

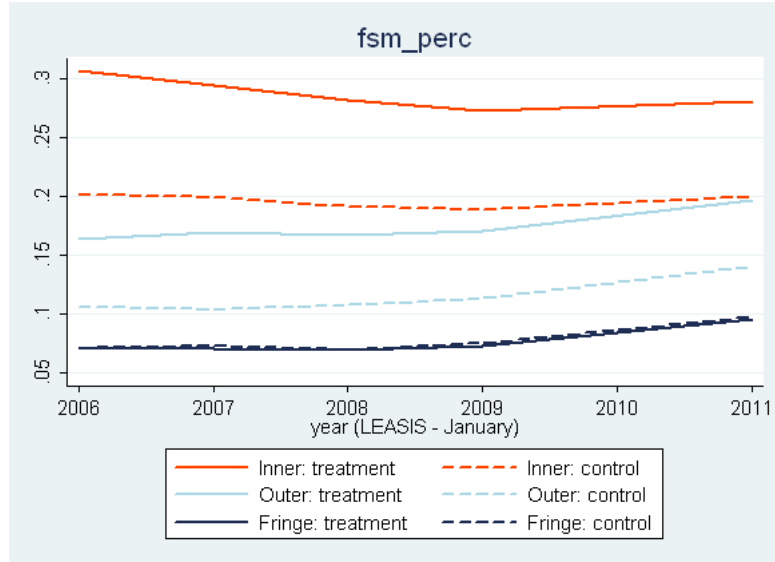
Online Appendix Figures and Tables - Greaves and Sibieta (2014)

Figure 1: Growth in teacher pay between 2005-2010



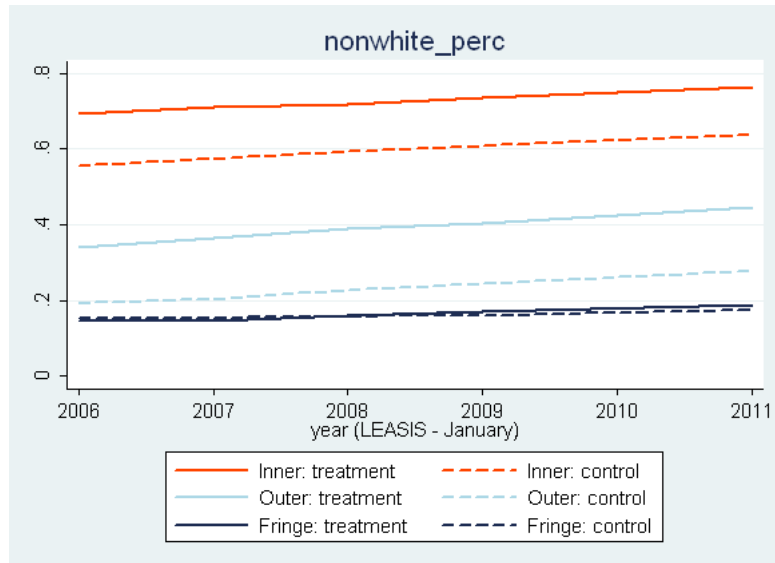
Note: Scale point refers to the teacher pay scale (ranging from lowest to highest). Source: School Teachers Pay and Conditions Document.

Figure 2: Percentage of pupils that are eligible for free school meals over time



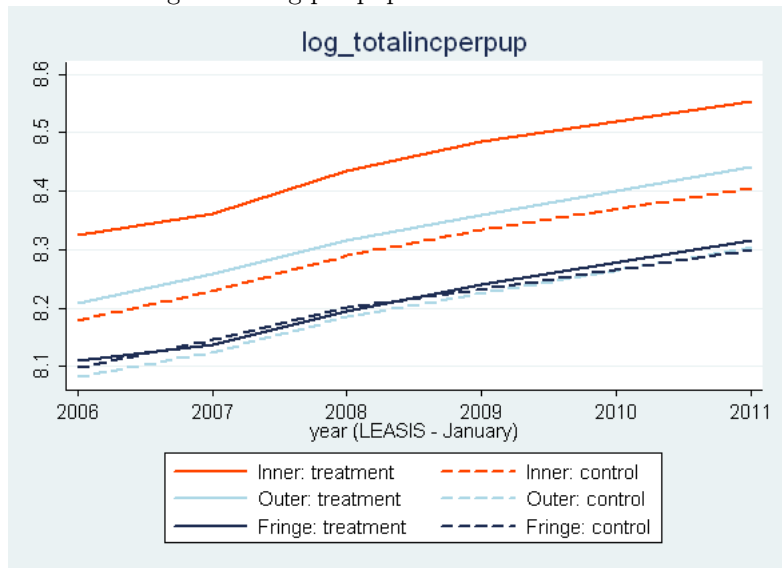
Note: Sample includes primary schools within 2km of each boundary. 'Treatment' refers to schools on the high-pay side of the boundary. Source: National Pupil Database and LEASIS.

