

Macroeconomics VI: The Labour Market

John Bluedorn
Nuffield College

Hilary Term 2005

introduction

- “When in any country the demand for those who live by wages... is continually increasing; when every year furnishes employment for a greater number than had been employed the year before, the workmen have no occasion to combine to raise their wages. The scarcity of hands occasions competition among masters, who bid against one another, in order to get workmen...” Adam Smith (1776)

job separation and job finding

- The labour force = employed + unemployed
 - $L=E+U$
- When unemployment is stable (labour market is in steady-state), the number of job separations must equal the number of jobs found.
 - $sE=fU$, where s is the separation rate and f is the job-finding rate.
- but since $E=L-U$
 - $s(L-U)=fU$, divide both sides by L to obtain
 - $s(1-U/L)=fU/L$ and solve for U/L to find
 - $U/L= s/(s+f)$
- The steady-state unemployment rate is an increasing function of the job separation rate and a decreasing function of the job-finding rate (can verify with derivatives).

kinds of unemployment

- **frictional unemployment** – matching jobs are available but it takes time to find them.
 - unemployment insurance incentives
 - search costs/labour mobility
- **structural unemployment** – consequence of real wage rigidities (preventing labour market clearing) and the resultant job-rationing.
 - labour unions and minimum wages
 - monopsony
 - efficiency wages
- both are related to job separation and job-finding rates.

