



Efficiency, Exchange, and the Edgeworth Box

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Efficiency and Exchange

- > **Pareto Improving** – *An allocation that makes at least one person better off without making anyone worse off*
- > **Pareto Efficient** – *An allocation in which no one can be made better off without making someone worse off*
- > **Potentially Pareto Improving** – *An allocation is potentially pareto improving if the gainers gain sufficiently so that they could compensate the losers for their losses and still come out ahead*

Efficiency and Exchange

Two Welfare Theorems

- > **Perfect Competition yields a Pareto Efficient Allocation**
 - *This is termed the First Theorem of Welfare Economics*
 - *Think “Perfect Competition is efficient”*
- > **All Pareto Efficient allocations can be obtained by the competitive market given an appropriate initial endowment**
 - *This is termed the Second Theorem of Welfare Economics*
 - *Think “distribution can (might) be separated from efficiency”*
 - *Edgeworth box can help visualize this*

Efficiency and Exchange

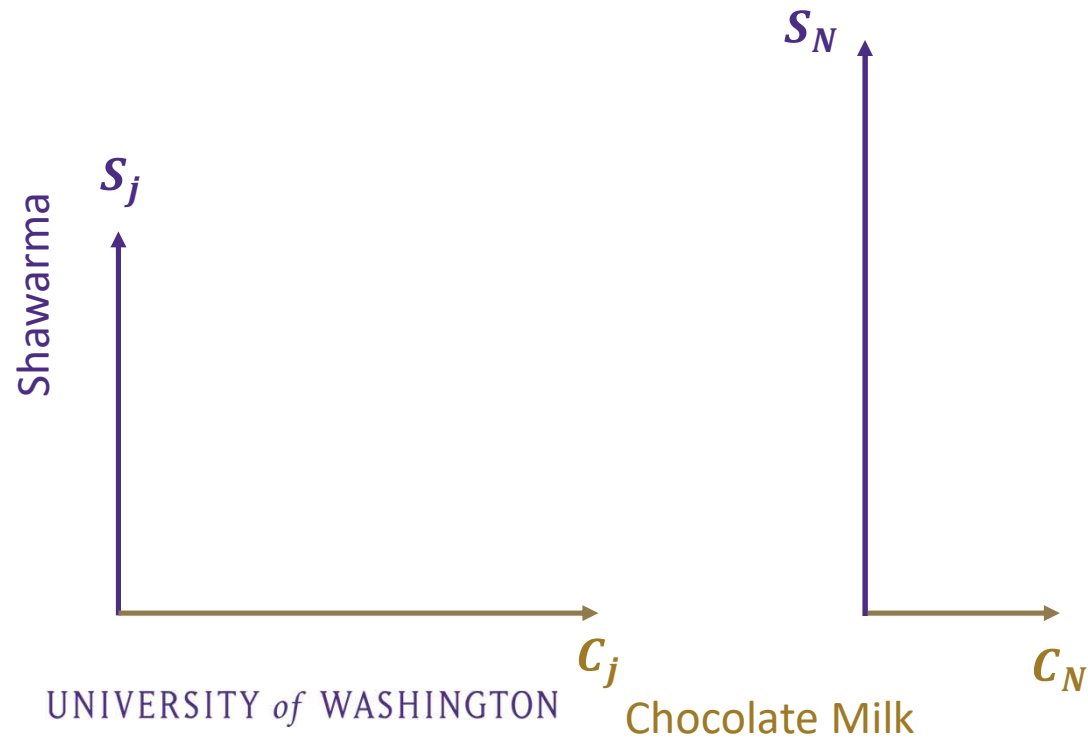
- > **Efficiency does not equal Equity**
- > **Why are they different?**
- > **What are the advantages of focusing on efficiency?**
- > **What are the disadvantages?**
- > **Normative vs Positive**

