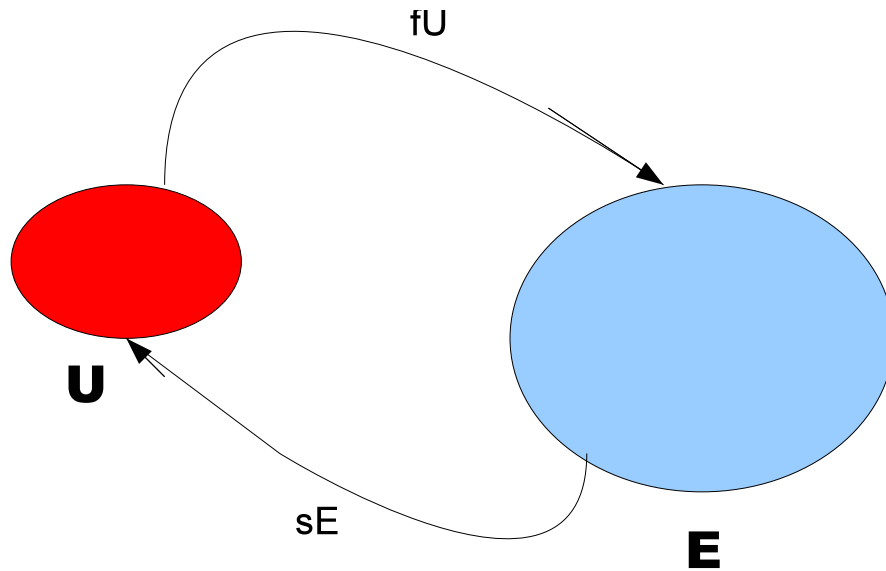


Unemployment

Flows

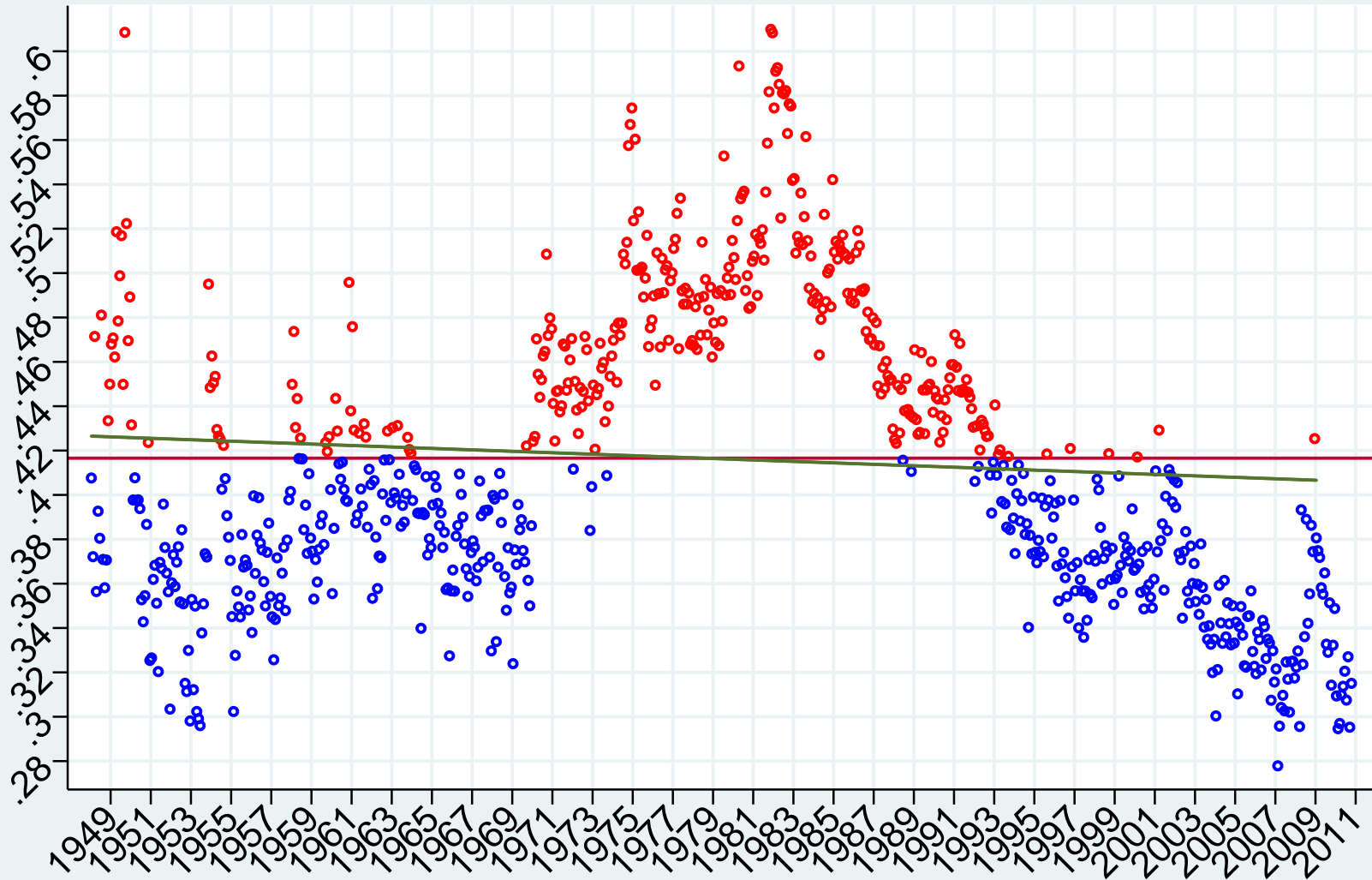