the labour supply decision by workers

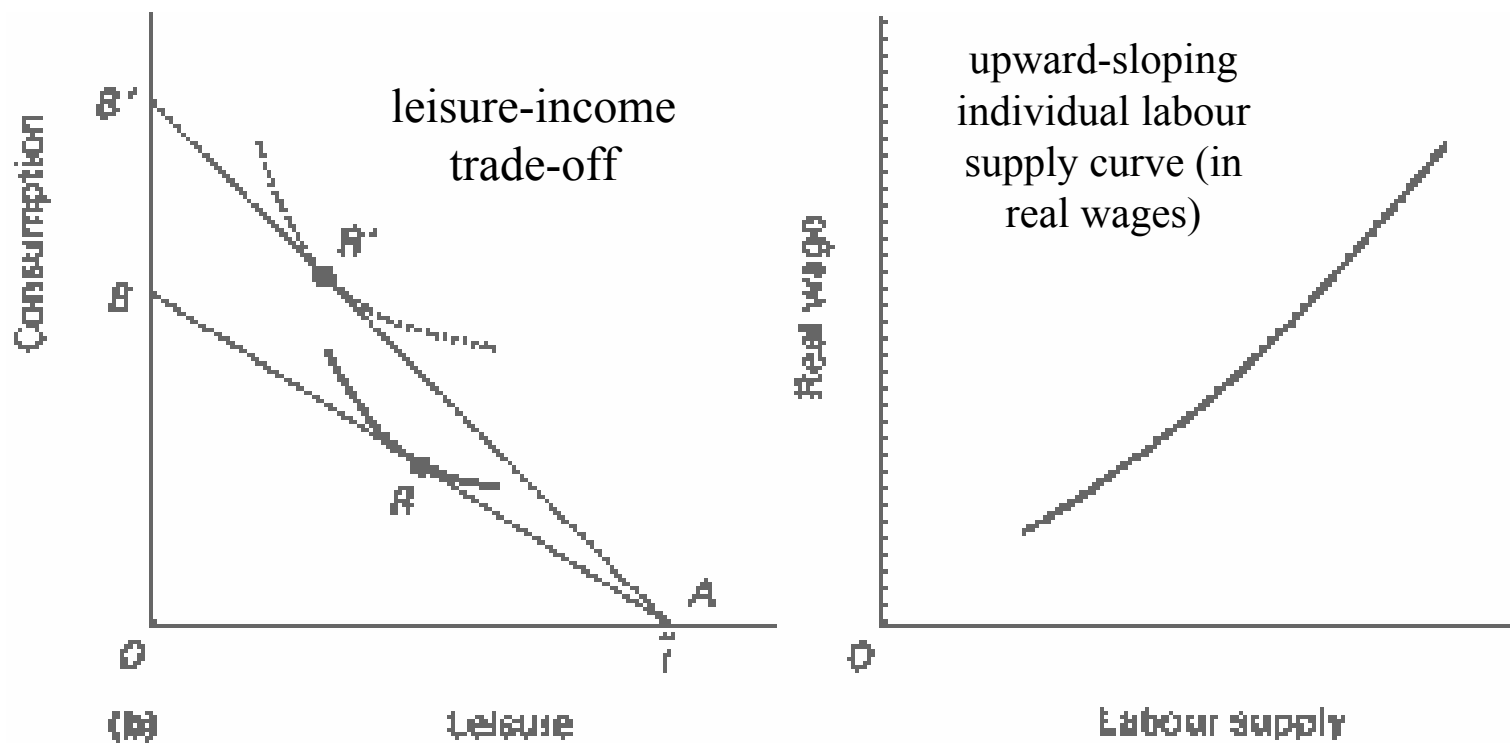
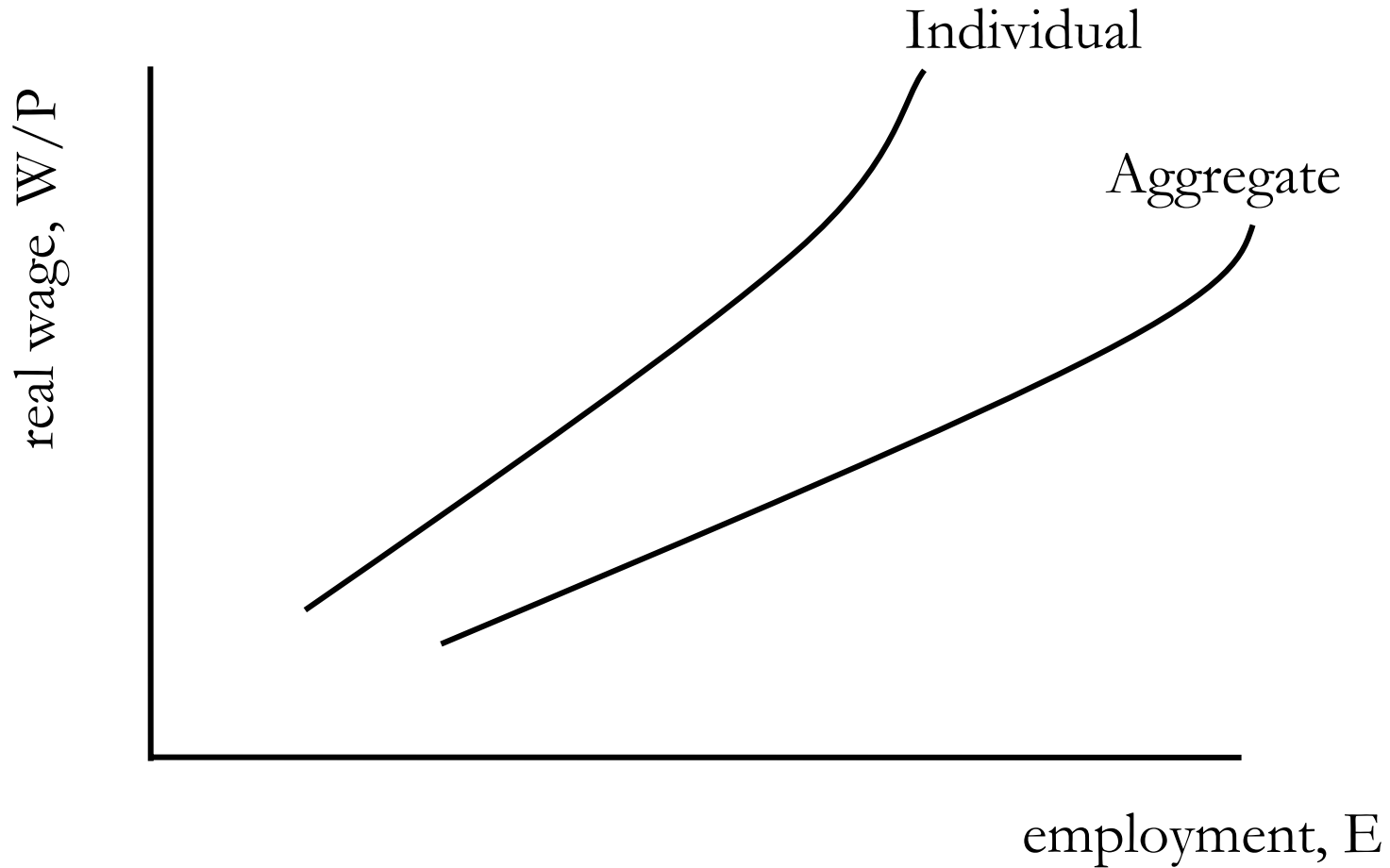


