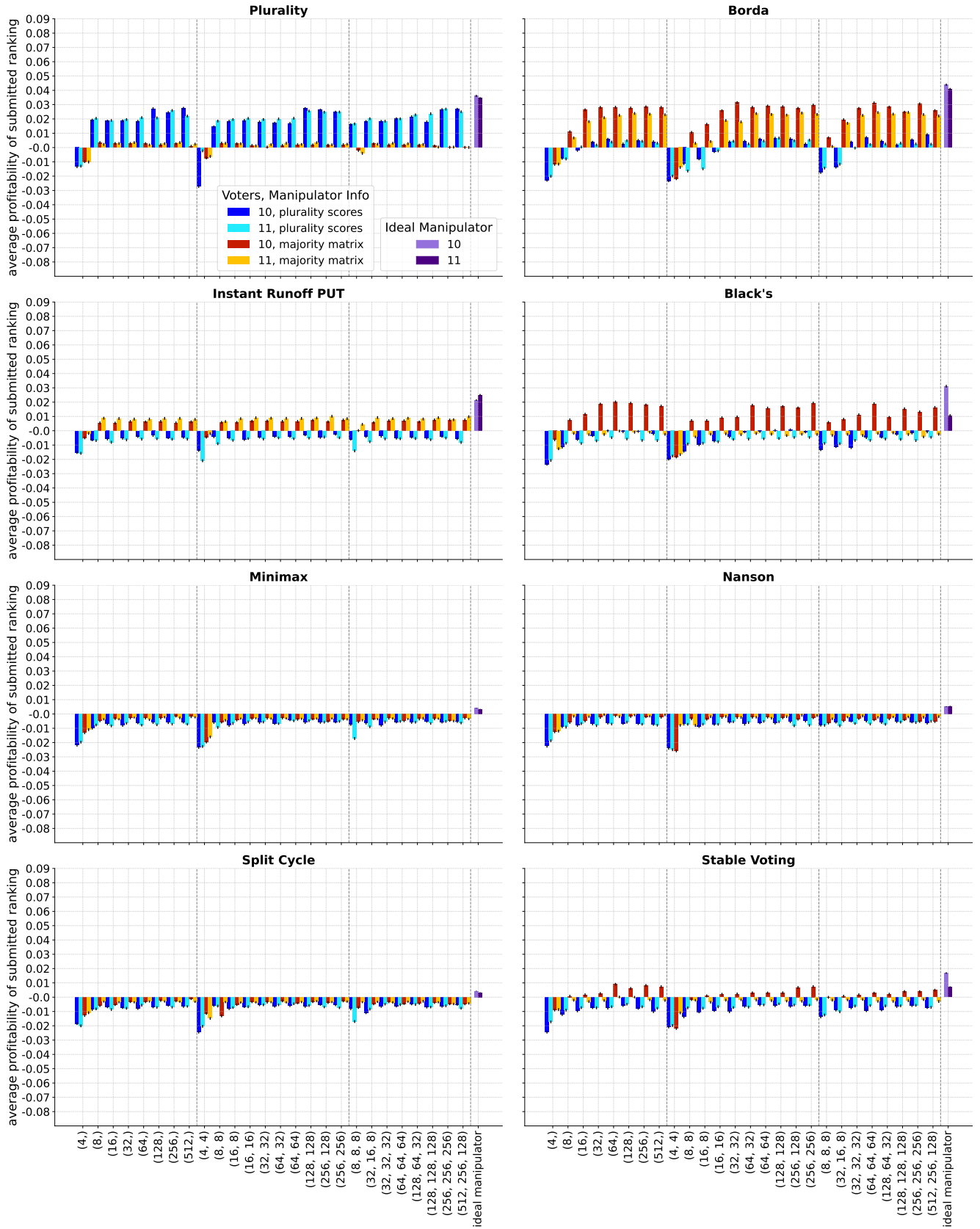Supplementary Figure A.1: Results using the **uniform utility model** with 6 candidates and 10/11 voters for MLPs manipulating on the basis of the **plurality scores** or **majority matrix**. Error bars indicate twice the estimated standard error of the mean. Hidden layer configurations of trained MLPs are shown on the x-axis.
