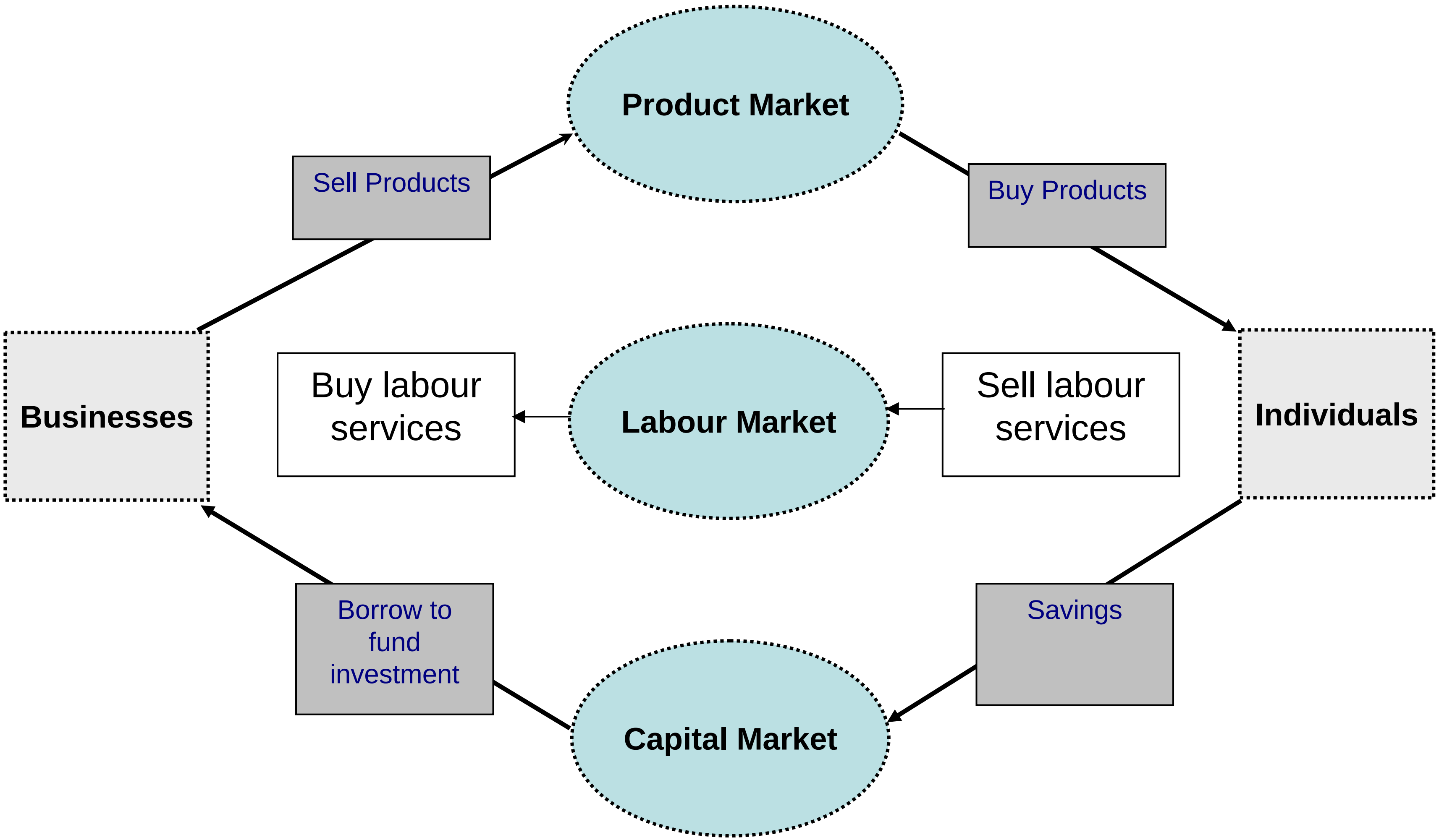
Labour Market Economics - Demand for Labour and Equilibrium Wages

A2 Economics Presentation

2005

The Labour Market



Key Areas to Cover

- Labour as a derived demand
- Understand the factors influencing the demand for labour, including marginal productivity theory
- The elasticity of demand for labour
- Wage determination in competitive markets