Figure 6.4. (b) Labour Supply

the market supply of labour



the demand for labour by firms

real wage, W/P

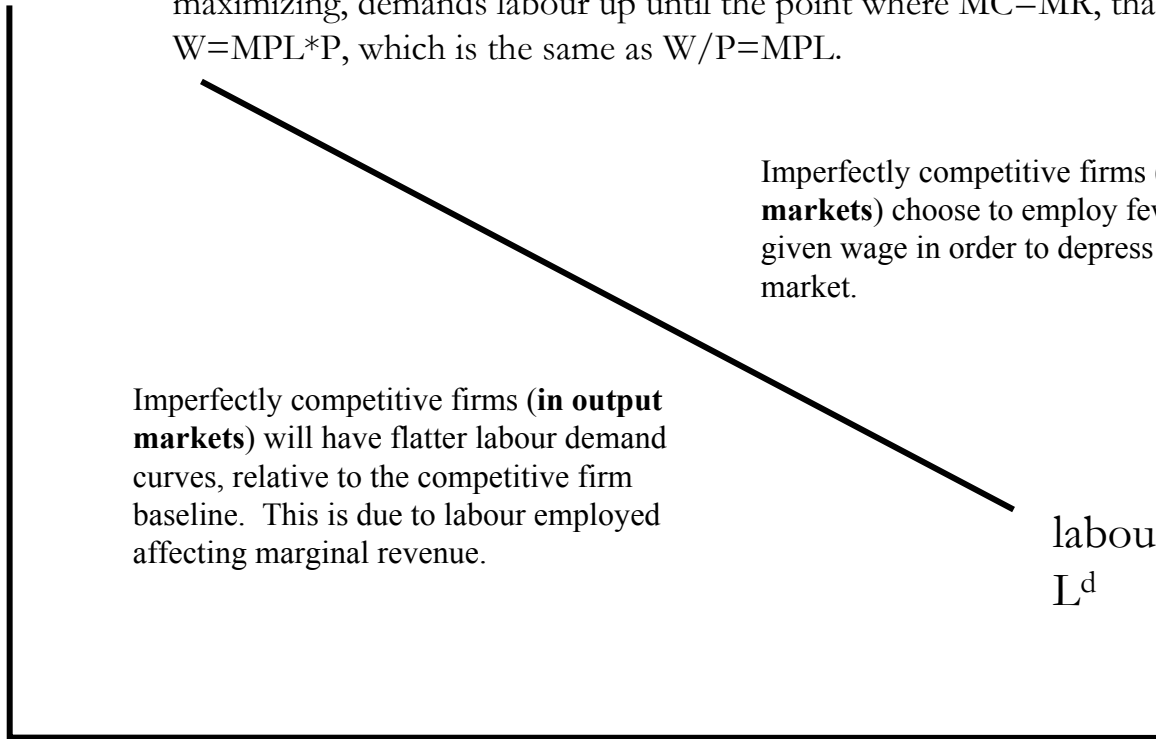
A competitive firm (**in input and output markets**) that is profit-maximizing, demands labour up until the point where $MC=MR$, that is $W=MPL*P$, which is the same as $W/P=MPL$.