Figure 3: Percentage of pupils that are non-white over time



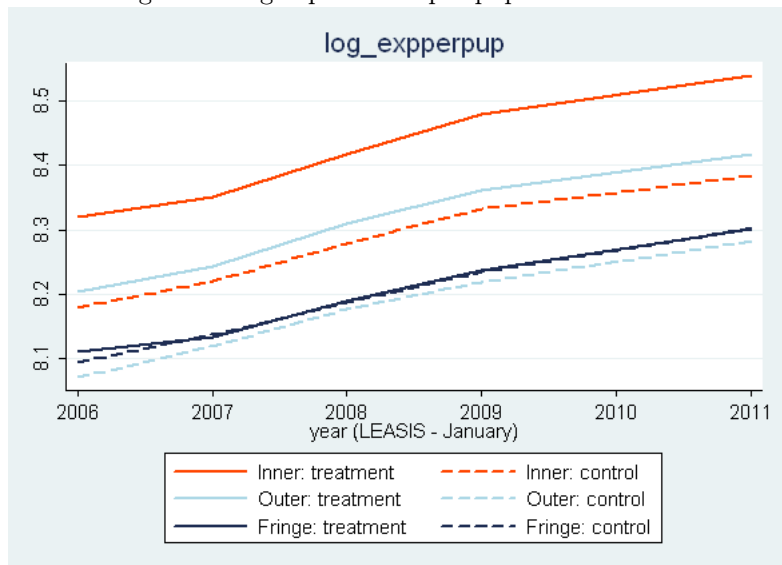
Note: Sample includes primary schools within 2km of each boundary. 'Treatment' refers to schools on the high-pay side of the boundary. Source: National Pupil Database and LEASIS.

Figure 4: Log per-pupil income over time



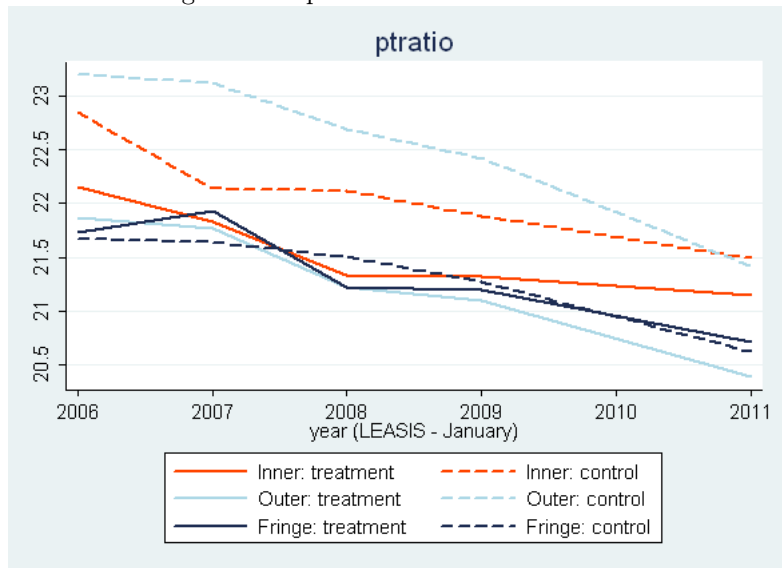
Note: Sample includes primary schools within 2km of each boundary. 'Treatment' refers to schools on the high-pay side of the boundary. Source: National Pupil Database and LEASIS.

Figure 5: Log expenditure per-pupil over time



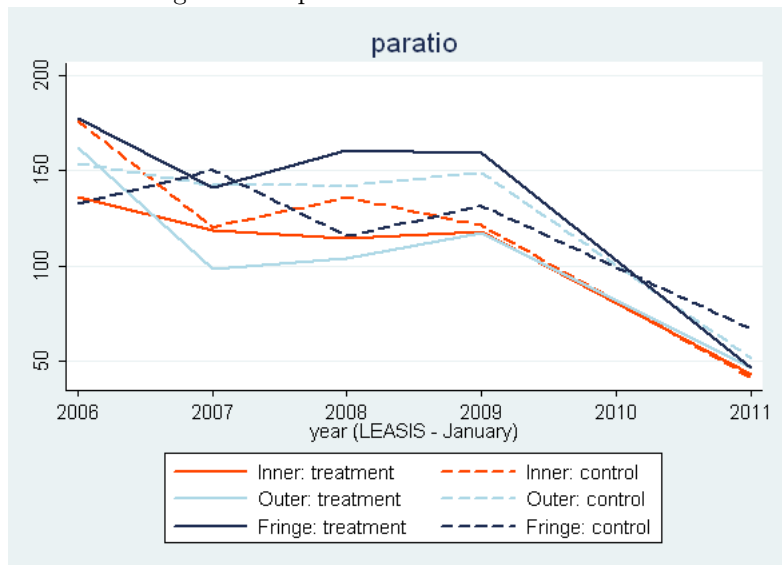
Note: Sample includes primary schools within 2km of each boundary. 'Treatment' refers to schools on the high-pay side of the boundary. Source: National Pupil Database and LEASIS.