Edgeworth Box

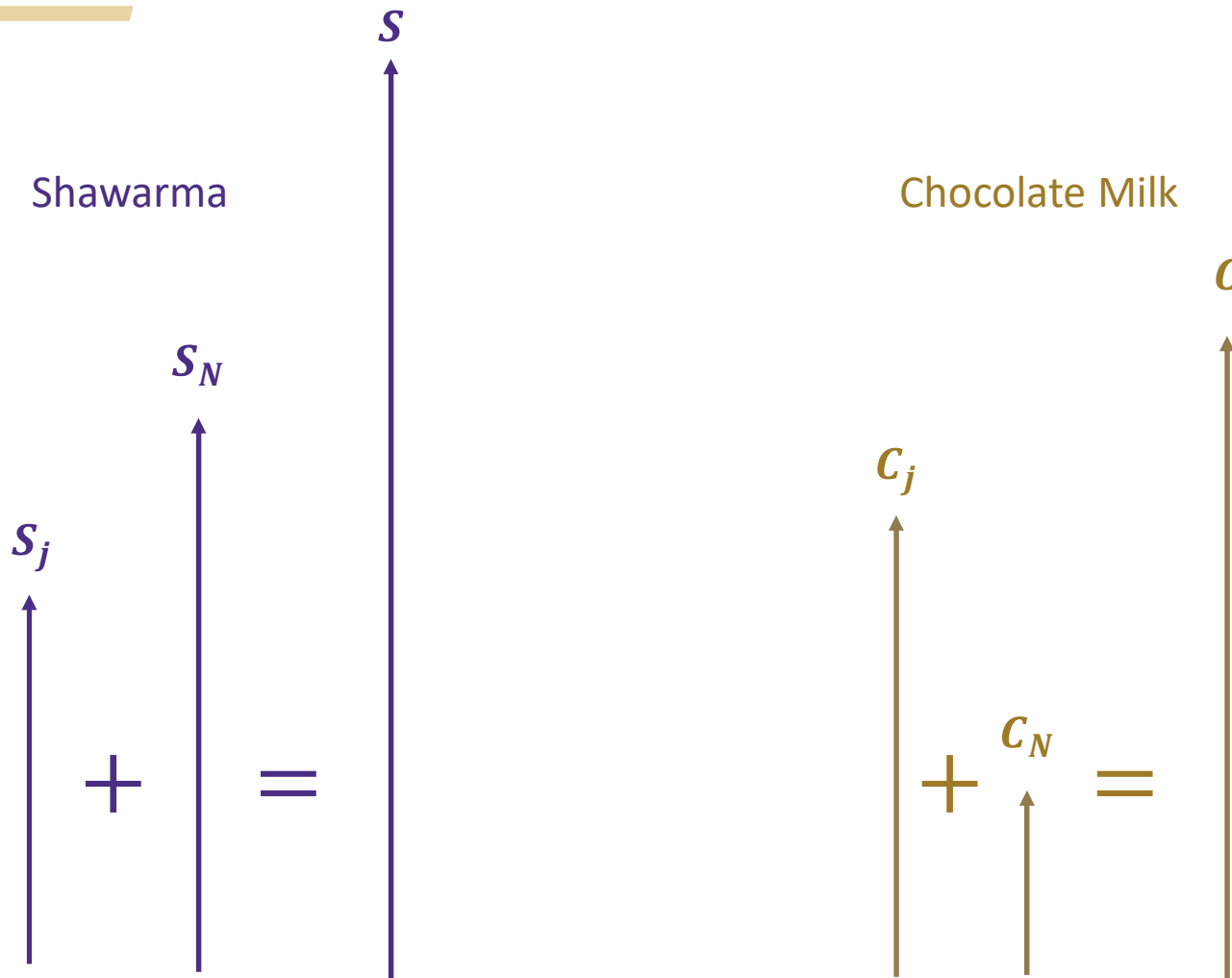
- > Suppose it is lunch time in a cafeteria and two extremely economic oriented 3rd graders are trading food. Both have some combination of shawarma and chocolate milk
- > Julia – S_j, C_j
- > Norma – S_N, C_N