Imperfectly competitive firms (**in input markets**) choose to employ fewer workers at a given wage in order to depress wages in the market.

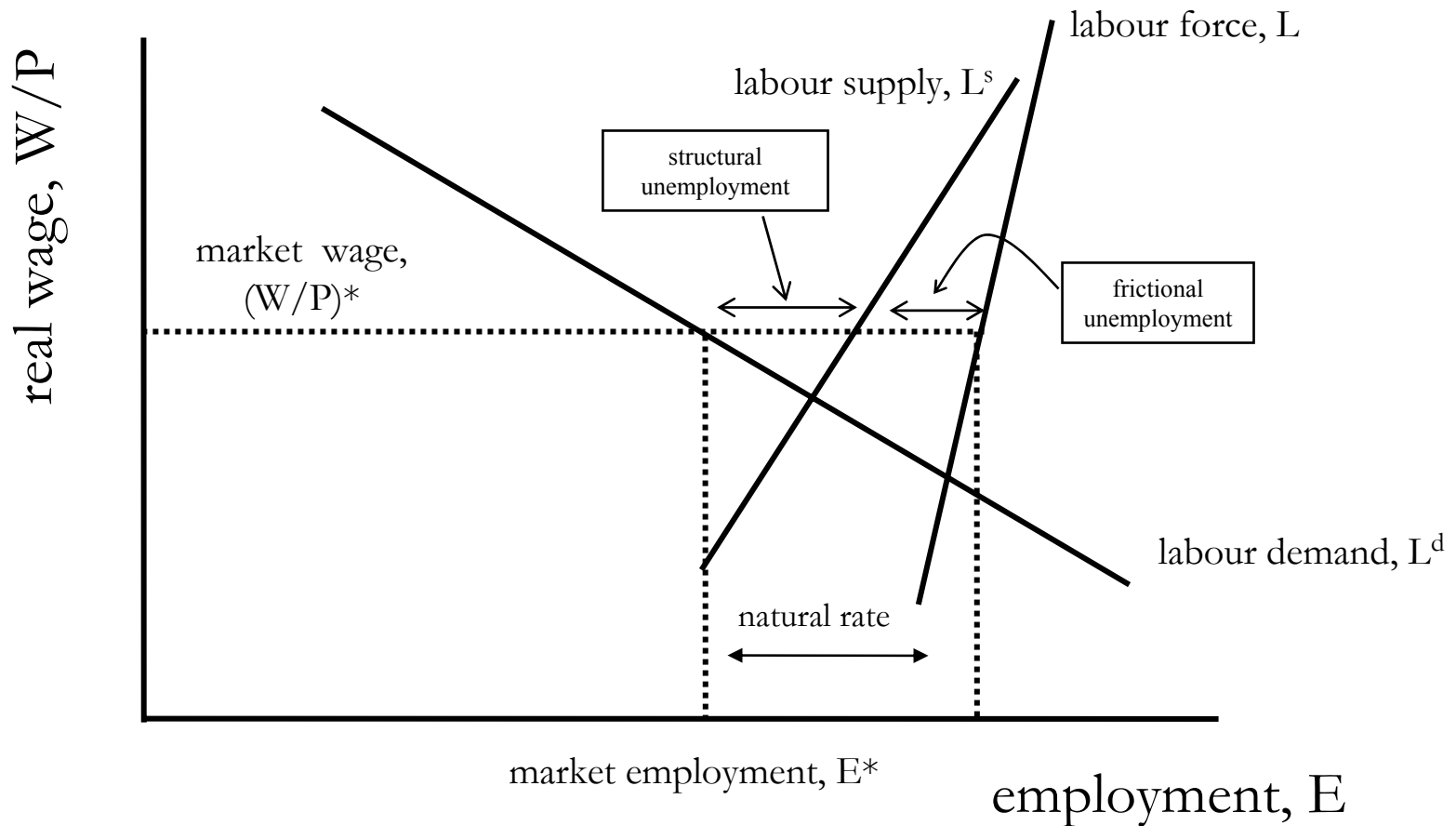
Imperfectly competitive firms (**in output markets**) will have flatter labour demand curves, relative to the competitive firm baseline. This is due to labour employed affecting marginal revenue.