Marginal Revenue Product of Labour

- Marginal revenue productivity (MRPL) is a theory of wages where workers are paid the value of their marginal revenue product to the firm
- MRP theory suggests that wage differentials result from differences in labour productivity and the value of the output that the labour input produces
- Marginal Revenue Product (MRPL) measures the change in total output revenue for a firm as a result of selling the extra output produced by additional workers employed
- MRPL = Marginal Physical Product x Price of Output per unit

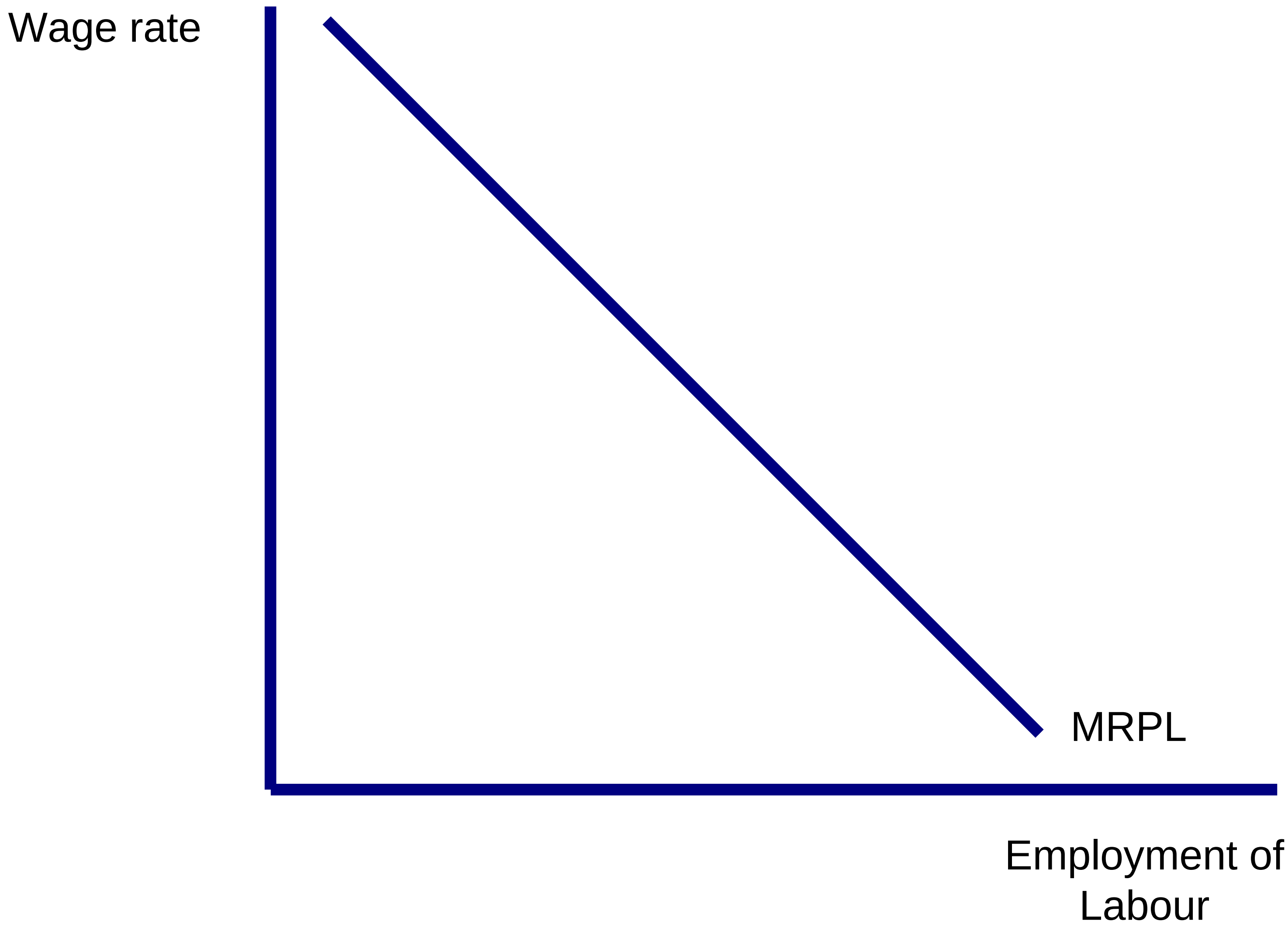
Marginal Revenue Product

Labour	Capital (K)	Output (Q)	MPP	price (£)	MRP = MPP x P (£)
0	5	0		5	
1	5	30	30	5	150
2	5	70	40	5	200
3	5	120	50	5	250
4	5	180	60	5	300
5	5	270	90	5	450
6	5	330	60	5	300
7	5	370	40	5	200
8	5	400	30	5	150
9	5	420	20	5	100
10	5	430	10	5	50