Edgeworth Box

- > Julia – S_j, C_j
- > Norma – S_N, C_N

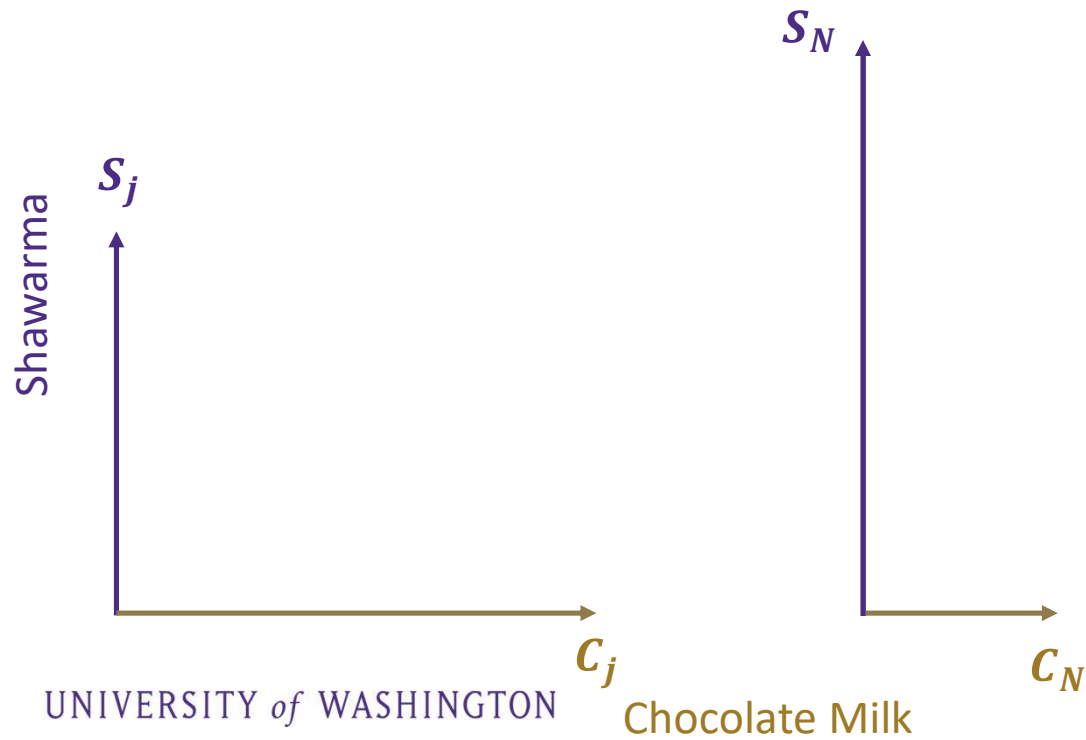


Edgeworth Box



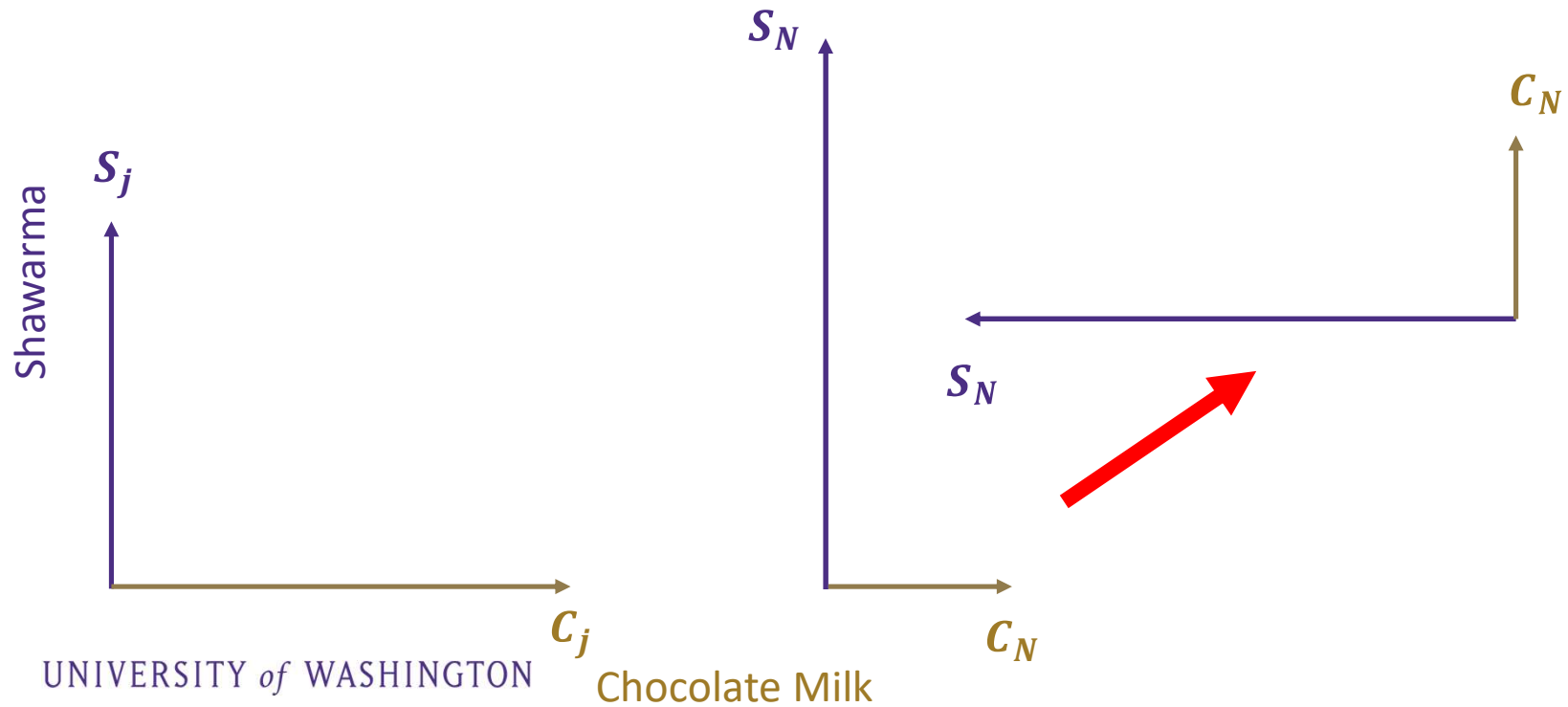
Edgeworth Box

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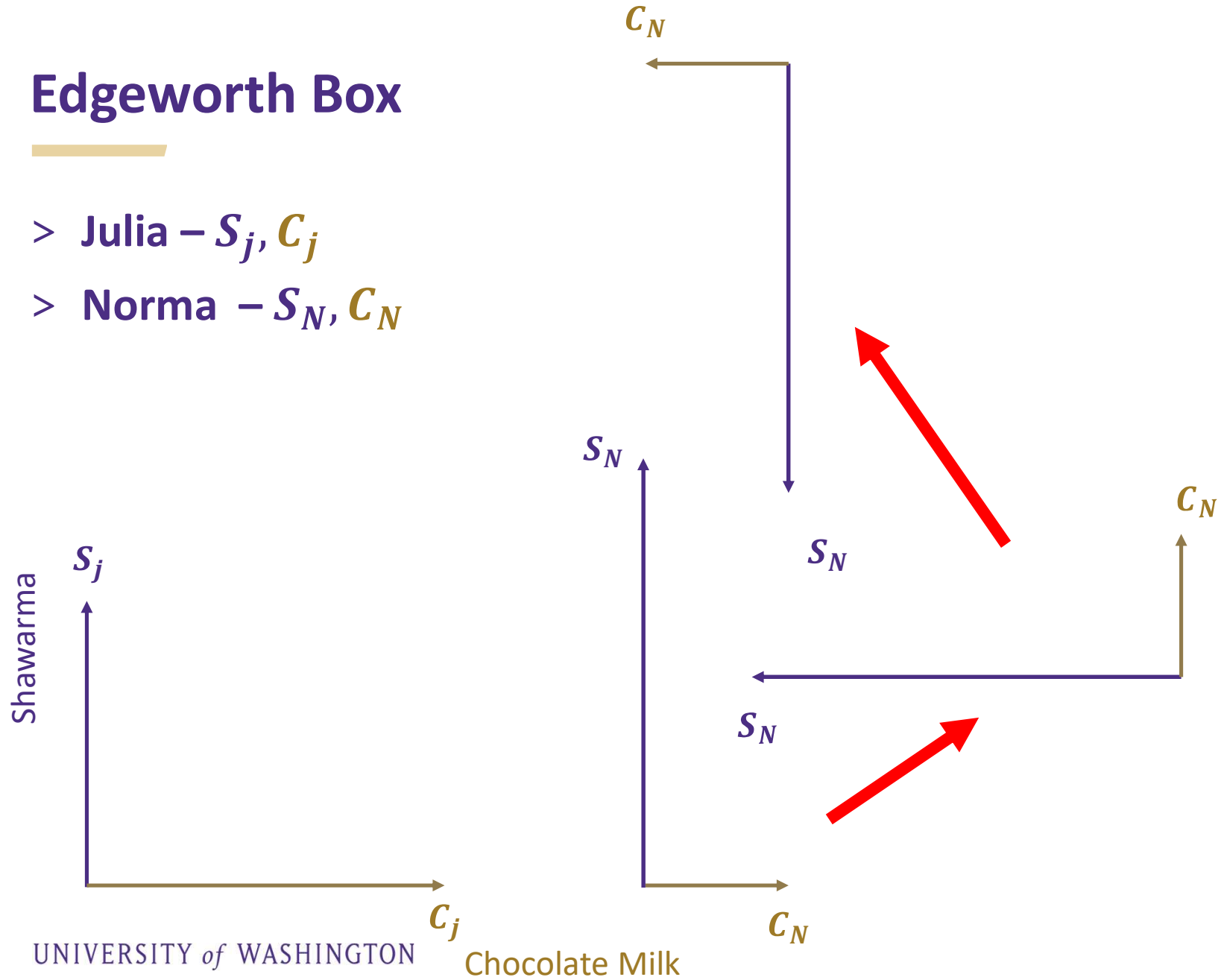
Edgeworth Box