labour demand,
 L^d

employment, E



the natural rate of unemployment/NAIRU



structural unemployment/wage rigidities

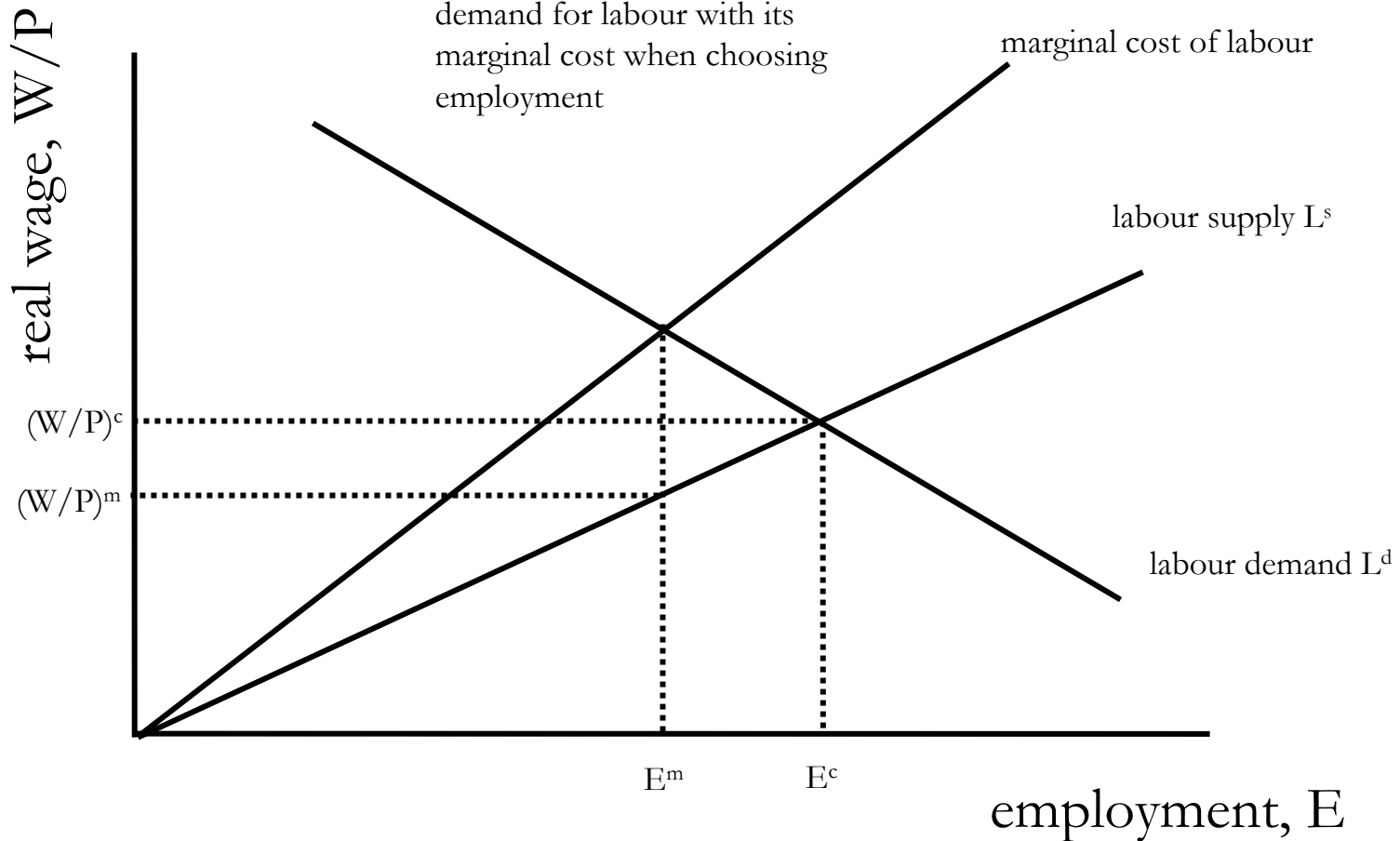
- causes:
 - unions may bargain for higher wages for insiders (the employed), causing higher unemployment among outsiders.
 - monopsony employers may exist, generating higher unemployment for a given real wage in order to depress wages.
 - efficiency wages may exist to elicit effort from workers.

