of Time and Income Poverty.” Working Paper No. 690. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. October.
- Zacharias, A., T. Masterson, and E. Memiş. 2014. *Time Deficits and Poverty: The Levy Institute Measure of Time and Consumption Poverty for Turkey*. Research Project Report. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College and UNDP-Turkey. April.
- ZKA (Time Use Survey). 2006. Turkish Statistical Institute.

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