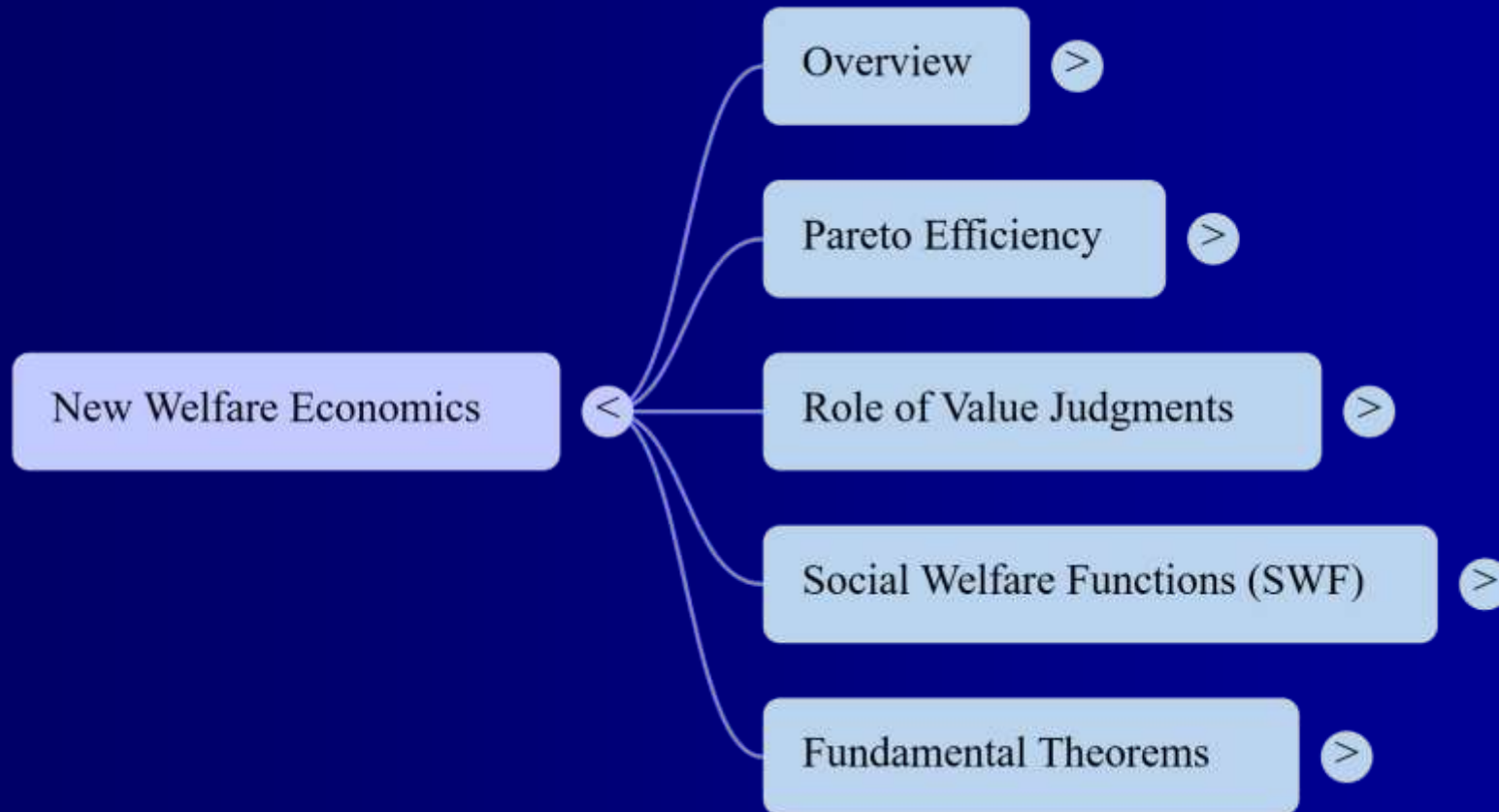


Fundamentals of Welfare Economics

- ***Welfare Economics*** – the branch of economic theory concerned with the social desirability of alternate economic states and policies