Assumptions Behind MRPL Theory

- MRPL theory assumes a competitive labour market
- Workers are homogeneous in terms of their ability and productivity
- Firms have no buying power when demanding workers (i.e. they have no monopsony power)
- There are no trade unions (the possible impact on unions on wage determination is considered later)
- The productivity of each worker can be clearly and objectively measured and the value of output can be calculated
- The industry supply of labour is assumed to be perfectly elastic. Workers are occupationally and geographically mobile and can be hired at a constant wage rate

The Labour Demand Curve



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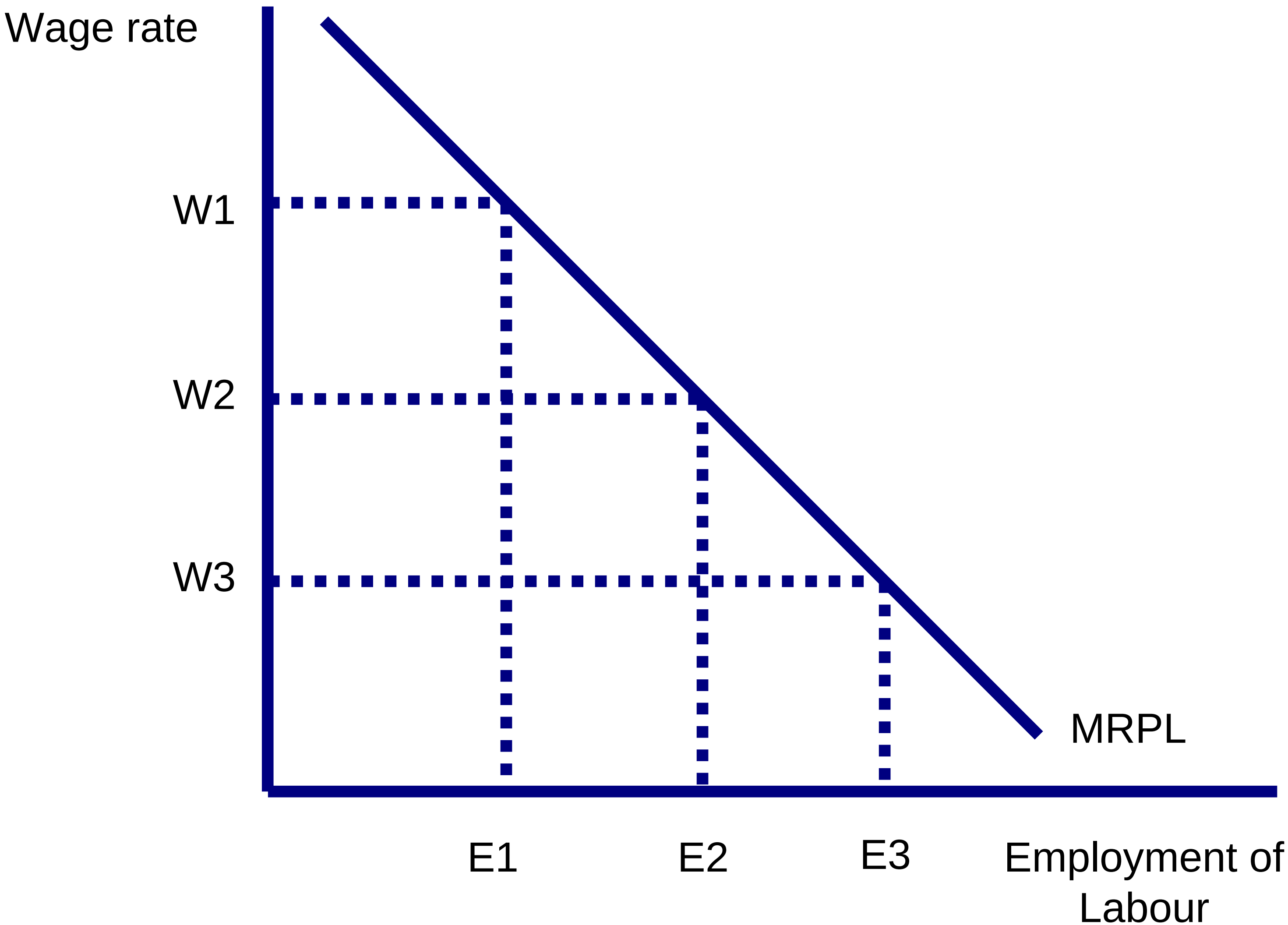