Figure 6: Pupil-teacher ratio over time



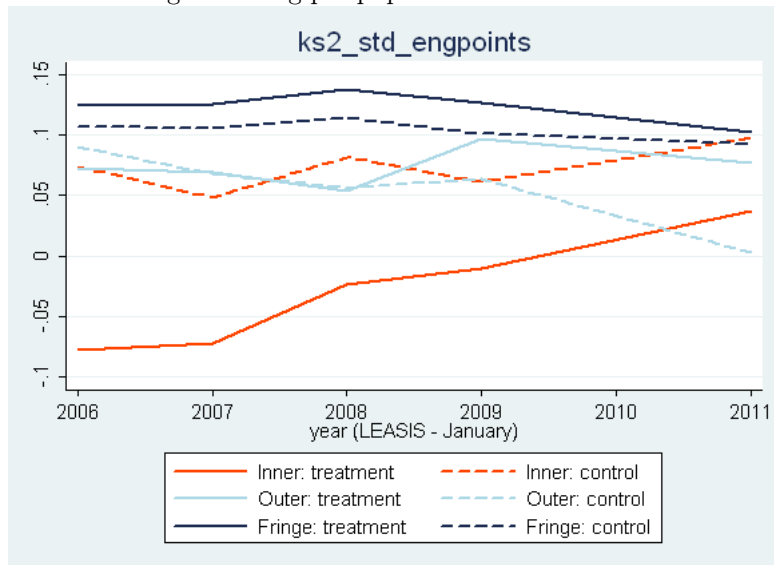
Note: Sample includes primary schools within 2km of each boundary. 'Treatment' refers to schools on the high-pay side of the boundary. Source: National Pupil Database and LEASIS.

Figure 7: Pupil-assistant ratio over time



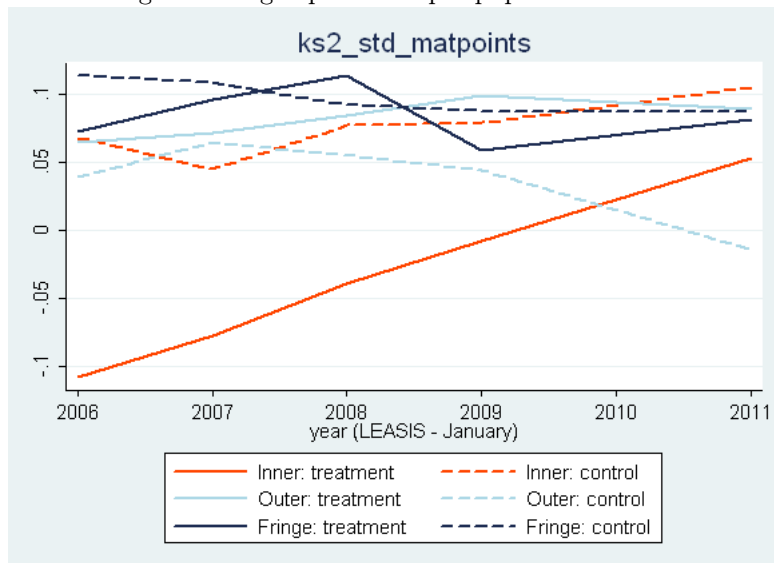
Note: Sample includes primary schools within 2km of each boundary. 'Treatment' refers to schools on the high-pay side of the boundary. Source: National Pupil Database and LEASIS.

Figure 8: Log per-pupil income over time



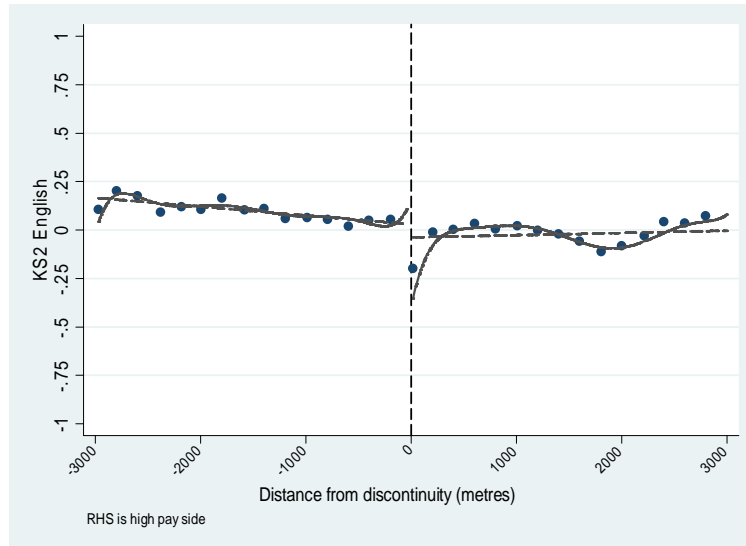
Note: Sample includes primary schools within 2km of each boundary. 'Treatment' refers to schools on the high-pay side of the boundary. Source: National Pupil Database and LEASIS.