unions and wage bargaining

- Unemployment is the means by which the *competing claims* of employers and unions are reconciled in the labour market.
- Unions bargain over wages relative to prices (the *bargained real wage*) and reduce their demands when unemployment is high, because then employers are relatively powerful.
- Unions care about the employed (*insiders*) without caring too much about the unemployed (*outsiders*).
- Employers set prices relative to wages: this leads to a relatively flat labour demand schedule.

a monopsony labour market

a monopsonist who pays all workers the same equates its demand for labour with its marginal cost when choosing employment



efficiency wages

- In 1914, the Ford Motor Company paid its workers \$5 per day when the going rate was between \$2 and \$3. Why?
- “A low wage business is always insecure... The payment of five dollars a day for an eight hour day was one of the finest cost-cutting moves we ever made”, Henry Ford
- Why would this policy *reduce* costs?
- Workers might work harder and staff turnover might be reduced because workers don't want to run the risk of a big cut in wages. The firm may also attract better quality workers.
- If many firms pay efficiency wages, it will be harder for the unemployed to find jobs, and so unemployment will be higher.

the rising UK NAIRU, 1956 to 1987

	1956-59	1960-68	1969-73	1974-80	1981-87
Unemployment %	2.2	2.6	3.4	5.2	11.1
NAIRU %	2.2	2.7	3.8	6.1	6.6
Change in NAIRU		+0.5	+1.1	+2.3	+0.5
-North Sea Oil		+0.0	+0.0	-0.3	-2.6
-Terms of Trade		-0.4	-0.1	+1.5	+1.3
-Skill mismatch		+0.1	+0.3	+0.6	+1.5
-Benefits		+0.3	+0.6	-0.3	+0.5
-Unions		+0.4	+0.3	+0.8	+0.1
-Tax wedge		+0.1	+0	+0	-0.3

how to reduce unemployment

- Retraining and work experience schemes for long-term unemployed and unskilled;
- Reform of the benefit system;
- Limitations on union power;
- Improved job matching and search facilities;
- Tax reform (lower payroll taxes for the unskilled);
- Increased labour mobility & reform of local government finance.

how not to reduce unemployment

- Overly restrictive firing policies may generate offsetting reductions in the separation rate and the job-finding rate;
- Job-sharing or cuts in working hours;
- Increased capital investment by firms (although this will raise wages);
- Protectionism (any benefit to workers massively outweighed by costs to consumers).

summary

- unemployment represents unused resources in the economy, which if employed effectively, could increase national income.
- unemployment is associated with a wide variety of social ills, such as crime and depression.
- zero unemployment is likely unrealistic (there are always some frictions), and yet there is some scope for policy to encourage lower unemployment.