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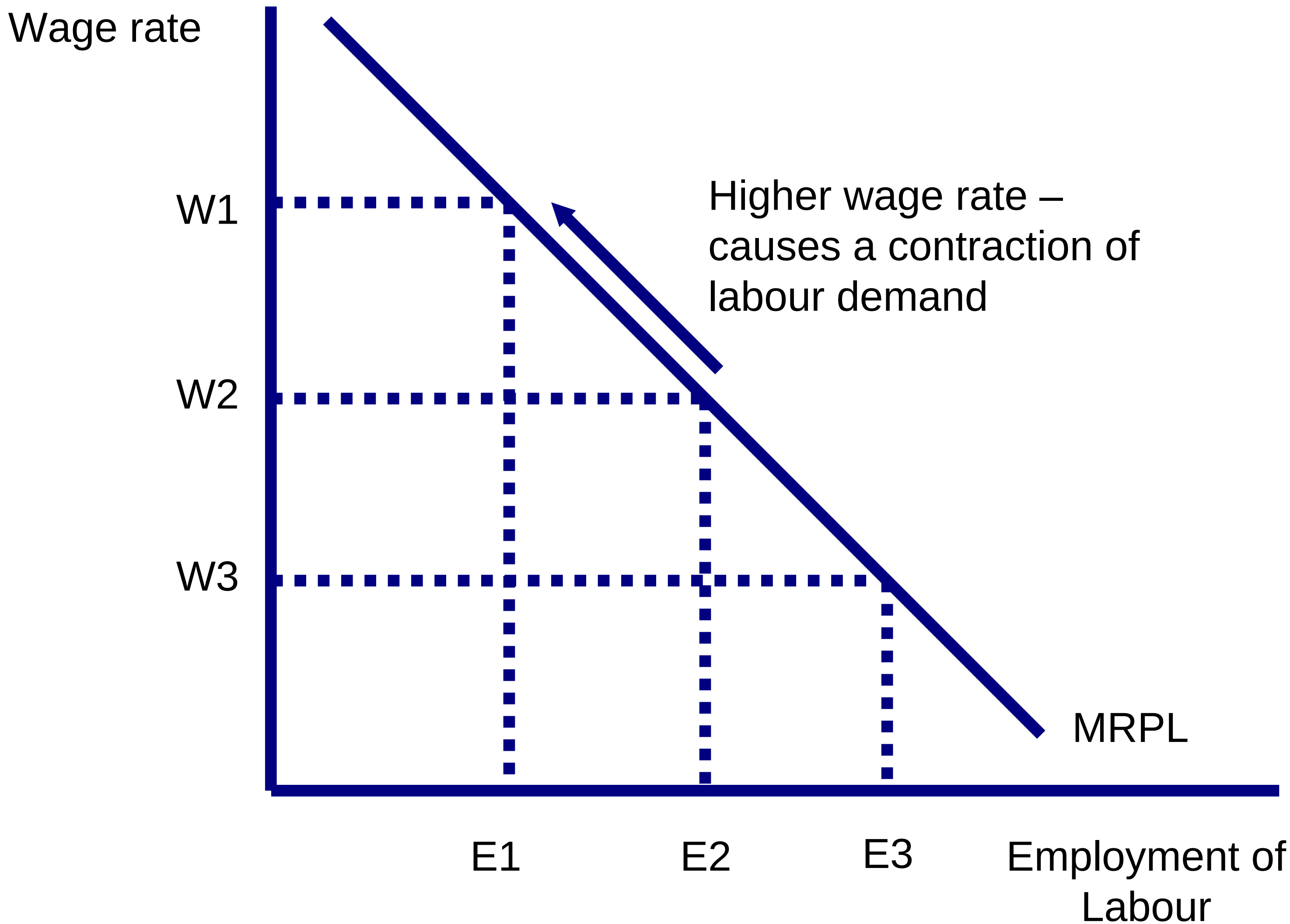

