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CAN WOMEN BOOST TURKEY'S GROWTH?

Low female labor force participation rate (FLPR) in Turkey has always been an important item on TEPAV's agenda. Currently, the participation rate is 28.8 percent compared to the OECD average of 61.8 percent.[2] Mexico has the second lowest FLPR among OECD countries, with 46 percent. Latest TURKSTAT data available reveals that as of October 2012, civilian non-institutional female population is 37.2 million. There are 17.9 million women at the working age while only 7.6 million women are employed.

This study investigates how a gradual increase in the FLPR until 2023 can boost Turkey's GDP. Turkish government announced its official FLPR target for 2023 as 38 percent. In light of the analysis below, we identify what 38 percent FLPR can achieve in terms of GDP growth and depict why such an improvement in FLPR would be insufficient.

Evidently, increase in the FLPR has positive social influences beyond its impact on economic growth. This study neither undermines the sociological dimensions of the issue nor argues for a one-dimensional benefit analysis oriented exclusively on the economic aspects. Nevertheless, as an organization that concentrates on economic policy research, we are focusing on quantifiable impacts of changes in FLPR. The analysis is based on a simple partial equilibrium analysis which focuses directly on the FLPR-economic output relationship. In other words, we shut down the indirect effects coming through wages, education, fertility and other sociological and economic channels; and we solemnly focus on –ceteris paribus- the direct supply side effects of a gradual increase in FLPR.[3]

[1] http://www.tepav.org.tr/tr/ekibimiz/s/1274/Gunes+A.+Asik
[2] According to OECD statistics, LFPR in Turkey is 31 percent whereas the difference is completely methodological.
[3] The study does not make any sector or skill differentiation for the labor force. Population projection trajectories until 2023 are based on United Nations estimations. Total factor productivity growth is assumed 8 percent, real capital input growth is assumed to decrease from 8 to 4 percent by 2023 with gradual capital accumulation. Other assumptions and methodological details are available upon request.

In this context, under the assumption that male labor force participation rate (MLPR) will remain constant at the current 71 percent while FLPR will gradually increase to 38 percent by 2023, we project that real GDP per capita grows by 5.6 percent compared to the baseline scenario.[4] On the other hand, if FLPR gradually reaches 50 percent or 61 percent, real GDP per capita growth reaches 12 percent and 17.5 percent, respectively.

Table 1 summarizes our findings. According to TURKSTAT data, real GDP per capita (1998=100) in Turkey was 1,554 TL. We estimate that it will reach 2,418 TL by 2023 if FLPR remains constant. If FLPR reaches 38 percent (and under the assumption that unemployment rate will remain at 10 percent), we estimate that GDP per capita will increase by 5.06 percent to 2,552 TL. Our projections suggest that if FLPR reaches 50 percent, real GDP per capita will grow by 11.7 percent. Similarly, if FLPR reaches 61 percent, real GDP per capita will increase by 17.5 percent to 2.841 TL. Enabling a gradual improvement in women's participation in the labor force has the potential to increase real GDP per capita by almost 20 percent just in a decade. This is a significant gain for 10 decades and the GDP growth will evidently be higher for a larger period of analysis.

Table 1: Projections for Real GDP Per Capita (1998=100)

	2023	Difference (%)
Baseline Scenario: Real GDP-FLPR 28.8%	**2,418**	
Projection 1: FLPR %38, unemployment %10	2,552	5.6
Projection 2: FLPR %38, unemployment %15	2,524	4.4
Projection 3: FLPR %38, unemployment %20	2,495	3.2
Projection 4: FLPR %50, unemployment %10	2,702	11.7
Projection 5: FLPR %50, unemployment %15	2,666	10.3
Projection 6: FLPR %50, unemployment %20	2,630	8.8
Projection 7: FLPR %61.4, unemployment %10	2,841	17.5
Projection 8: FLPR %61.4, unemployment %15	2,799	15.7
Projection 9: FLPR %61.4, unemployment %20	2,756	14.0