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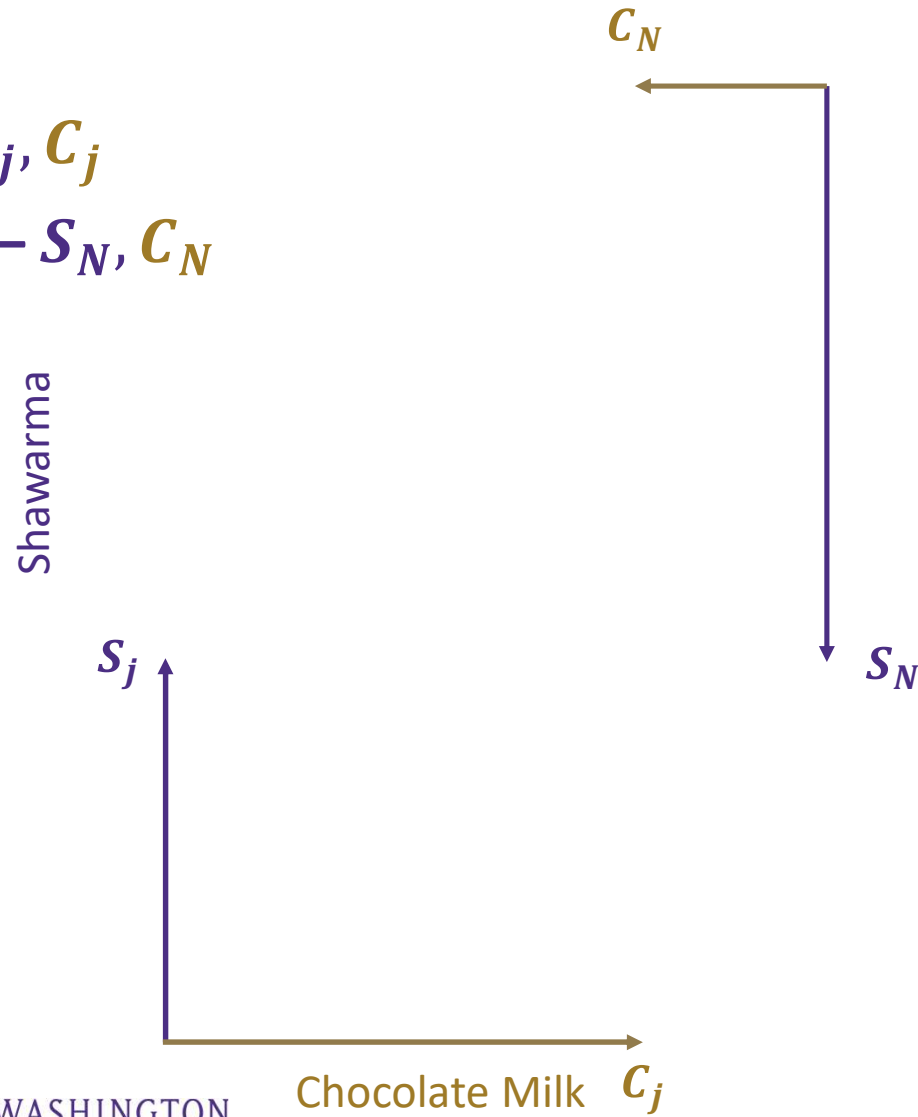
Edgeworth Box