Figure 9: Log expenditure per-pupil over time



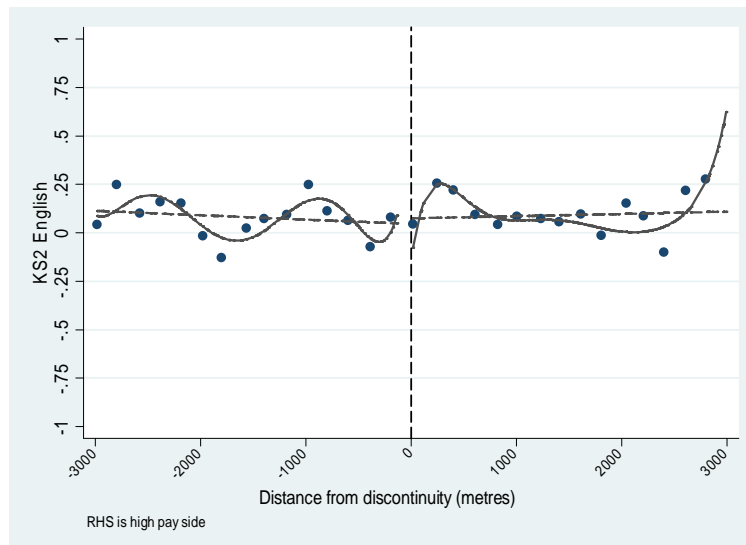
Note: Sample includes primary schools within 2km of each boundary. 'Treatment' refers to schools on the high-pay side of the boundary. Source: National Pupil Database and LEASIS.

Figure 10: Relationship between distance to boundary and English test scores, inner London



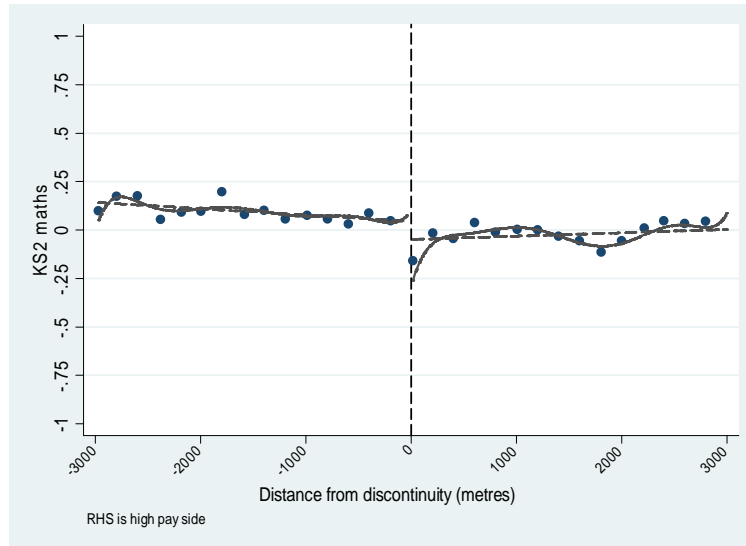
Note: Dashed line represents linear specification estimated either side of boundary, solid line is based on a 7th order polynomial and dots are local averages by 200m from the pay zone boundary.

Figure 11: Relationship between distance to boundary and English test scores, outer London



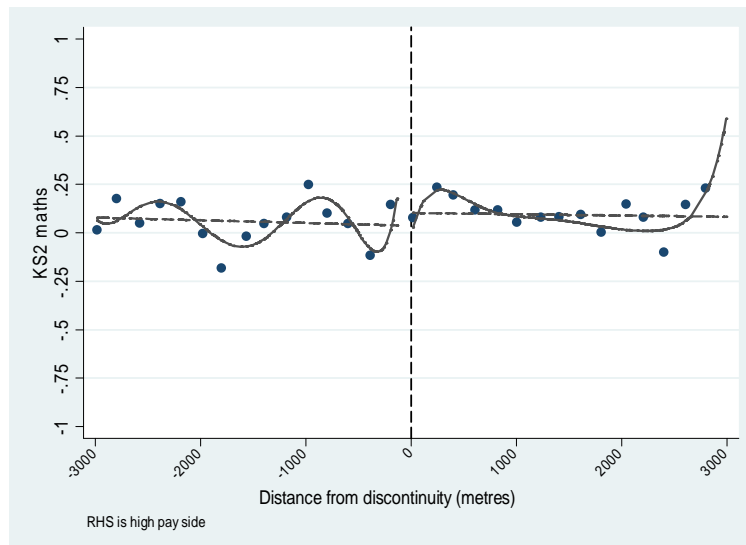
Note: Dashed line represents linear specification estimated either side of boundary, solid line is based on a 7th order polynomial and dots are local averages by 200m from the pay zone boundary.