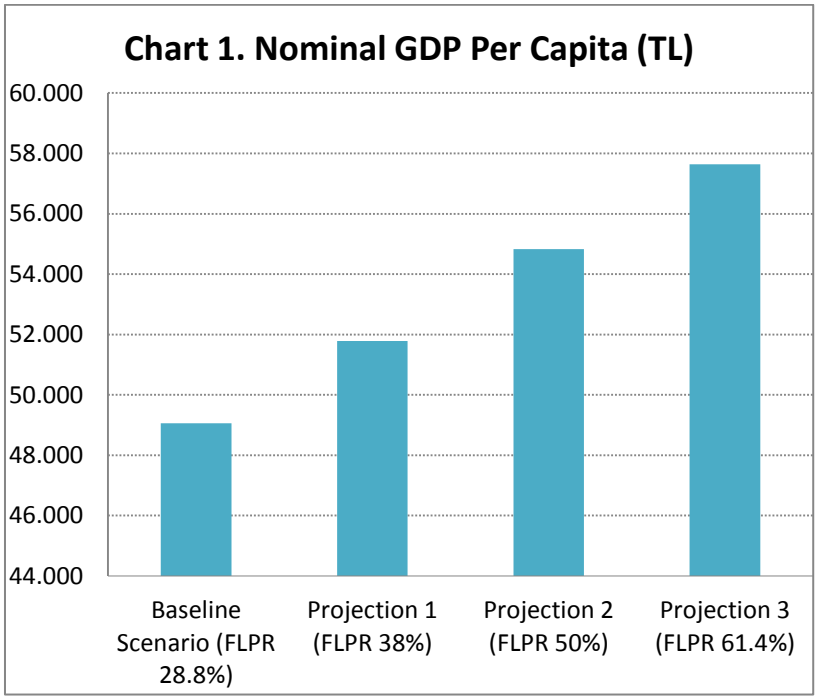
Source: Own calculations based on TURKSTAT data

On the other hand, since rises in FLPR will expand the labor force, it might be unrealistic to expect that the unemployment rate remain at 10 percent in case of a prolonged jobless growth period. TURKSTAT statistics show that between 2004 and November 2012, total employment grew by 5.7 million. Out of the new employment, 63 percent were in the services sector and only 15 percent were in the manufacturing sector which in fact generates the highest value added output. The assumptions that FLPR will increase to 38 percent and MLPR remains constant at 71 percent mean that 8.5 million new jobs are need to be created by 2023. The figure would be 15 million if FLPR is assumed to reach 61 percent. Given the current state, it is doubtful whether Turkey has the potential

[4] Baseline scenario: GDP growth forecast with constant FLPR at 28.8 percent

to generate new employment opportunities for 15 million people. Therefore, we revise our projections under different assumptions for unemployment rate. For instance, if unemployment rate reaches to 20 percent due to the failure to generate sufficient number of new jobs for women newly participating in the labor force, FLPR at 61.4 percent will generate 14 percent real GDP growth instead of 17.5 percent under the original projection. Yet, even the revised projection point at a significant income growth in comparison with the baseline scenario. On the other hand, if the growth in labor supply puts a downwards pressure on the wages, there would be an additional boost on the growth coming through increased labor demand. However, the analysis ignores these channels of general equilibrium.

So far, the analysis of the study focused on real GDP per capita. With nominal prices, if FLPR increases to 61 percent, we project that GDP per capita picks up from 17,553 TL in 2011 nominal prices to 57,000 TL.[5] In the same vein, annual potential real GDP growth increases by 1.44 points on average. On the other hand, FLPR increasing to 38 percent improves Turkey's growth potential only by 0.4 percent. These imply that Turkey has been severely underutilizing its growth potential.



