

## Parameters:

$$b_z = 0 \quad b_3 = \frac{1}{3} \quad e_3 = \frac{1}{200616} \quad e_4 = \frac{1}{235464} \quad e_5 = \frac{1}{1182264}$$

## Values of the Solution Variables:

$$a_1 f_2 = a_2 f_1 = 0.05735701$$

$$a_1 f_3 = a_2 f_3 = 0.0608687$$

$$a_3 f_1 = a_3 f_2 = 0.06634303$$

$$a_{12} = a_{21} = 0.07704447$$

$$a_{13} = a_{23} = 0.10034813$$

$$a_{31} = a_{32} = 0.10340788$$

$$a f_{12} = a f_{21} = 0.05574581$$

$$a f_{23} = a f_{13} = 0.10034813$$

$$a f_{32} = a f_{31} = 0.10034004$$

$$u_2 b_1 r_{23} = u_1 b_2 r_{13} = 0.34082523$$

$$u_1 b_2 r_{31} = u_2 b_1 r_{32} = 0.34082523$$

$$u_3 b_2 r_{31} = u_3 b_1 r_{32} = 0.31834698$$

$$u_1 b_3 r_{12} = u_2 b_3 r_{21} = 0.34082543$$

$$u_3 b_1 r_{23} = u_3 b_2 r_{13} = 0.31834728$$

$$u_2 b_3 r_{12} = u_1 b_3 r_{21} = 0.34082512$$

$$u_2 b_1 r_{23} = u_1 b_2 r_{13} = 0.34082208$$

$$u_3 b_2 r_{31} = u_3 b_1 r_{32} = 0.31834426$$

$$u_3 b_1 r_{23} = u_3 b_2 r_{13} = 0.31834426$$

$$u_1 b_3 r_{12} = u_2 b_3 r_{21} = 0.34082261$$

$$u_1 b_3 r_{21} = u_2 b_3 r_{12} = 0.34082214$$

$$u_2 b_1 r_{32} = u_1 b_2 r_{31} = 0.34082262$$

## Normalized Payoffs:

$$u_1 = 0.34082615 \approx \frac{91}{267}$$

$$u_2 = 0.34082615 \approx \frac{91}{267}$$

$$u_3 = 0.31834768 \approx \frac{85}{267}$$

## Shapley Value:

$$\left\{ \frac{7}{18}, \frac{7}{18}, \frac{2}{9} \right\}$$

## Nucleolus:

$$\left\{ \frac{1}{3}, \frac{1}{3}, \frac{1}{3} \right\}$$