Figure 12: Relationship between distance to boundary and maths test scores, inner London



Note: Dashed line represents linear specification estimated either side of boundary, solid line is based on a 7th order polynomial and dots are local averages by 200m from the pay zone boundary.

Figure 13: Relationship between distance to boundary and maths test scores, outer London



Note: Dashed line represents linear specification estimated either side of boundary, solid line is based on a 7th order polynomial and dots are local averages by 200m from the pay zone boundary.

Table 1: Summary statistics: within 2km of the boundary (all years)

| Characteristic | England | London | Inner Inside | Outer Outside | Difference | Outer Inside | Outer Outside | Difference | Fringe Inside | Outer Outside | Difference |
|-----------------------------------|----------------|----------------|-----------------|------------------|------------|-----------------|------------------|------------|------------------|------------------|------------|
| Prop. FSM | 0.16 (0.15) | 0.21 (0.16) | 0.29 (0.15) | 0.20 (0.13) | 0.09*** | 0.17 (0.13) | 0.11 (0.09) | 0.06*** | 0.08 (0.07) | 0.08 (0.08) | 0 |
| Prop. SEN (no s.) | 0.23 (0.11) | 0.23 (0.11) | 0.27 (0.11) | 0.24 (0.11) | 0.03*** | 0.23 (0.11) | 0.22 (0.10) | 0.02** | 0.21 (0.10) | 0.21 (0.11) | 0 |
| Prop. SEN (s.) | 0.02 (0.02) | 0.02 (0.02) | 0.02 (0.02) | 0.02 (0.02) | 0 | 0.02 (0.02) | 0.02 (0.02) | 0.00* | 0.02 (0.02) | 0.02 (0.02) | 0.00*** |
| Prop. EAL | 0.19 (0.24) | 0.30 (0.27) | 0.47 (0.23) | 0.37 (0.27) | 0.10*** | 0.20 (0.16) | 0.10 (0.08) | 0.10*** | 0.07 (0.11) | 0.07 (0.10) | 0 |
| Prop. non-white | 0.34 (0.30) | 0.50 (0.31) | 0.72 (0.22) | 0.59 (0.28) | 0.13*** | 0.39 (0.19) | 0.23 (0.12) | 0.16*** | 0.16 (0.12) | 0.16 (0.13) | 0 |
| FTE Pupils (nursery to KS4) | 280.6 (125.5) | 310.9 (119.7) | 349.7 (117.2) | 351.9 (118.5) | -2.2 | 319.4 (121.7) | 265.3 (96.1) | 54.2*** | 259.8 (119.8) | 250.2 (110.2) | 9.6 |
| IMD rank | 0.54 (0.24) | 0.46 (0.24) | 0.27 (0.14) | 0.45 (0.18) | -0.18*** | 0.50 (0.19) | 0.62 (0.19) | -0.12*** | 0.73 (0.17) | 0.70 (0.17) | 0.03** |
| IMD rank (education) | 0.56 (0.20) | 0.56 (0.19) | 0.51 (0.17) | 0.58 (0.17) | -0.07*** | 0.53 (0.22) | 0.52 (0.21) | 0.01 | 0.62 (0.22) | 0.59 (0.22) | 0.03** |
| IMD rank (employment) | 0.58 (0.22) | 0.52 (0.22) | 0.36 (0.15) | 0.51 (0.17) | -0.15*** | 0.55 (0.18) | 0.64 (0.19) | -0.09*** | 0.75 (0.16) | 0.72 (0.18) | 0.03** |
| IMD rank (income) | 0.51 (0.24) | 0.42 (0.24) | 0.24 (0.15) | 0.39 (0.18) | -0.14*** | 0.45 (0.20) | 0.57 (0.18) | -0.12*** | 0.68 (0.16) | 0.67 (0.18) | 0.02 |
| Prop. low IMD rank (education) | 0.21 (0.27) | 0.18 (0.25) | 0.19 (0.25) | 0.14 (0.18) | 0.05*** | 0.28 (0.32) | 0.29 (0.31) | -0.01 | 0.19 (0.27) | 0.21 (0.26) | -0.03 |