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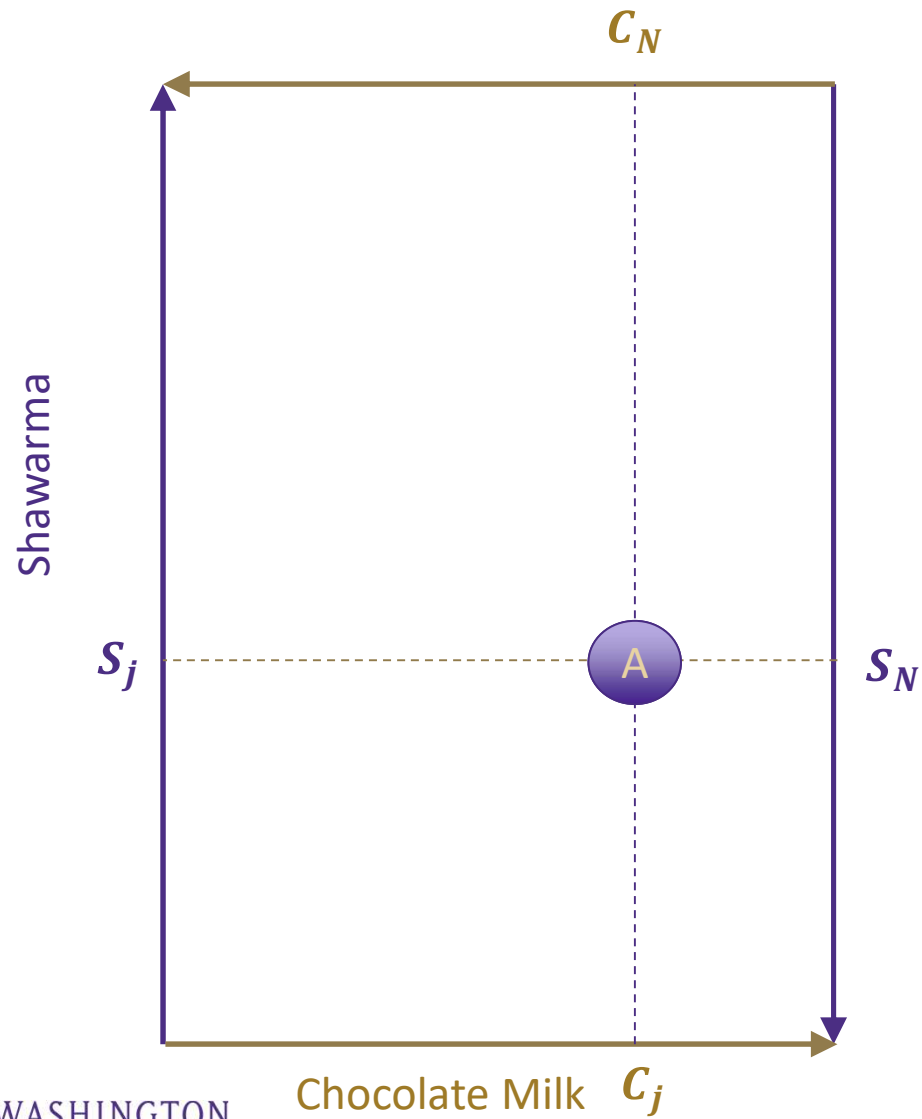