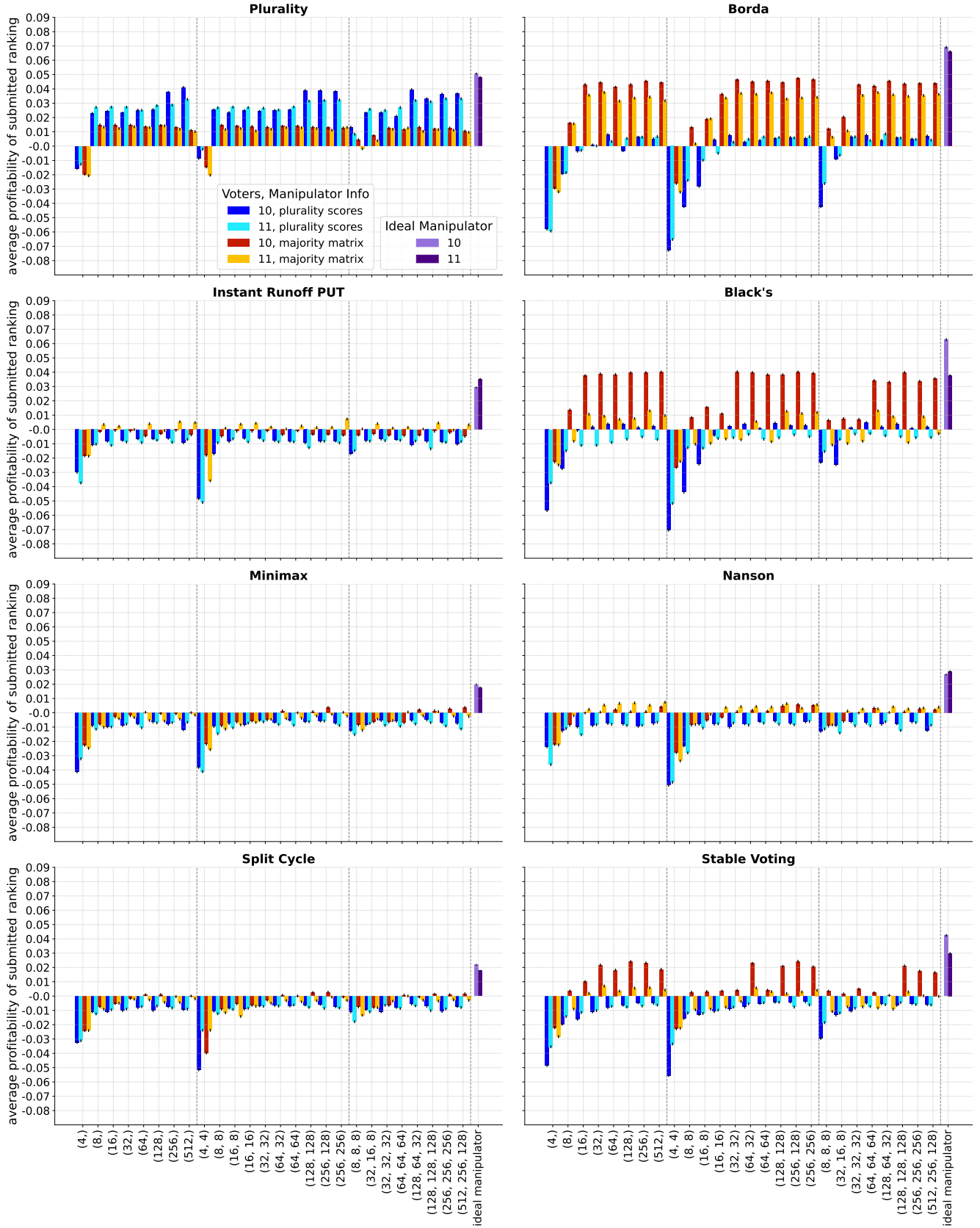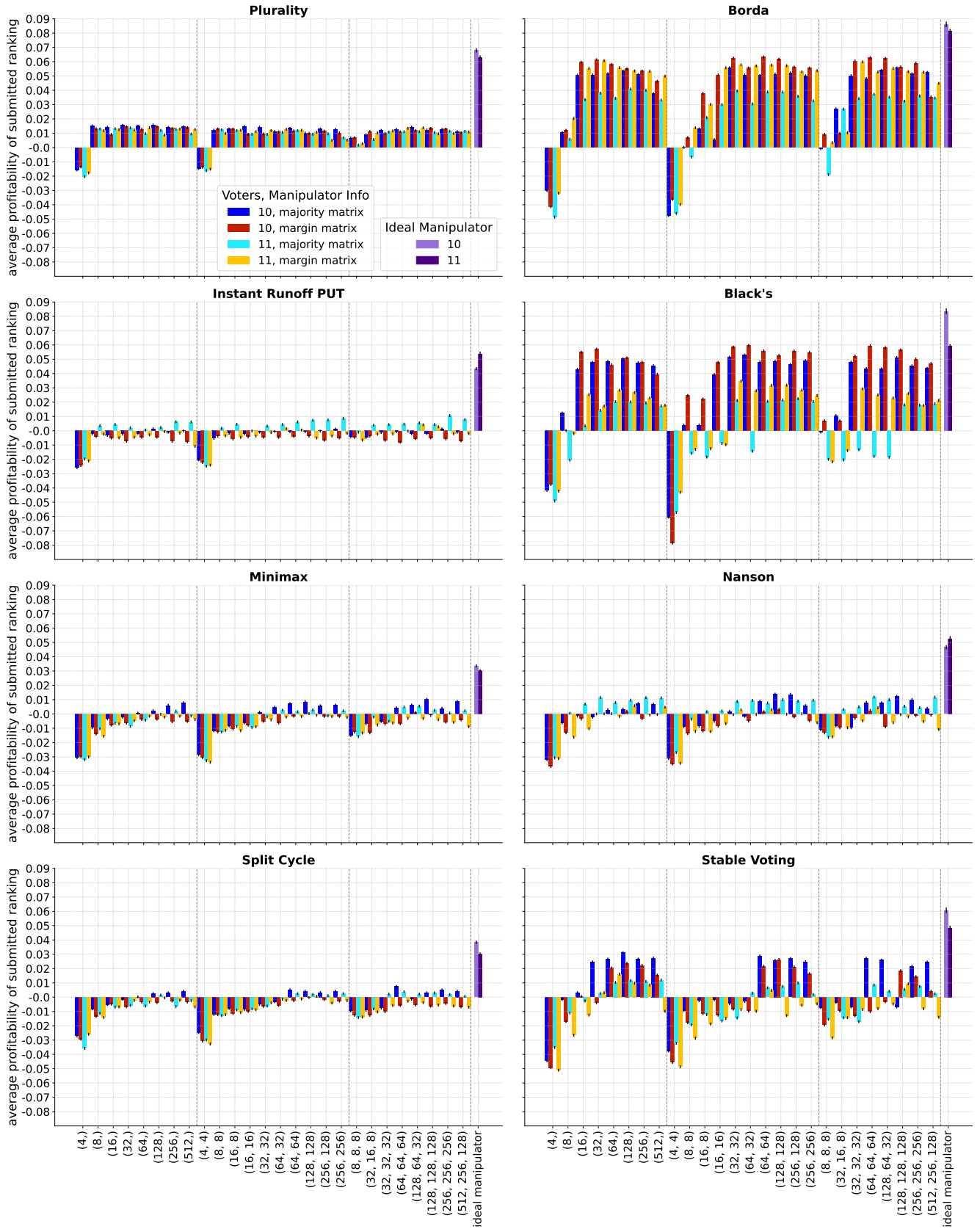
Supplementary Figure A.2: Results using the **Mallows model** with 6 candidates and 10/11 voters for MLPs manipulating on the basis of the **plurality scores** or **majority matrix**. Error bars indicate twice the estimated standard error of the mean. Hidden layer configurations of trained MLPs are shown on the x-axis.