Equilibrium: $fU = sE$

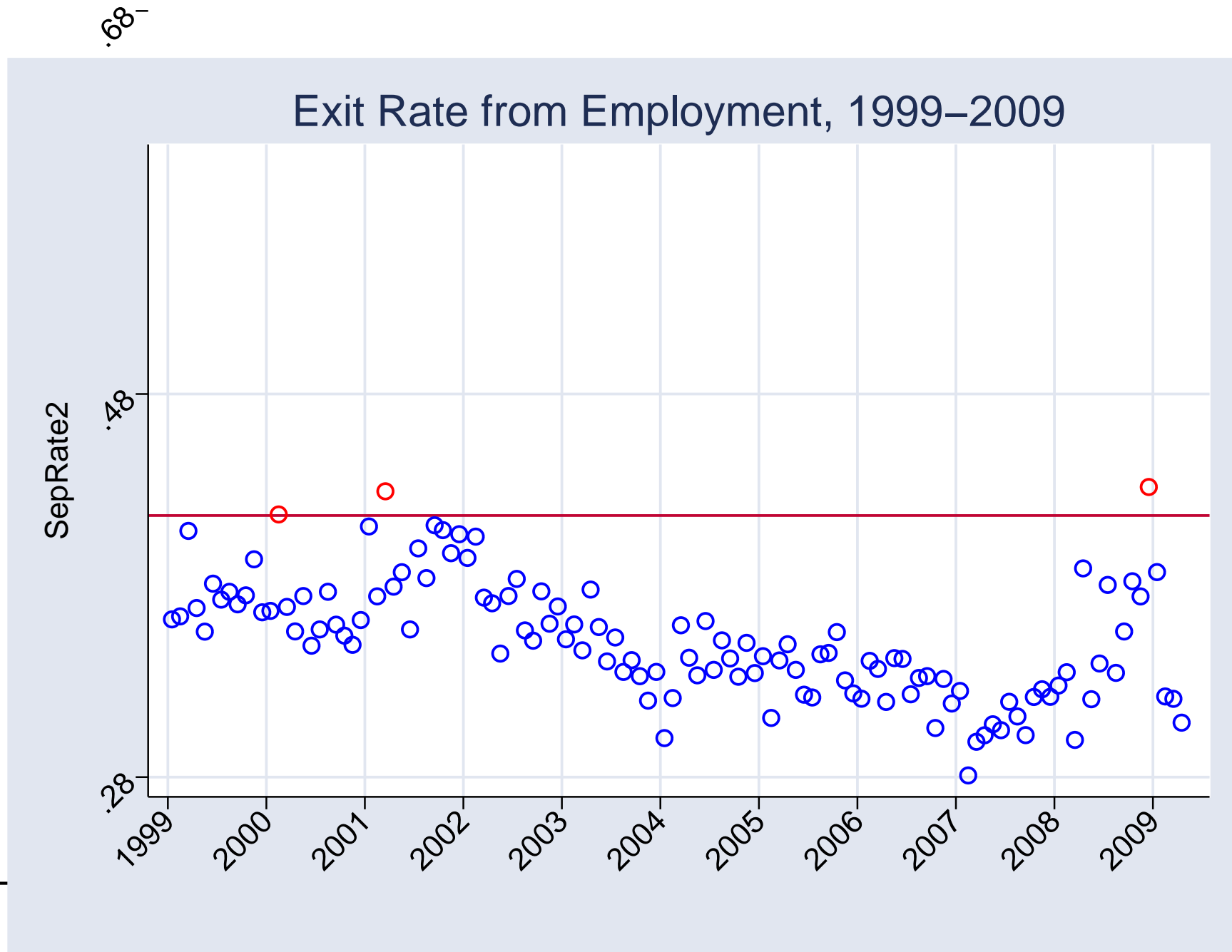
Unemployment Rate: $u^* = \frac{1}{1 + \frac{f}{s}}$