Edgeworth Box

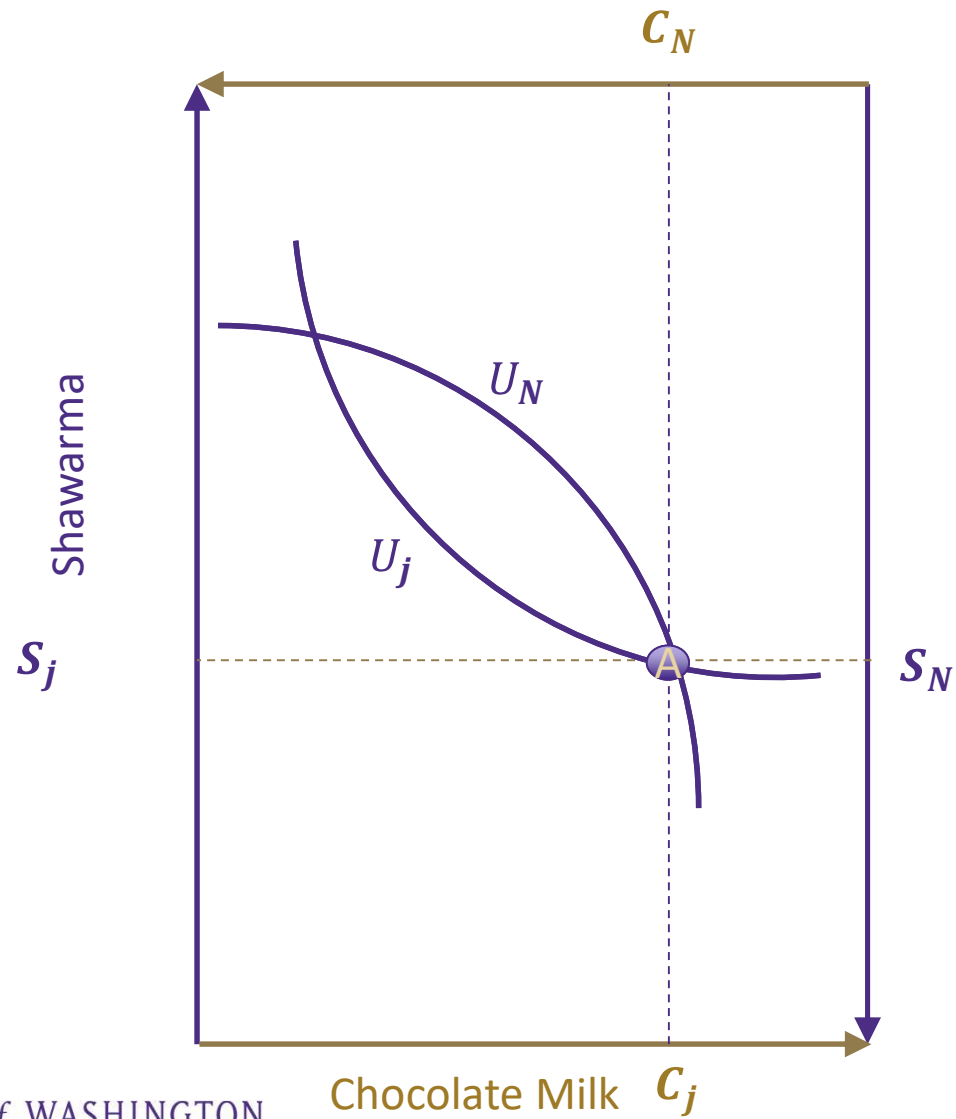
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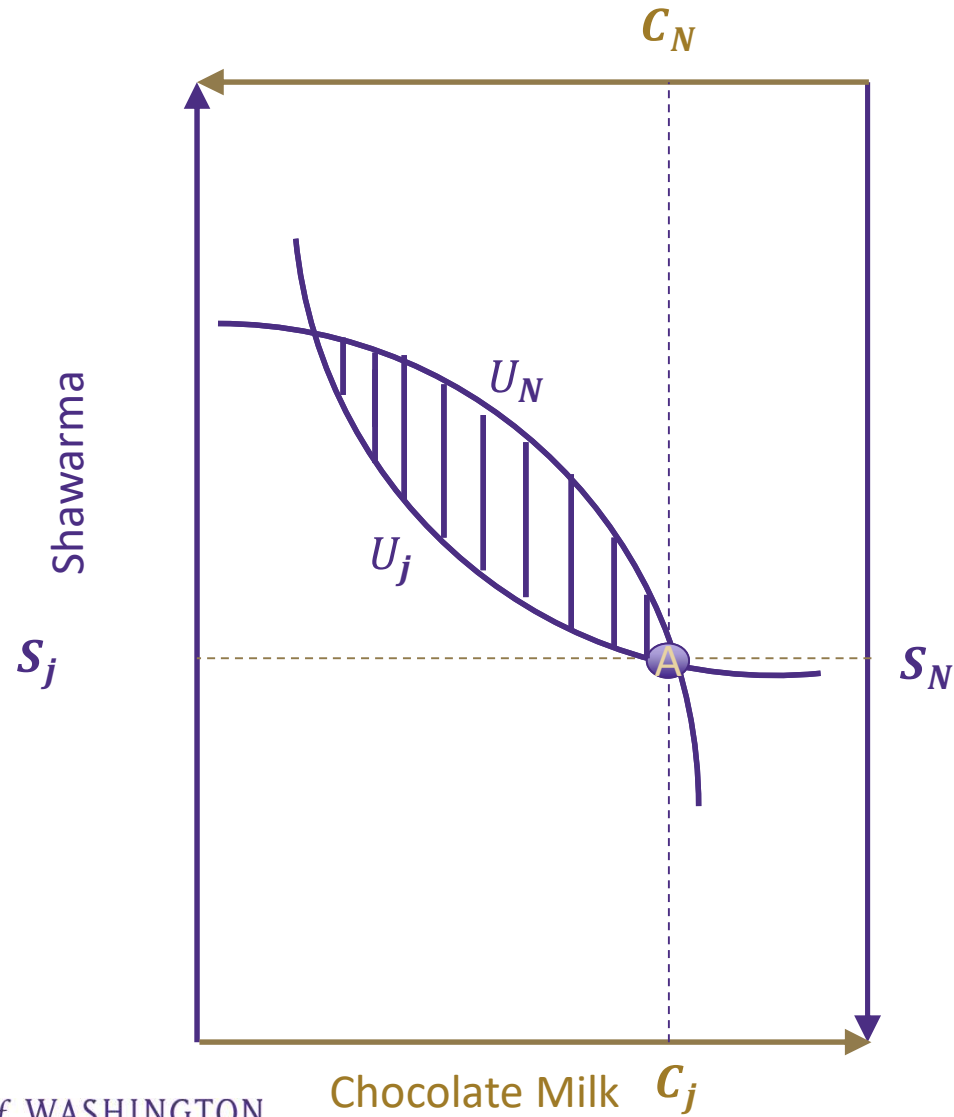
Edgeworth Box