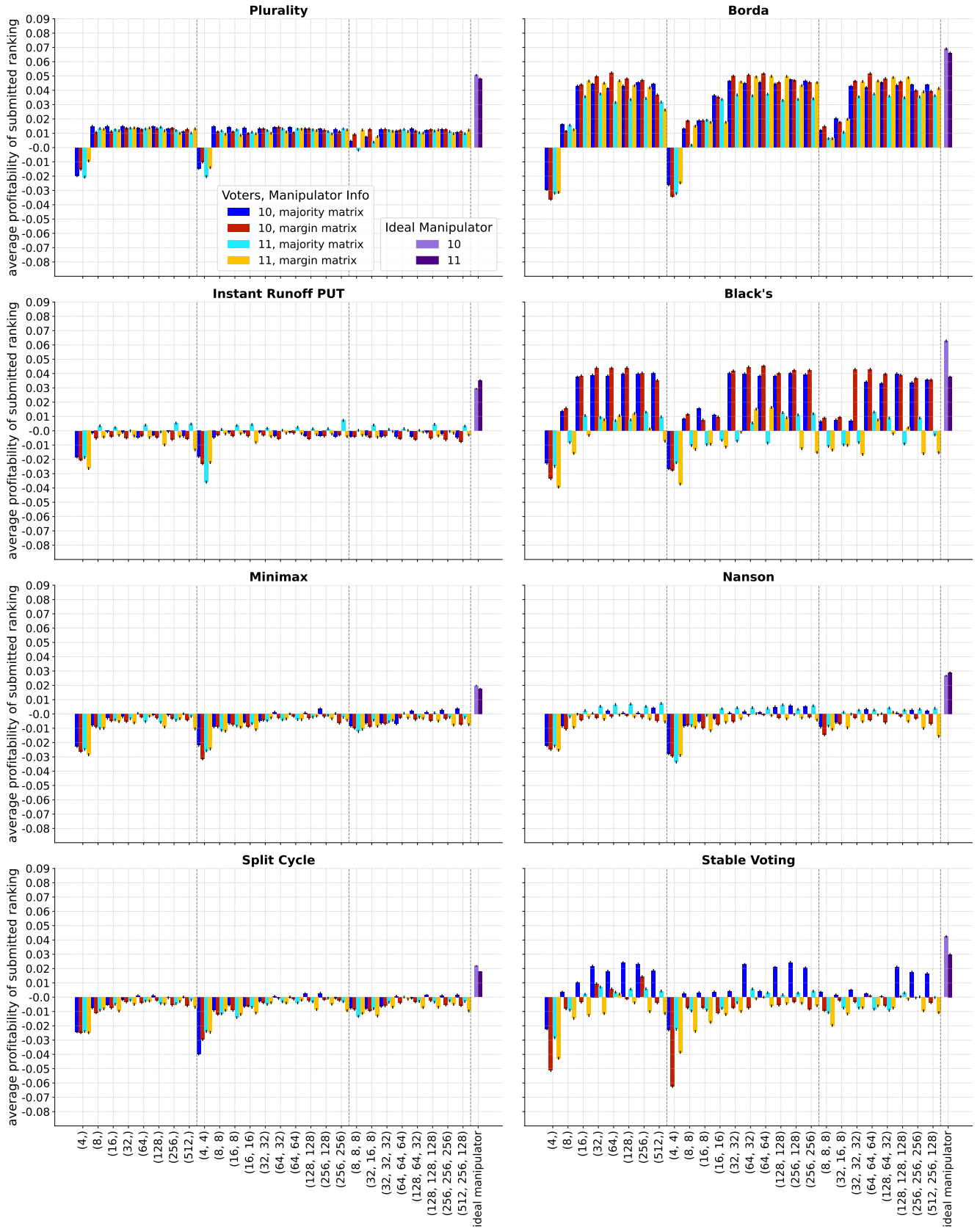
Supplementary Figure A.3: Results using the **spatial 2D model** with 6 candidates and 10/11 voters for MLPs manipulating on the basis of the **plurality scores** or **majority matrix**. Error bars indicate twice the estimated standard error of the mean. Hidden layer configurations of trained MLPs are shown on the x-axis.