Fundamentals of Welfare Economics



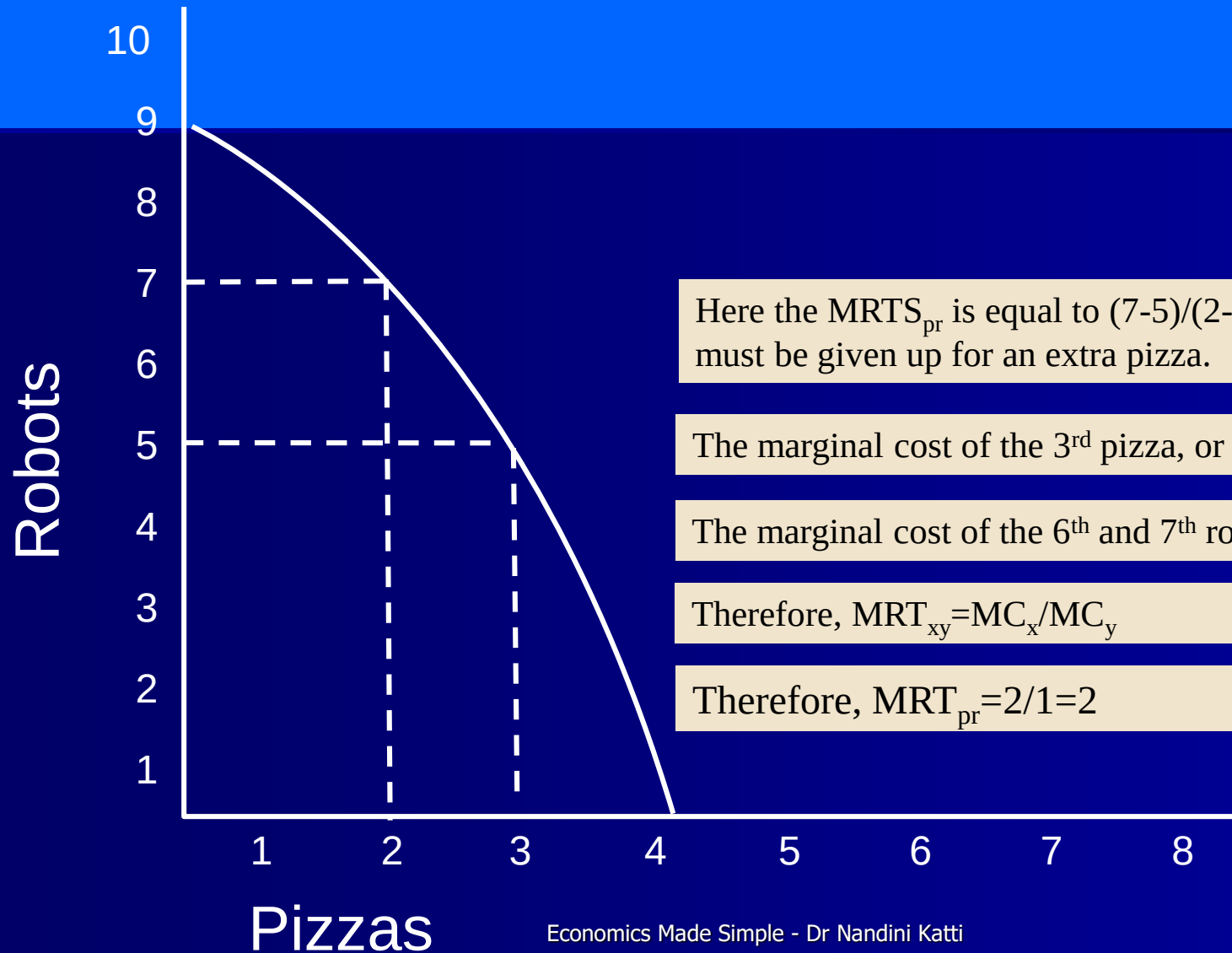
Pareto Efficiency

- When an allocation is NOT pareto efficient, it is wasteful (at least one person could be made better off)
 - Pareto efficiency evaluates the desirability of an allocation
- A PARETO IMPROVEMENT makes one person better off without making anyone else worse off (like the move from A to C)
- However, there may be more than one pareto improvement:

Theory - Starting Point: Economy with production

- A production economy can be analyzed using the PRODUCTION POSSIBILITIES CURVE/FRONTIER
 - The PPC shows all combinations of 2 goods that can be produced using available inputs
 - The slope of the PPC shows how much of one good must be sacrificed to produce more of the other good, or MARGINAL RATE OF TRANSFORMATION (x for y) (MRT_{xy})

Production Possibilities Curve



Here the $MRTS_{pr}$ is equal to $(7-5)/(2-1)=-2$, or two robots must be given up for an extra pizza.

The marginal cost of the 3rd pizza, or $MC_p=2$ robots

The marginal cost of the 6th and 7th robots, or $MC_r=1$ pizza

Therefore, $MRT_{xy}=MC_x/MC_y$

Therefore, $MRT_{pr}=2/1=2$

Efficiency & Production Example

- From the PPC, we know that:

$$\frac{MC_x}{MC_y} = MRT_{xy}$$

- We can therefore reinterpret Pareto efficiency as:

$$\frac{MC_x}{MC_y} = MRS_{xy}^{PersonA} = MRS_{xy}^{PersonB}$$

Welfare Economics Evaluation

Welfare Economics asks 3 questions of every government action:

- 1) Will it have desirable distributional consequences?**
- 2) Will it enhance efficiency?**
- 3) Is the cost reasonable?**