

Love, betrayal and commitment.

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- Although the general analysis of limited commitment provides some guidelines for the analysis of families there are distinct differences between the contexts.
- In particular, family relationships often involve love which is conspicuously absent from the worker-firm relationship or in interactions between village members
- and is unthinkable for central bankers.

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- Suggestion: if partner b exercises too aggressively his bargaining power then a loses some regard (or love) for him. The important element is that this loss of love is out of the control of the affected partner; in this sense, this is betrayal.
- In a model with mutual love, this 'punishment' is often sufficient to deter a partner from exercising their full bargaining power.

- Consider a married couple a ('her') and b ('him'). Income, normalised to unity, is divided between them so that a receives x for private consumption and b receives $1 - x$. Each person has the same strictly increasing, strictly concave felicity function, so that:

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- Each person also cares for the other with individual utility functions given by:

$$W_a(x) = u_a + \lambda_a u_b = u(x) + \lambda_a u(1 - x)$$

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- The household behaves as though it maximises the function:

$$\hat{W} = W_a + \mu W_b$$

The *objective Pareto weight*, μ , captures all of the external factors that affect the power of b within the household.

- The household welfare function is:

$$\begin{aligned}\hat{W} &= u(x) + \lambda_a u(1-x) + \mu (\lambda_b u(x) + u(1-x)) \\ &= (1 + \mu \lambda_b) u(x) + (\lambda_a + \mu) u(1-x)\end{aligned}$$

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$$\begin{aligned}\hat{V}^a &= u(\hat{x}) + \lambda_a u(1 - \hat{x}) \\ \hat{V}^b &= \lambda_b u(\hat{x}) + u(1 - \hat{x})\end{aligned}$$

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- Partner a will veto the move if $m > m_0(y)$.

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- If he does take the improvement ('betrayal'), she finds herself caring less for him.
- The fall in her caring for him is taken to be exogenous so that a has an automatic and hence credible punishment for b choosing to take advantage of his improved position.
- We assume that a 's new caring parameter for b is $\lambda_a(1 - s.m)$ where $s \in [0, m^{-1}]$.

- If he does not betray, the household utility function used to choose \tilde{x} is given by:

$$\tilde{W} = (1 + \mu\lambda_b) u(x) + (\lambda_a + \mu) u(y - x)$$

and indirect utility functions are given by:

$$\tilde{V}^a = u(\tilde{x}) + \lambda_a u(y - \tilde{x})$$

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- If he does betray, the household utility function used to choose \check{x} is given by:

$$\check{W} = (1 + \mu(1 + m)\lambda_b) u(x) + (\lambda_a(1 - sm) + \mu(1 + m)) u(y - x)$$

and indirect utility functions are given by:

$$\check{V}^a = u(\check{x}) + \lambda_a(1 - sm) u(y - \check{x})$$

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- Since his indirect utility function is the same in both cases, he will betray if $\check{x} > \tilde{x}$. This holds iff

$$s < \frac{\mu(1 - \lambda_a \lambda_b)}{(1 + \mu \lambda_b) \lambda_a} = s^* \quad (1)$$

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- Her loss of caring for him, s , has to be small ($< s^*$) for him to betray. The threshold s^* is independent of y and m .

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- Case *I*. Do not move. ($\Leftarrow s < s^*$ and $m > m_0$).
- Case *II*. Move with no betrayal. ($\Leftrightarrow s \geq s^*$).
- Case *III*. Move with betrayal.
- Easiest to see outcomes on a figure.

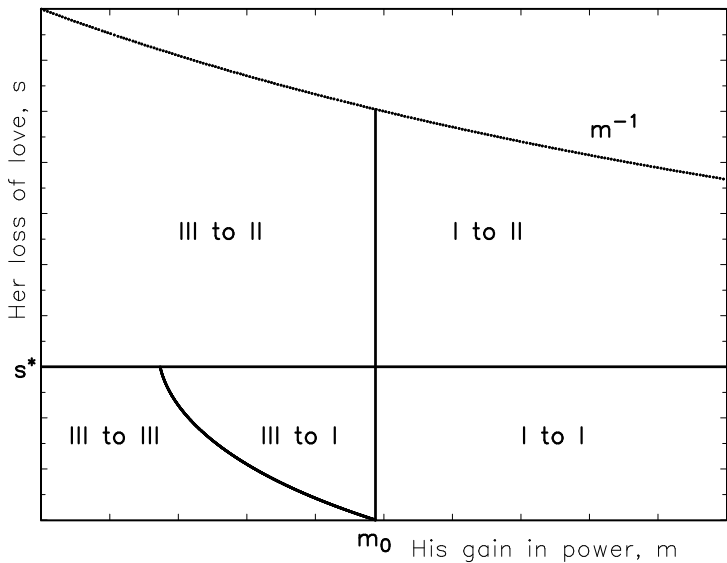


Figure: Outcomes as function of his gain in power and her loss of love.

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- Are there any empirical implications?