Separation Rate, U.S

Exit Rate from Employment, 1948–2010

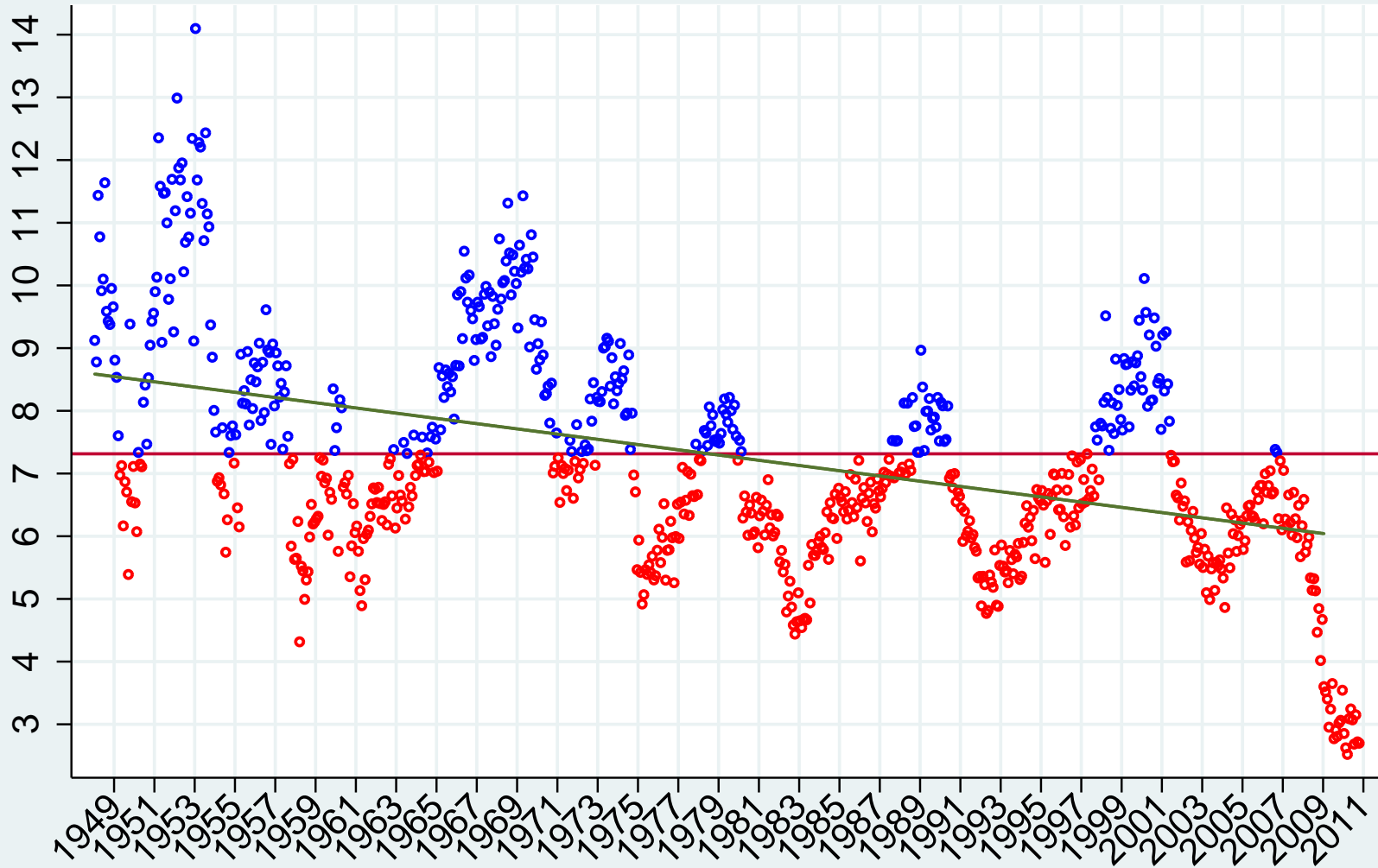


Separation Rate

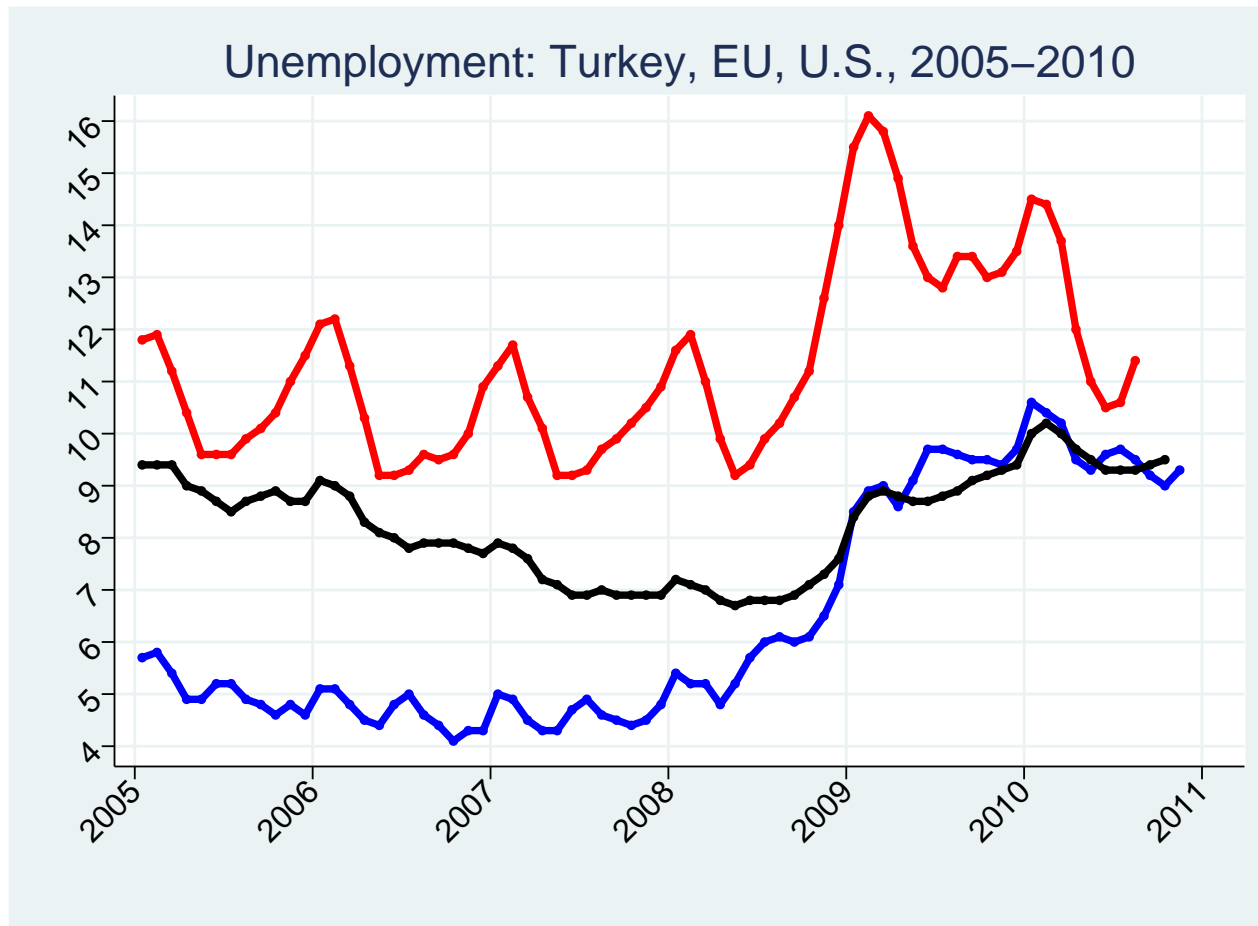


Job-Finding Rate

Exit Rate from Unemployment, U.S. 1948–2010



Recent Unemployment Rates



Turkey the only country that reversed a steep rise in unemployment?

Some countries not much affected by the recession(Germany, Italy).

Others had steep increases in unemployment, no sign of reversal (Spain, U.S., Ireland)

The Tax Wedge

A job generates a revenue flow y per annum, which is taxed at rate τ

The worker's alternative use of time generates a flow b , which is not taxed
(this includes unemployment benefits, leisure and home production)

The job is viable if $(1 - \tau)y \geq b$

The job is socially desirable if $y \geq b$

Tax wedge kills a desirable job when $y \geq b > (1 - \tau)y$

How to Increase the Match Surplus

Reduce the marginal tax rate