The government targets at US$ 25,000 GDP per capita by 2023. Our study also investigates whether or not this target is achievable. Under the assumption that CPI based real exchange rate index released by the Central Bank of Turkey will remain

[5] Annual CPI inflation assumption is 5 percent until 2023.

constant during the 2013-2023 period, our calculations reveal that Turkey's GDP per capita under the baseline scenario (FLPR at the current 28.8 percent) by 2023 will be US$ 18,000 instead of the targeted US$ 25,000. If FLPR gradually increases to 38 percent by 2023, GDP per capita is projected to reach US$ 19,000. Our GDP per capita projection under FLPR gradually reaching at 61 percent is US$ 21,000. Even if we assume a 20 percent increase in real exchange rate, our GDP per capita projections for 2023 are US$ 20,000 with the FLPR at 38 percent and US$ 22,000 with FLPR at 61 percent. In other words, **Turkey cannot achieve US$ 25,000 GDP per capita by 2023 even if MLPR increases from 71 to 100 percent while FLPR remains constant.** The target can be achieved only if MLPR increases to 100 percent and FLPR to 61 percent. **Hence, the target cannot be achieved unless women's participation in the labor force is enhanced.** Of course, it is impossible to raise the MLPR to 100 percent in Turkey. Even among the OECD countries, Sweden has the highest MLPR, at 88 percent. Therefore, we take into account more plausible scenarios (albeit we still think unlikely) and we estimate that Turkey can achieve US$ 25,000 GDP per capita by 2023 only if MLPR and FLPR are raised to 85 percent and 72 percent, respectively. Meanwhile, even in Scandinavian countries which have the highest FLPR throughout the world, the rates are hardly around 77 percent. According to OECD statistics, FLPR is 77 percent in Sweden, 75 percent in Norway and 72 percent in Finland.[6] This picture lies at the core of our main argument in this study: enhancing women's participation in the labor force or more broadly expanding the labor force by encouraging fertility and population growth fail short of enabling growth. **Policy efforts must instead concentrate on increasing the value added in production by upgrading the skill profile of the existing labor force.**

Unfortunately, low skills level is one of the chief problems concerning women in the labor market. Table 2, based on the 2011 household labor survey shows that 77 percent of women in Turkey have 8-year secondary school education or less. FLPR is highest among women with higher education level, who constitute less than tenth of women population.

Table 2: FLPR by education level[7]	*Out of the labor force*	*Labor force*	*Total*
No diploma	*22.2%*	*5.1%*	*27.3%*
Primary (5 years)	*24.9%*	*9.4%*	*34.3%*
Secondary and vocational secondary (8 years)	*12.2%*	*3.5%*	*15.7%*
Regular high school	*6.1%*	*2.7%*	*8.8%*
Vocational or technical high school	*3.3%*	*2.1%*	*5.4%*
Tertiary. higher education or above	*2.5%*	*6.1%*	*8.6%*
Total	***71.2%***	***28.8%***	***100.0%***

[6] http://stats.oecd.org/Index.aspx?DatasetCode=LFS_SEXAGE_I_R

[7] Calculations are based on TURKSTAT Household Labor Survey

Low skill profile is as severe problem as for men in Turkey: 67 percent of the men in the labor force have 8-year secondary education or less. Although our calculations indicate that improving women's participation in the labor force will generate positive effects on growth, it is up to question to what degree and in what sectors Turkey can be globally competitive given the skills set of the labor force. Demographic trends point at a natural improvement in the quality profile of the labor force. Taking into account the ambition of Turkey to become one of the top ten economies of the world by 2023, however, it is not realistic to count on a labor force with such skill sets.

As Nobel Laureate economist Amartya Sen says "development is a state of mind". Women can save Turkey, but participation in labor force alone is not enough. Even though they might go hand in hand, economic growth and development are not the same concepts. It is true that human capital is one of the key assets of a country; but in the current era it is the quality, not the quantity, that makes a difference. This is why Turkey has to take side by the former in the recent quality-quantity debate evolving around the "3 children per family" argument, and revise its "education reforms" and growth strategy. Employment growth in the highest-value-added sector, i.e. manufacturing sector over the last 9 years was less than 1 million. Turkey has the potential to boost its real GDP by almost 20 percent solely by increasing women's participation in the labor force. However, a genuine improvement in welfare is possible only with a qualified labor force that can generate technology and penetrate to high-value-added sectors. This is why the policies aimed at increasing women's participation in the labor force are in the right direction but insufficient.

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