| Prop. low IMD rank (employment) | 0.21 (0.28) | 0.30 (0.30) | 0.50 (0.28) | 0.24 (0.22) | 0.26*** | 0.22 (0.25) | 0.13 (0.19) | 0.09*** | 0.05 (0.13) | 0.08 (0.13) | -0.03*** |
| Prop. low IMD rank (income) | 0.30 (0.34) | 0.43 (0.36) | 0.72 (0.27) | 0.44 (0.31) | 0.28*** | 0.36 (0.32) | 0.19 (0.24) | 0.18*** | 0.08 (0.16) | 0.11 (0.18) | -0.03** |
| IDACI rank | 0.48 (0.25) | 0.38 (0.24) | 0.21 (0.14) | 0.35 (0.18) | -0.15*** | 0.40 (0.19) | 0.53 (0.18) | -0.13*** | 0.66 (0.17) | 0.65 (0.18) | 0.01 |
| KS2 total points (standardised) | 0.06 (0.38) | 0.05 (0.38) | -0.04 (0.36) | 0.08 (0.36) | -0.12*** | 0.09 (0.34) | 0.05 (0.36) | 0.04 | 0.11 (0.37) | 0.11 (0.36) | 0 |
| KS2 English (standardised) | 0.06 (0.37) | 0.06 (0.37) | -0.03 (0.35) | 0.07 (0.36) | -0.10*** | 0.07 (0.34) | 0.06 (0.35) | 0.02 | 0.12 (0.36) | 0.10 (0.36) | 0.02 |
| KS2 maths (standardised) | 0.04 (0.36) | 0.04 (0.37) | -0.04 (0.34) | 0.07 (0.37) | -0.11*** | 0.08 (0.33) | 0.04 (0.35) | 0.04* | 0.08 (0.35) | 0.10 (0.34) | -0.01 |
| Total income per pupil (log) | 8.29 (0.22) | 8.34 (0.22) | 8.43 (0.17) | 8.29 (0.17) | 0.14*** | 8.32 (0.18) | 8.19 (0.16) | 0.13*** | 8.20 (0.18) | 8.20 (0.19) | 0 |
| Total expenditure per pupil (log) | 8.28 (0.22) | 8.33 (0.22) | 8.42 (0.17) | 8.28 (0.17) | 0.14*** | 8.31 (0.18) | 8.17 (0.16) | 0.13*** | 8.20 (0.18) | 8.19 (0.19) | 0 |
| Pupil teacher ratio | 21.3 (3.2) | 21.6 (3.1) | 21.6 (3.0) | 22.1 (3.0) | -0.5*** | 21.3 (3.0) | 22.6 (3.0) | -1.3*** | 21.4 (3.1) | 21.3 (3.3) | 0 |
| Pupil-assistant ratio | 120.6 (200.6) | 111.5 (174.0) | 106.0 (148.3) | 119.0 (167.6) | -12.9* | 105.7 (213.8) | 127.8 (148.8) | -22.1* | 137.1 (177.6) | 119.4 (173.4) | 17.7 |
| Teacher-assistant ratio | 5.5 (9.1) | 5.0 (7.7) | 4.8 (6.7) | 5.3 (7.7) | -0.5* | 4.9 (9.5) | 5.5 (6.5) | -0.7 | 6.2 (7.9) | 5.5 (8.4) | 0.8 |
| Prop. cross LA boundary | 0.06 (0.10) | 0.08 (0.12) | 0.11 (0.13) | 0.11 (0.12) | 0.01* | 0.09 (0.10) | 0.07 (0.09) | 0.01** | 0.06 (0.09) | 0.04 (0.09) | 0.02** |
| Prop. cross pay region boundary | 0.03 (0.07) | 0.04 (0.08) | 0.08 (0.11) | 0.08 (0.11) | -0.01 | 0.06 (0.08) | 0.07 (0.09) | 0 | 0.11 (0.15) | 0.08 (0.13) | 0.03*** |
| Number of obs | 21912 | 11791 | 1830 | 1352 | | 711 | 565 | | 600 | 677 | |
| Number of schools | 4428 | 2361 | 366 | 271 | | 143 | 113 | | 120 | 136 | |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The mean characteristics for schools in England, London and within 2km of the inner London pay boundary, outer London pay boundary and fringe London pay boundary are reported. Standard deviations are reported in brackets. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011. The sample size varies slightly between rows, where individual schools have missing data.