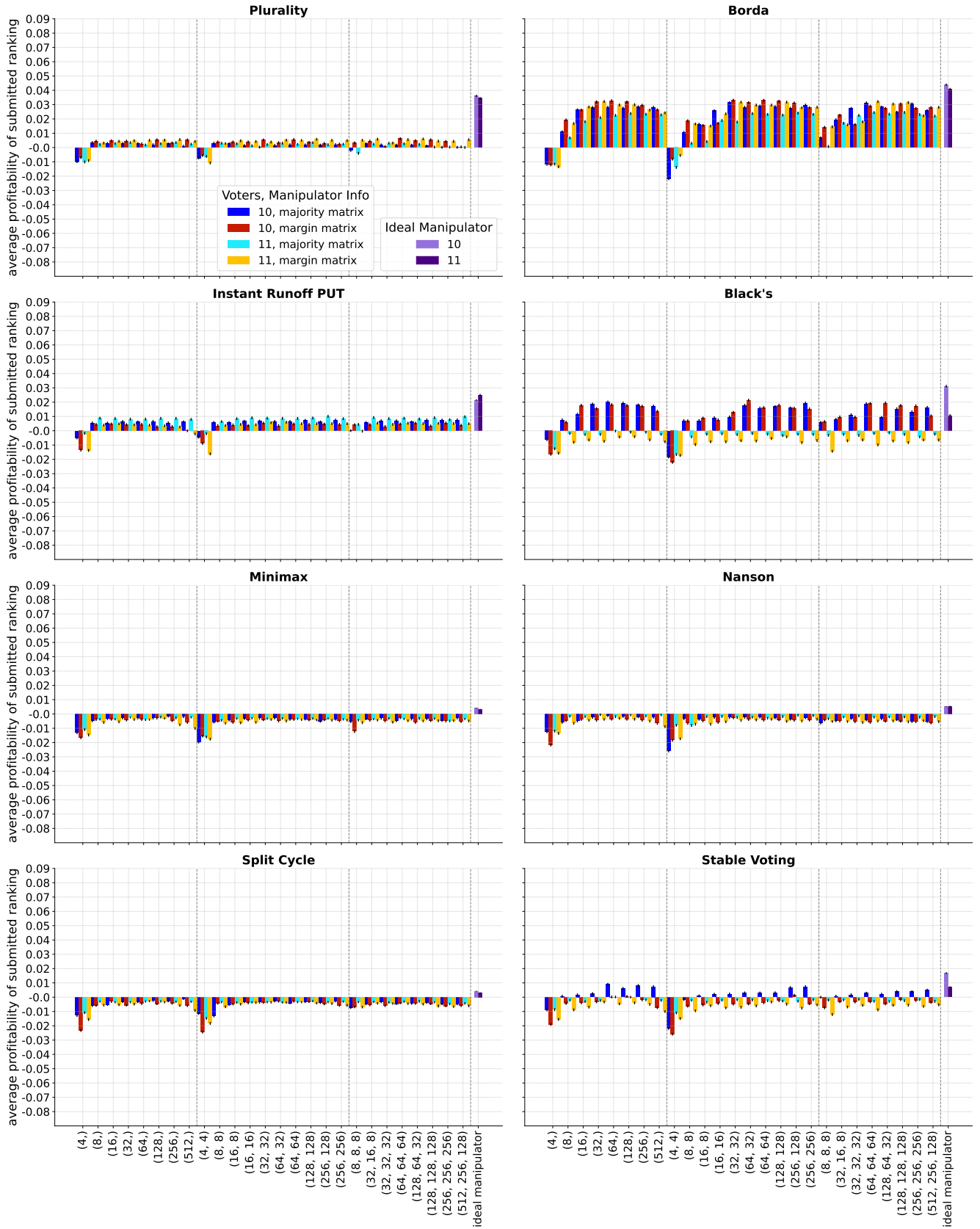
Supplementary Figure B.1: Results using the **uniform utility model** with 6 candidates and 10/11 voters for MLPs manipulating on the basis of the **majority matrix** or **margin matrix**. Error bars indicate twice the estimated standard error of the mean. Hidden layer configurations of trained MLPs are shown on the x-axis.