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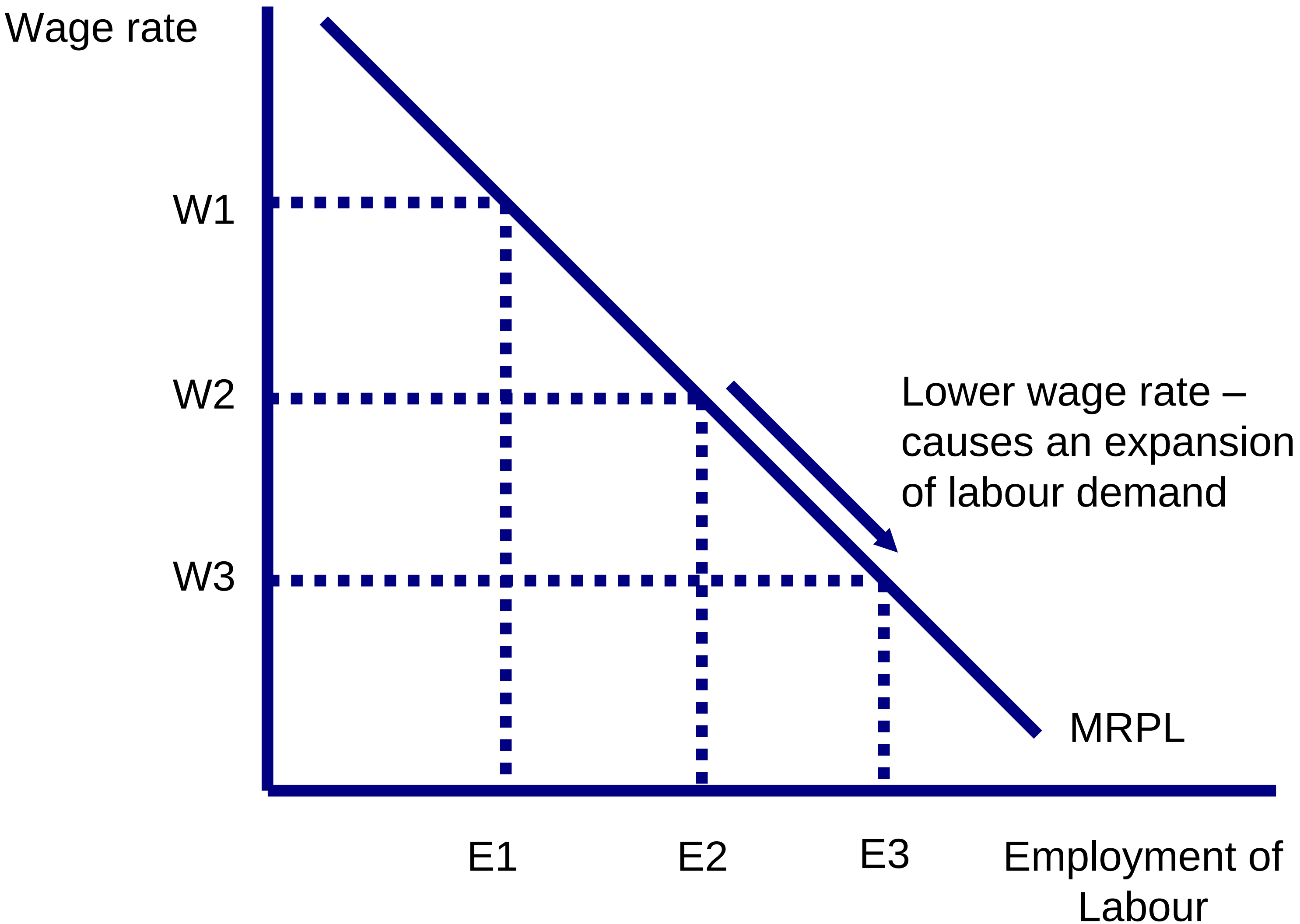
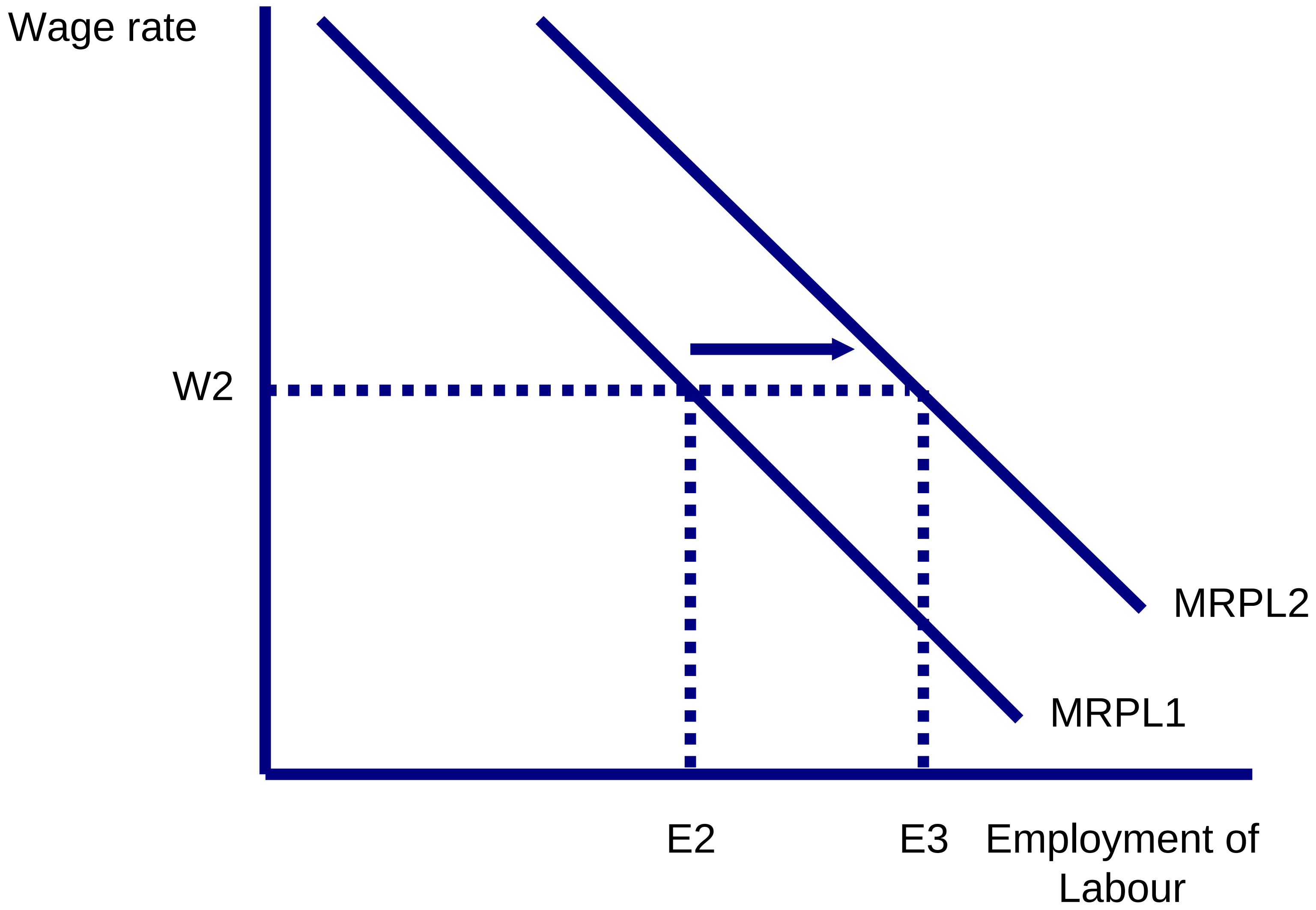