Table 2: Difference in Outcomes across Inner/Outer London Boundary in 2011: within 2km of the boundary

| Outcomes | Raw difference | | OLS | | FILM | | Matching | |
|---------------------------------|----------------|-----------|----------|-----------|---------|-----------|----------|-----------|
| | b | SE | b | SE | b | SE | b | SE |
| Resources | | | | | | | | |
| Funding per pupil (log) | 0.149 | 0.01*** | 0.088 | 0.02*** | 0.092 | 0.02*** | 0.114 | 0.02*** |
| Pupil:Teacher Ratio | -0.328 | 0.26 | -0.149 | 0.51 | -0.302 | 0.52 | -0.796 | 0.44 |
| Pupil:Assistant Ratio | 1.004 | 2.34 | 3.018 | 4.97 | 0.557 | 2.76 | 1.261 | 3.19 |
| Teacher pay | | | | | | | | |
| Teacher salary (£) | 2427.77 | 250.17*** | 2415.978 | 455.84*** | 2483.52 | 432.12*** | 2448.856 | 429.84*** |
| Has additional responsibilities | 0.02 | 0.02 | 0.035 | 0.04 | 0.083 | 0.04* | 0.061 | 0.04 |
| Spine point | -0.622 | 0.16*** | -0.05 | 0.34 | 0.25 | 0.31 | 0.025 | 0.34 |
| Pupil attainment | | | | | | | | |
| KS2 English (std) | -0.064 | 0.03* | 0.056 | 0.04 | 0.073 | 0.03* | 0.01 | 0.04 |
| KS2 Maths (std) | -0.053 | 0.02* | 0.049 | 0.04 | 0.053 | 0.03 | -0.008 | 0.04 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where dependent variable is observed, within 2km of a pay area boundary. The coefficient reported represents the percent increase in expenditure per pupil associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 3: Difference in Outcomes across Outer/Fringe London Boundary in 2011: within 2km of the boundary

| Outcomes | Raw difference | | OLS | | FILM | | Matching | |
|---------------------------------|----------------|-----------|----------|----------|---------|---------|----------|----------|
| | b | SE | b | SE | b | SE | b | SE |
| Resources | | | | | | | | |
| Funding per pupil (log) | 0.139 | 0.02*** | 0.13 | 0.02*** | 0.117 | 0.01*** | 0.108 | 0.03** |
| Pupil:Teacher Ratio | -0.884 | 0.37* | -0.976 | 0.56 | -0.806 | 0.6 | -0.775 | 0.66 |
| Pupil:Assistant Ratio | -5.231 | 6.36 | -2.238 | 7.42 | -4.458 | 8.97 | -3.459 | 11.29 |
| Teacher pay | | | | | | | | |
| Teacher salary (£) | 2524.479 | 439.67*** | 1868.221 | 524.52** | 1527.09 | 544.82* | 2100.428 | 724.80** |
| Has additional responsibilities | 0.091 | 0.02*** | 0.062 | 0.03 | 0.047 | 0.04 | 0.038 | 0.03 |
| Spine point | 0.258 | 0.23 | 0.377 | 0.49 | 0.465 | 0.34 | 0.423 | 0.31 |
| Pupil attainment | | | | | | | | |
| KS2 English (std) | 0.067 | 0.04 | 0.153 | 0.04*** | 0.171 | 0.03*** | 0.097 | 0.07 |
| KS2 Maths (std) | 0.096 | 0.04* | 0.171 | 0.04*** | 0.203 | 0.02*** | 0.156 | 0.07* |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where dependent variable is observed, within 2km of a pay area boundary. The coefficient reported represents the percent increase in expenditure per pupil associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 4: Results: Funding per pupil (in logs): within 2km of the boundary

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|---------|-------|---------|-------|---------|----------|---------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.143 | 0.01*** | 0.092 | 0.02*** | 0.082 | 0.02*** | 0.1 | 0.02*** |
| 2007 | 0.13 | 0.01*** | 0.081 | 0.02*** | 0.078 | 0.02*** | 0.101 | 0.02*** |
| 2008 | 0.144 | 0.01*** | 0.087 | 0.02*** | 0.088 | 0.02*** | 0.102 | 0.02*** |
| 2009 | 0.148 | 0.01*** | 0.093 | 0.02*** | 0.092 | 0.02*** | 0.102 | 0.02*** |
| 2011 | 0.149 | 0.01*** | 0.088 | 0.02*** | 0.092 | 0.02*** | 0.114 | 0.02*** |