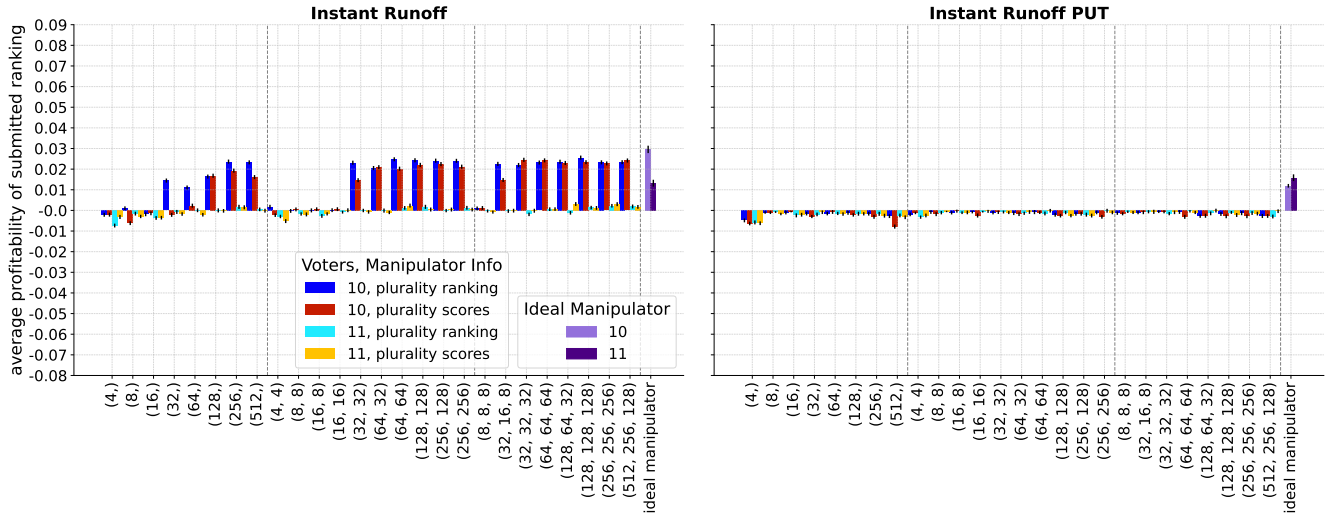
Supplementary Figure B.2: Results using the **Mallows model** with 6 candidates and 10/11 voters for MLPs manipulating on the basis of the **majority matrix** or **margin matrix**. Error bars indicate twice the estimated standard error of the mean. Hidden layer configurations of trained MLPs are shown on the x-axis.
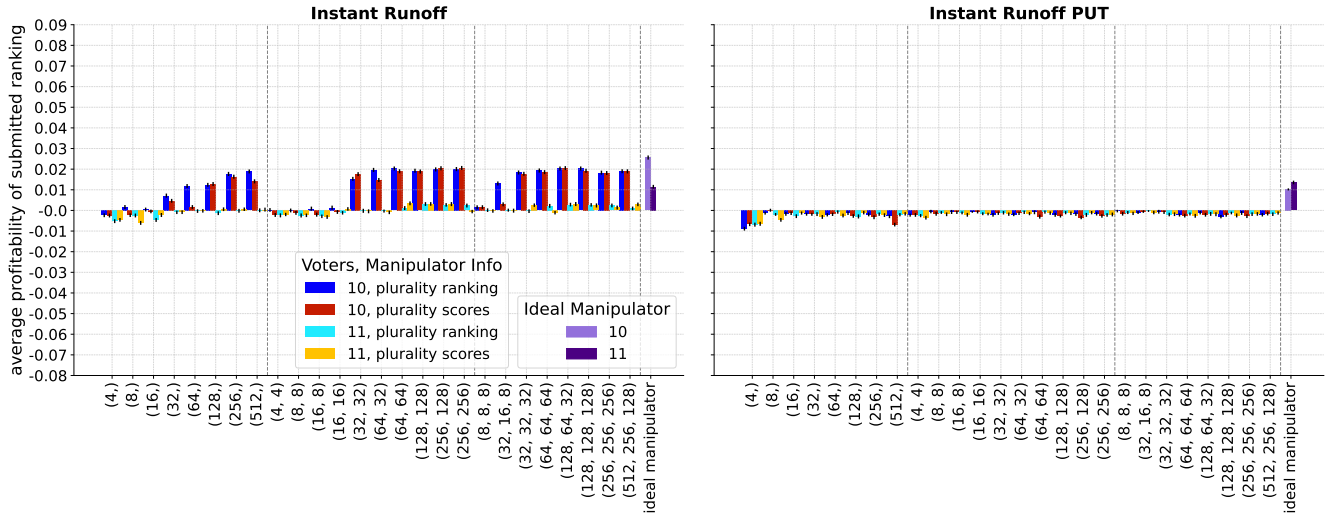
Supplementary Figure B.3: Results using the **spatial 2D model** with 6 candidates and 10/11 voters for MLPs manipulating on the basis of the **majority matrix** or **margin matrix**. Error bars indicate twice the estimated standard error of the mean. Hidden layer configurations of trained MLPs are shown on the x-axis.