Shifts in the MRPL Curve



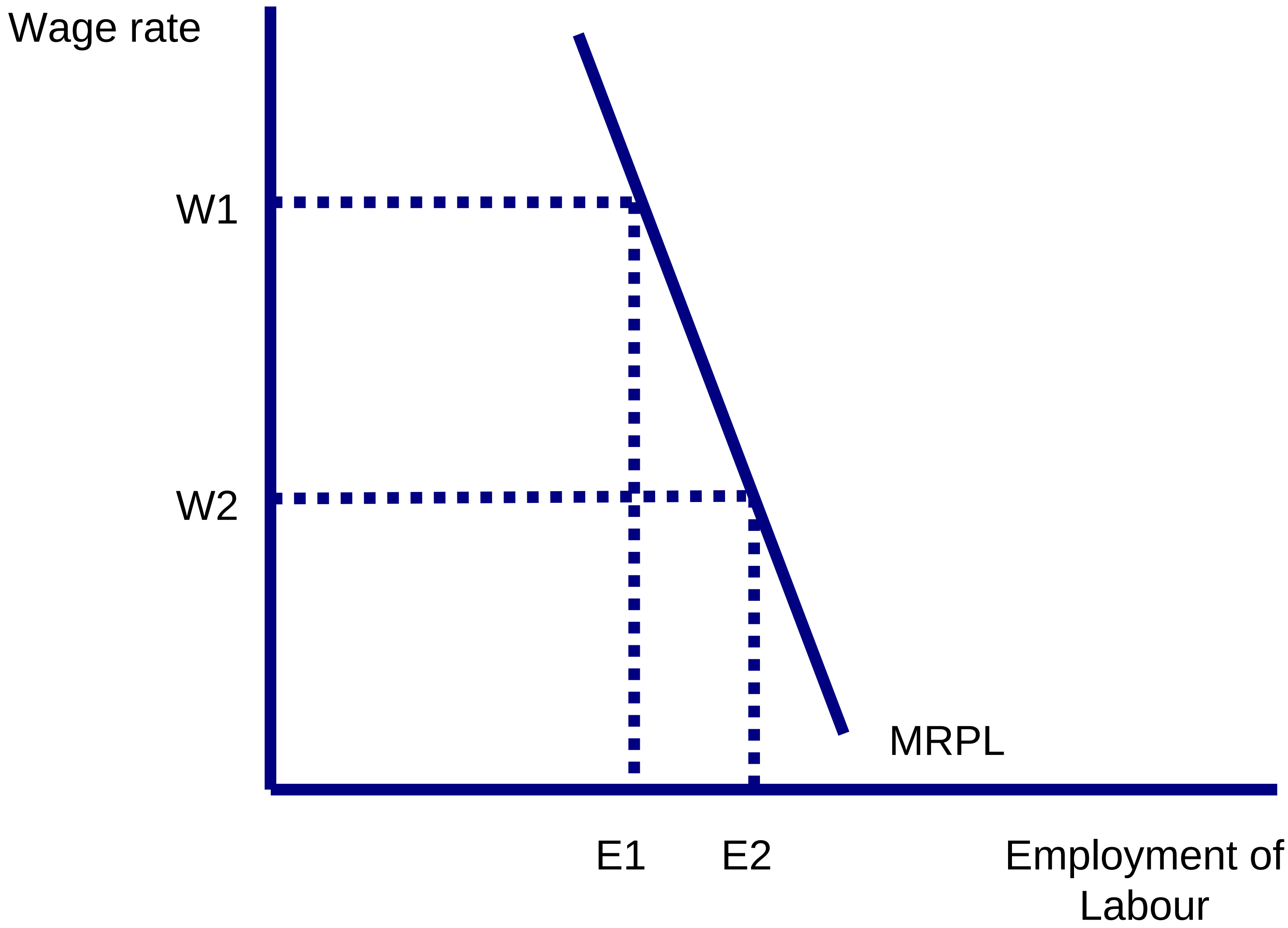
Causes of shifts in labour demand

- The demand for labour rises following
- (1) Labour productivity (MPP) improvements through training, better capital, or better management.
- (2) Higher demand for the final product rises so firms hire extra workers and thus the demand for labour increases, shifting the labour demand curve to the right.
- (3) The price of a substitute input e.g. the relative price of capital equipment rises

Wage Elasticity of Demand for Labour

- Proportion of labour costs in total costs. Demand for labour is more wage elastic in labour intensive industries
- Ease of factor substitution. Demand for labour is more elastic when labour and capital are interchangeable
- Price elasticity of demand for the final product. Firms operating in highly competitive market have little opportunity to pass on higher wages through higher prices
- Time period. The demand for labour is more wage inelastic in the short run as it is harder to substitute

An Inelastic Demand for Labour



An Elastic Demand for Labour