

Labor Supply Behavior in the Czech Republic

Labor supply in countries with high labor force participation rates is less sensitive to wages

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In many planned economies — including Czechoslovakia, East Germany, and the Soviet Union — labor force participation was obligatory during Communism. Although a gradual withdrawal from the labor market occurred after the change of regime, labor force participation rates in many transition countries, in particular among women, remain high, when compared to mature market economies such as France, Germany and the US (see Table).

Using 2002 household income survey data, we estimate the wage elasticity of labor force participation using two different definitions of wage: gross wage, ignoring the tax and benefit system, and the effective net wage, which takes into account the taxes paid and benefits received. We interpret the difference between the two specifications as a behavior-based measure of welfare system disincentives, which we consider to be more preferable for policy discussions than the traditional ex ante make-work-pay indicators.

Behavior of Czech Labor Supply is Comparable to Other Market Economies

We find that a 1% rise in the gross wage increases the probability of working by 0.16 and 0.02 percentage points for women and men, respectively. When

we substitute the gross wage with the effective net wage, these semi-elasticities fall to 0.06 for women and 0.01 for men. Under both specifications and for both genders, wage sensitivity of the labor force participation decreases with earnings. Gross wage elasticity in the top wage quintile is lower, by 47% for women and by 85% for men, than the elasticity in the bottom wage quintile; the corresponding differences for the effective net wage are similar: 83% for men and 41% for women.

Measured as the difference between the marginal effects for the gross and the effective net wage specifications, the welfare system disincentives are greater for women than for men and vary only a little with wages. The marginal effect of the effective net wage on labor force participation is lower than the effect of the gross wage by 65% and 57% for women and men, respectively. The disincentives vary between 52% and 57% for men and between 63% and 67% for women across the five wage quintiles and tend to be a bit lower for the rich.

Labor supply behavior in the post-transition Czech Republic is comparable to the one in mature market economies in other aspects as well. While other sources of household income reduce labor force participation of both genders, being married and having young children has an adverse effect only on women's decision to work.

Our estimates of the wage elasticity of labor supply are at the lower end of the range of values documented in previous research that was mostly focused on the mature market economies.

The small size of our estimates is consistent with

other empirical evidence that labor supply in countries with high labor force participation rates, such as in the Czech Republic, tends to be less sensitive to wages. We therefore expect a limited response of labor supply to wages also in other post-transition countries which have retained high labor force participation rates since the Communist period.

Policy Implications

Our findings suggest that changes in taxes or benefits resulting in changes of the effective net wage will have the greatest impact on individuals at the bottom of the wage distribution and also on women (rather than on men).

Policy measures aimed at enhancing labor supply should therefore primarily target these groups and focus on income taxes at the lowest tax brackets and on the potential disincentives of unemployment benefits and benefits to low income families. Under the current benefit scheme, major changes in labor force participation should not be expected in response to changes in tax levels because the estimated effects are fairly small even for the most wage-elastic individuals.

As part of the changes in the Czech welfare system, tax reform implemented in January 2006 extended the range of the lowest tax bracket and decreased the tax rate in the lowest two brackets from 15% to 12% and from 20% to 19%, respectively. Its focus on the reduction of disincentives due to the tax burden of the individuals with wages in the lowest quintile of the wage distribution is in line with our finding that it is low wage individuals who are likely to respond to the changes in the effective net wage the most.

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Pre and Post-Transition Participation Rates (percent)

	Men		Women	
	1988	2005	1988	2005
Czech Republic	97.0	94.8	93.1	81.6
Slovakia	96.9	93.2	88.8	82.5
Russia	96.2	92.5	91.7	86.3
Germany*	90.6	93.3	60.8	80.0
France	95.6	93.6	71.2	80.3
United States	93.5	90.7	72.7	76.7

Notes: Participation rates (ratios of economically active to total population) for individuals between 25 and 54 years of age.

* 1988 figures exclude the German Democratic Republic.

Source: ILO, <http://laborsta.ilo.org/>.