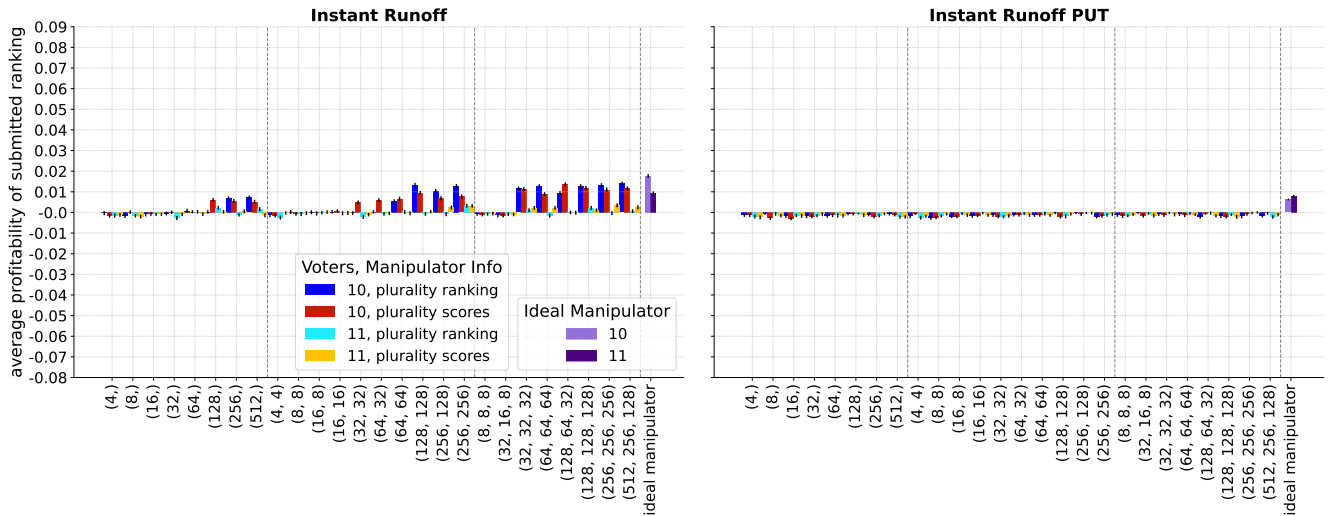
Supplementary Figure C.1: Results for 3 candidates and 10/11 voters for MLPs manipulating on the basis of the plurality ranking or plurality scores. Instant Runoff, as opposed to Instant Runoff PUT, is defined in Footnote 4. Error bars indicate twice the estimated standard error of the mean. Hidden layer configurations of trained MLPs are shown on the x-axis.
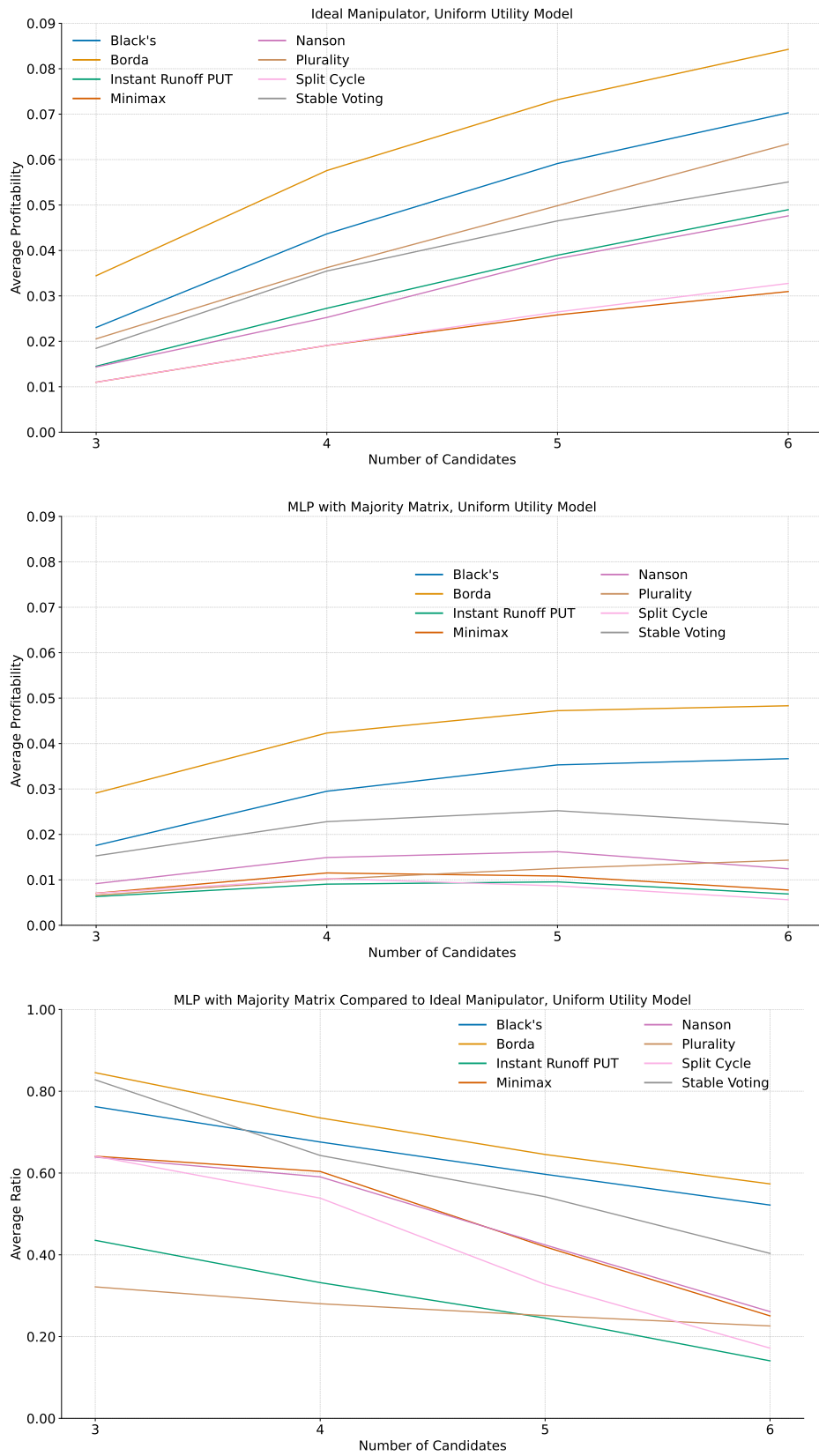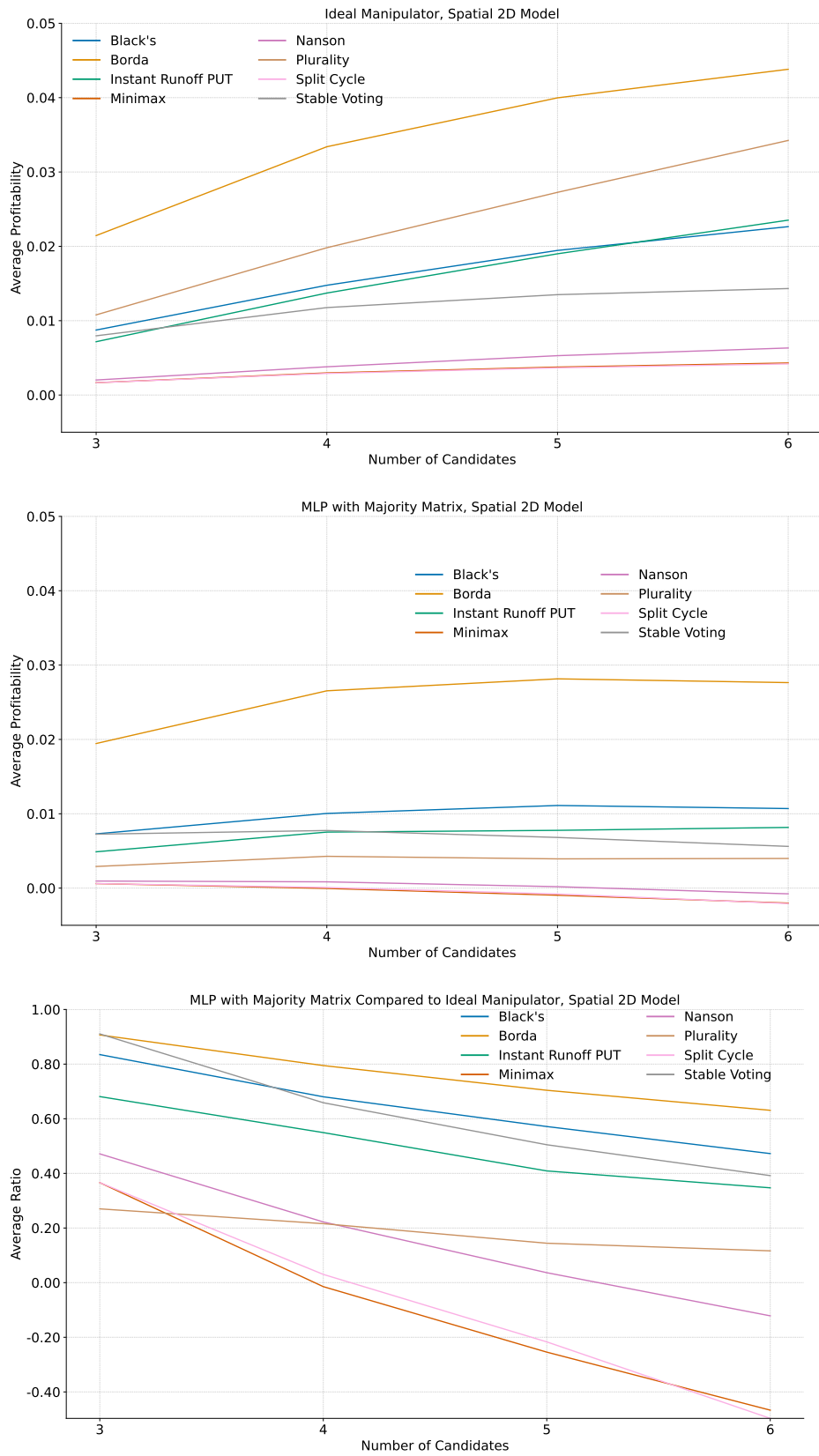
Supplementary Figure D.1: Top: average profitability of submitted rankings by an ideal manipulator. Middle: average profitability of submitted rankings by the best performing MLP with any hidden layer configuration using the **majority matrix** information, averaging over 5, 6, 10, 11, 20, and 21 voters. Bottom: the ratio of the average profitability of the MLP's submitted ranking to the average profitability of the ideal manipulator's submitted ranking.
