# Policies for the Long Run (Chapter 18)



## How to raise potential GDP?

#### Outline

Supply side policies Product Market Policies Taxation Labour Market Policy

### Supply Side Policies

Measures designed to raise potential GDP

Competition policy

- anti monopoly legislation
- spurring labour market competition

Market failures (resolutions)

externalities (*property rights*) pecuniary externalities (*changing wealth distribution*) natural monopolies (*regulation*) information asymmetries (*regulation*)

## Supply Side Policies



## Supply Side Policies



### Impact of Supply Side Policies



### Impact of Supply Side Policies















### Product Market Policies: Dealing with Externalities

Human capital accumulation

education

Law and order

no impediments for starting busines
 Health

### Product Market Policies: Dealing with Markets

Privatization

Monopoly regulation

Other market regulation/deregulation Industrial policy

subsidies, state owned companies

Trade policy

tariffs, quotas

### Ease of Doing Business Rankings

- 1. Singapore
- 2. New Zealand
- 3. Denmark
- 4. South Korea
- 5. Hong Kong
- 6. UK
- 7. USA
- 8. Sweden
- 9. Norway
- 10. Finland

### Deregulation of Taxi Markets in Finland



Major market liberalization in Finland in 2000's Criticism:

- demand has decreased
- quality has dropped
- less supply in rural areas
- increase of gray economy

Price index

#### Taxation: Laffer Curve



#### Laffer Curves



### Labour Tax Wedge

Labour taxes

• income taxes ( $\tau_{
ho}$ ), social insurance charges, social security contributions (  $\tau_w$ )

• income after taxes  $(1 - \tau_{\rho})(1 - \tau_w)W$  (take home)

Employer wage tax rate  $au_F$ 

• total costs  $(1 + \tau_F) W$ 

Effective labour cost: labour tax wedge

$$(1+\tau_F)/[(1-\tau_w)(1-\tau_\rho)]$$

#### Tax Burdens

Tax Wedge of a Single Worker with no Children Earning a Nation's Average Wage, 2020

60%



Tax Wedges on Singles and Families at a Nation's Average Wage, 2020



Source: OECD, taxing wages 2021

Wedge=(Tot. labour costs-Net Take Home)/Tot. labour costs

#### Indoor Air



#### Juho Milonoff and Elina Knihtilä in TV-series Sisäilmaa (Indoor Air)

### Labour Market Policy

Workers and jobs are heterogenous

Incomplete information

Efficiency of job matching

- Beveridge curve
- large number of vacancies and large unemployment (Beveridge curve is up); badly functioning labour market

Policy

- improving firm-worker match; decrease Beveredge curve
- job agencies, job retraining etc (active labour market policies)
- regulation related to minimum wages, dismissal
- social policies and taxation

#### Beveridge Curve UK



#### Beveridge Curve Germany



#### Beveridge Curve USA



### Search and Matching

Frictional unemployment: only a match of a worker and vacancy leads to a productive job

the creation of matches involves frictions

Elements of search and matching theory

- $\blacktriangleright$  u unemployment rate, L labor force, vacancy rate v
- number of newly created jobs (per period) m(uL, vL)
- constant returns to scale matching technology m(uL, vL)/L = m(u, v) (matching rate)
- ▶ instantenous probability of finding a job:  $p(\theta) = m(u, v)/u = m(1, u/v) = m(1, \theta)$ ,  $\theta = v/u$  tightness
- match destruction rate s

What happens to the number of unemployed people over time?

► 
$$d(uL)/dt = \dot{u}L = s(1-u)L - p(\theta)uL$$
, i.e.,  $\dot{u} = s(1-u) - p(\theta)u$ 

Equilibrium unemployment:  $\dot{u}=0$ 

• 
$$0 = s(1-u) - p(\theta)u$$
 from which  $u = s/[s + p(\theta)]$ 

• Beveridge curve: u = s/[s + p(v/u)]

#### Beveridge Curve Revisited















### Welfare Traps? Tax Progressivity in Finland



#### Ireland and the Netherlands: GDP



#### Ireland and the Netherlands: Unemployment Rate



Ireland and the Netherlands: Employment/Population