For each person, say T_0 is tax paid in 2010

$$T_0 = \tau Y_0$$

where τ is the average income tax rate and Y_0 is income in 2010

Put a ceiling on tax liability for each employer in 2011:

$$T_1 = \min(\lambda T_0, \tau Y_1)$$

Marginal tax rate is zero when $Y_1 \geq \lambda Y_0$

A Stylized Example

A worker has two potential job matches next year, each lasting six months

The output flow in each job is $\frac{y}{2}$ (per annum)

Last year's tax payment was $Y_0 = \tau \frac{y}{2}$

The tax rate is $\tau = .16$, output is $y = 1$, and the opportunity cost is $b = .9$

Under the standard tax system, these jobs are not viable

(because $(1 - \tau) y = .84 < .9 = b$)

So the worker will be unemployed next year

Under the proposed tax scheme, with $\lambda = 1$, **both** jobs are viable next year:

the tax paid on income from the first job fulfills the tax obligation for the year

so the effective average tax rate for the year is $\tau = .08$

Policy Proposals

Taxes

Reduce the tax wedge by cutting employer insurance premium
permanent reduction for new workers in first few years

How is this financed?

Make sure that the favorable labor market incentive effects are not undone by
increases in other taxes to balance the budget

Training scheme

200,000 trainees

How is this evaluated?

If workers are randomly assigned to receive training
do trained workers do much better than the control group?

Female Labor Force Participation

Participation rate is very low for women (26%).

The target is only 35% in 2023 – why so low, why so late?

Education

In the longer term, universal education at a high level is essential for stable
employment

Even “unskilled” workers need computer literacy in advanced economies

– e.g. ability to read and understand fairly complicated instructions

– flexibility to adapt to changes