Edgeworth Box

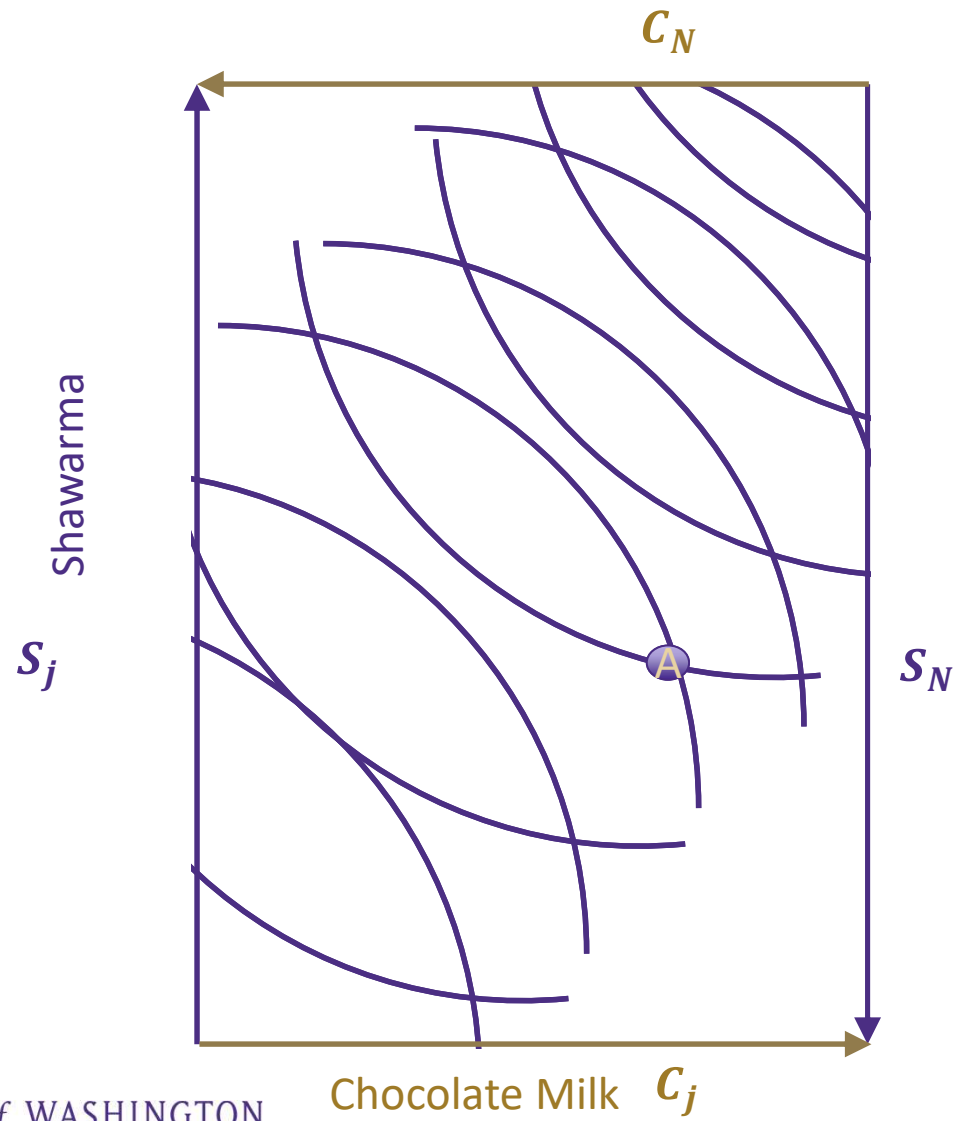


Edgeworth Box

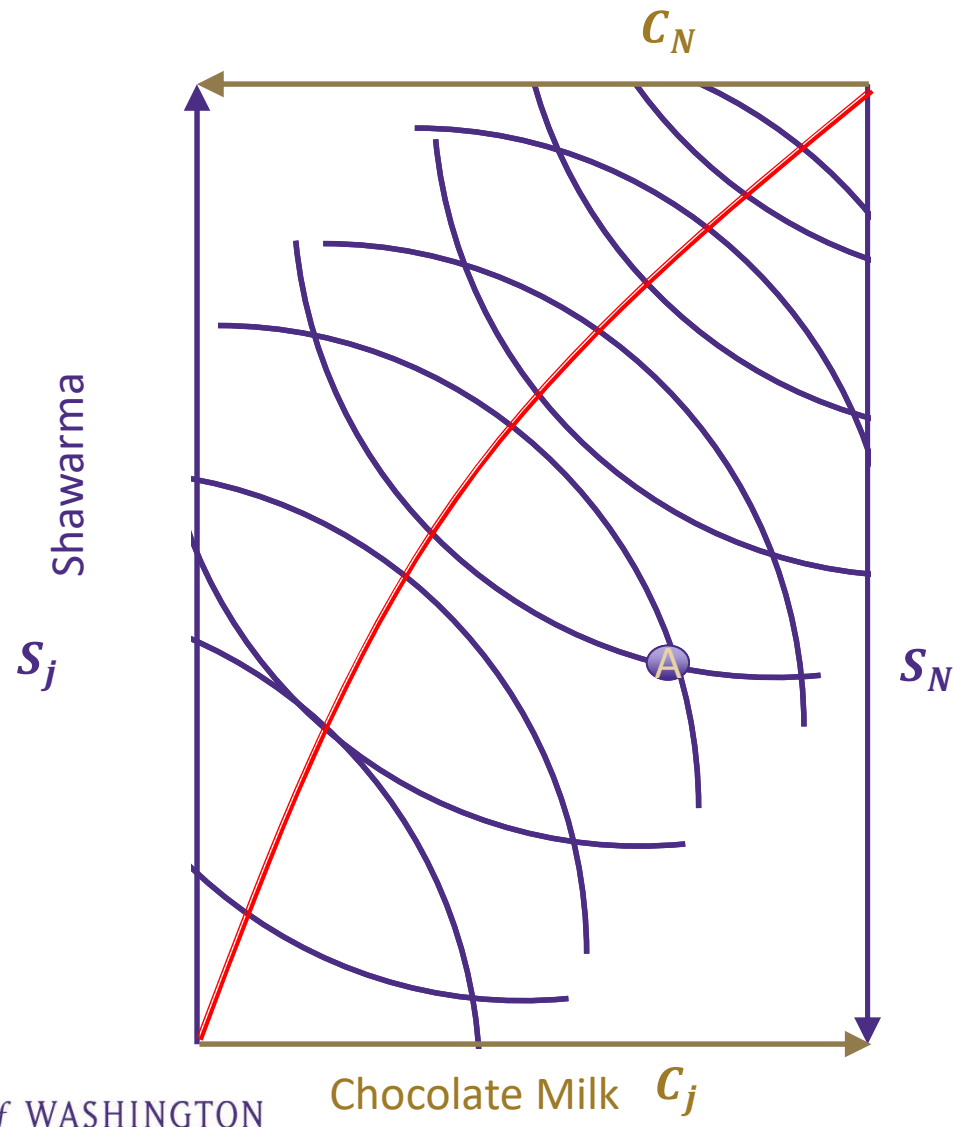


Bundles of goods that place both parties in the shaded region are better than point A.

Edgeworth Box



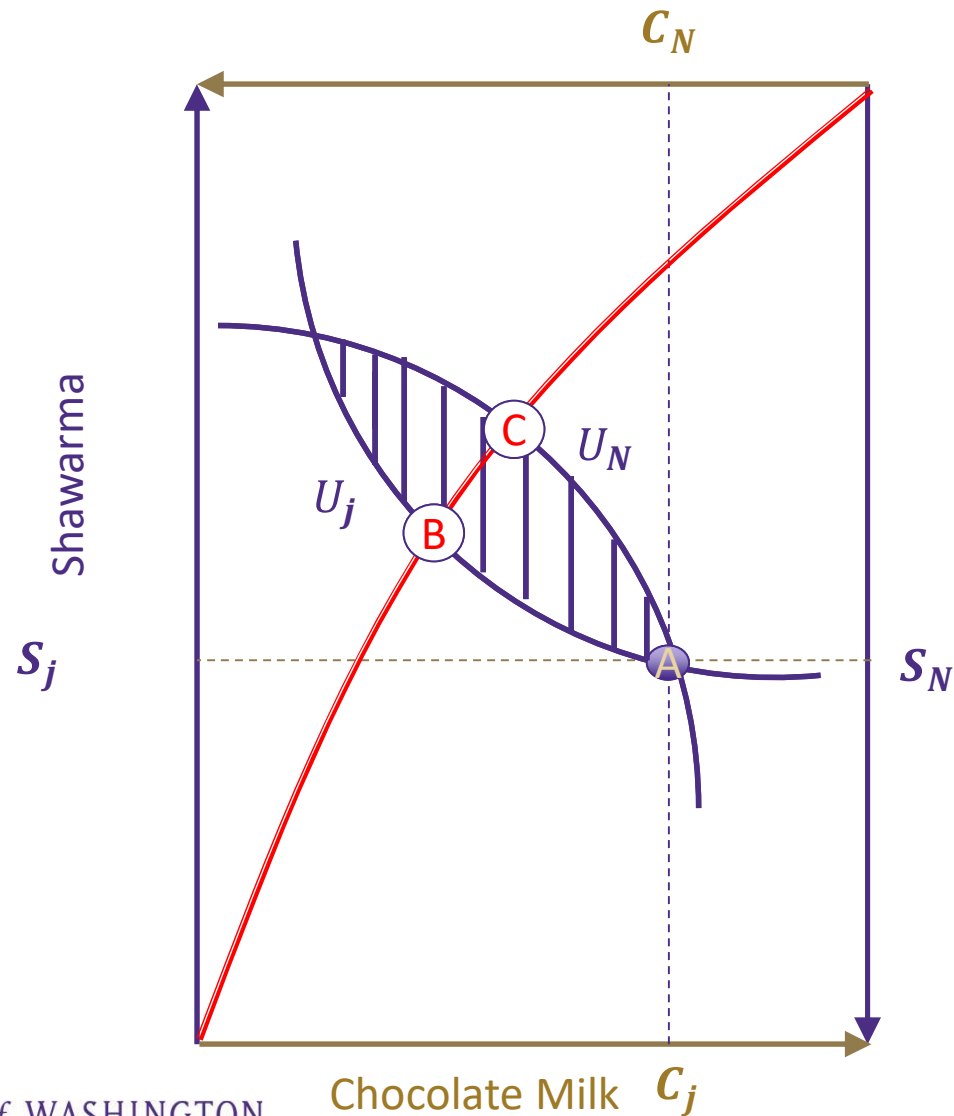
Edgeworth Box



In an exchange economy, all efficient allocations lie along a contract curve

Along the contract curve, individuals' preferences are rivals

Edgeworth Box



By adding the contract curve to our observed circumstance, we can see the range of possible trades that are optimal for both Julia and Norma (Between points B and C)

Efficiency and Exchange

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- > **Examples of each in small groups**

Efficiency and Exchange

Two Welfare Theorems

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 - *Edgeworth box can help visualize this*
- > **Write your own definition down, then compare in small groups**

Efficiency and Exchange

- > **Efficiency does not equal Equity**
- > **Why are they different?**
- > **What are the advantages of focusing on efficiency?**
- > **What are the disadvantages?**
- > **Normative vs Positive**

- > **Have your answers changed at all?**