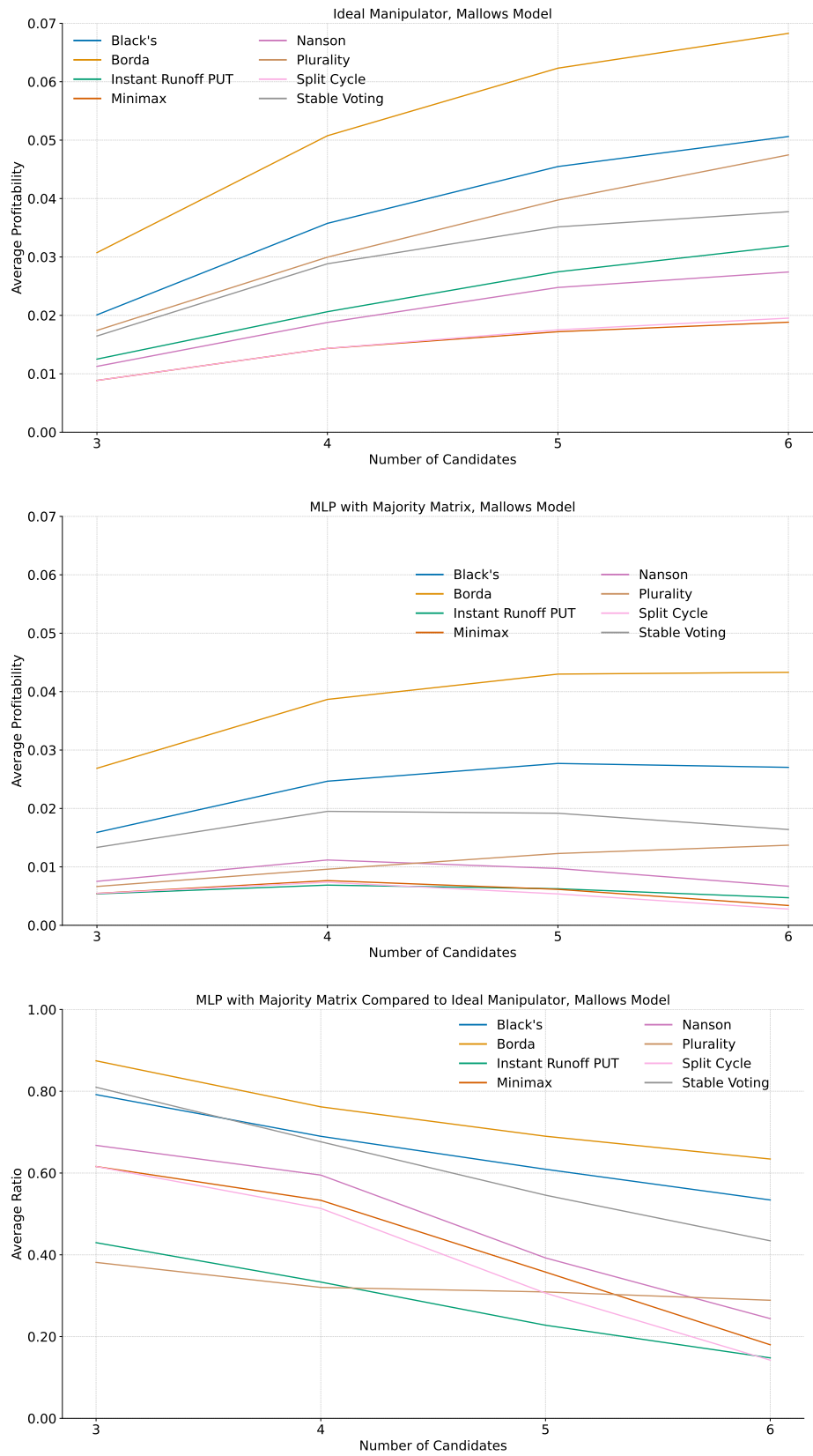
Supplementary Figure D.2: Top: average profitability of submitted rankings by an ideal manipulator. Middle: average profitability of submitted rankings by the best performing MLP with any hidden layer configuration using the **majority matrix** information, averaging over 5, 6, 10, 11, 20, and 21 voters. Bottom: the ratio of the average profitability of the MLP's submitted ranking to the average profitability of the ideal manipulator's submitted ranking.

Supplementary Figure D.3: Top: average profitability of submitted rankings by an ideal manipulator. Middle: average profitability of submitted rankings by the best performing MLP with any hidden layer configuration using the **majority matrix** information, averaging over 5, 6, 10, 11, 20, and 21 voters. Bottom: the ratio of the average profitability of the MLP's submitted ranking to the average profitability of the ideal manipulator's submitted ranking.