| Outer/fringe London boundary: within 2km | | | | | | | | |
|--|----------------|---------|-------|---------|-------|---------|----------|---------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.124 | 0.02*** | 0.114 | 0.02*** | 0.113 | 0.02*** | 0.118 | 0.04*** |
| 2007 | 0.133 | 0.02*** | 0.137 | 0.03*** | 0.119 | 0.02*** | 0.084 | 0.03** |
| 2008 | 0.13 | 0.02*** | 0.121 | 0.02*** | 0.112 | 0.02*** | 0.105 | 0.03** |
| 2009 | 0.133 | 0.02*** | 0.119 | 0.02*** | 0.11 | 0.03*** | 0.062 | 0.04 |
| 2011 | 0.139 | 0.02*** | 0.13 | 0.02*** | 0.117 | 0.01*** | 0.108 | 0.03** |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|------|--------|-------|--------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.017 | 0.02 | 0.013 | 0.02 | 0.01 | 0.01 | 0.007 | 0.02 |
| 2007 | -0.01 | 0.02 | 0.004 | 0.01 | 0.003 | 0.01 | -0.004 | 0.02 |
| 2008 | -0.005 | 0.02 | -0.005 | 0.01 | -0.008 | 0.01 | -0.02 | 0.02 |
| 2009 | 0.008 | 0.02 | 0.011 | 0.00* | 0.005 | 0.01 | -0.01 | 0.02 |
| 2011 | 0.013 | 0.02 | 0.015 | 0.01 | 0.005 | 0.01 | 0.012 | 0.02 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where dependent variable (income per pupil) is observed, within 2km of a pay area boundary. The coefficient reported represents the percent increase in expenditure per pupil associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 5: Results: Expenditure per pupil (in logs): within 2km of the boundary

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|---------|-------|---------|-------|---------|----------|---------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.139 | 0.01*** | 0.085 | 0.02*** | 0.073 | 0.02*** | 0.089 | 0.02*** |
| 2007 | 0.127 | 0.01*** | 0.083 | 0.02*** | 0.08 | 0.02*** | 0.102 | 0.02*** |
| 2008 | 0.138 | 0.01*** | 0.083 | 0.02*** | 0.082 | 0.02*** | 0.098 | 0.02*** |
| 2009 | 0.146 | 0.01*** | 0.093 | 0.02*** | 0.089 | 0.02*** | 0.096 | 0.02*** |
| 2011 | 0.157 | 0.01*** | 0.098 | 0.02*** | 0.1 | 0.02*** | 0.123 | 0.02*** |

| Outer/fringe London boundary: within 2km | | | | | | | | |
|--|----------------|---------|-------|---------|-------|---------|----------|---------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.12 | 0.02*** | 0.118 | 0.02*** | 0.119 | 0.02*** | 0.122 | 0.04*** |
| 2007 | 0.127 | 0.02*** | 0.136 | 0.03*** | 0.11 | 0.02*** | 0.078 | 0.03** |
| 2008 | 0.131 | 0.02*** | 0.126 | 0.02*** | 0.116 | 0.02*** | 0.106 | 0.04** |
| 2009 | 0.138 | 0.02*** | 0.128 | 0.02*** | 0.117 | 0.03*** | 0.062 | 0.04 |
| 2011 | 0.137 | 0.02*** | 0.131 | 0.02*** | 0.123 | 0.02*** | 0.118 | 0.03*** |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|------|-------|------|--------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.022 | 0.02 | 0.019 | 0.02 | 0.014 | 0.01 | 0.012 | 0.02 |
| 2007 | -0.009 | 0.02 | 0.003 | 0.02 | 0.001 | 0.01 | -0.004 | 0.02 |
| 2008 | 0.002 | 0.02 | 0 | 0.01 | -0.002 | 0.01 | -0.016 | 0.02 |
| 2009 | 0.001 | 0.02 | 0.005 | 0.01 | -0.002 | 0.01 | -0.015 | 0.02 |
| 2011 | 0.005 | 0.02 | 0.007 | 0.01 | -0.004 | 0.01 | 0.004 | 0.02 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where dependent variable (expenditure per pupil) is observed, within 2km of a pay area boundary. The coefficient reported represents the percent increase in expenditure per pupil associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 6: Results: Pupil Teacher Ratio: within 2km of the boundary

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|--------|--------|-------|--------|-------|----------|-------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -0.637 | 0.27* | -0.807 | 0.38* | -0.888 | 0.35* | -1.099 | 0.43* |
| 2007 | -0.226 | 0.27 | -0.135 | 0.41 | -0.211 | 0.37 | -0.589 | 0.43 |
| 2008 | -0.775 | 0.27** | -0.537 | 0.47 | -0.687 | 0.41 | -1.06 | 0.46* |
| 2009 | -0.531 | 0.25* | -0.26 | 0.51 | -0.466 | 0.46 | -0.6 | 0.41 |
| 2011 | -0.328 | 0.26 | -0.149 | 0.51 | -0.302 | 0.52 | -0.796 | 0.44 |

| Outer/fringe London boundary: within 2km | | | | | | | | |
|--|----------------|---------|--------|--------|--------|--------|----------|---------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -1.368 | 0.38*** | -1.283 | 0.34** | -1.367 | 0.48** | -2.5 | 0.76*** |
| 2007 | -1.536 | 0.39*** | -1.83 | 0.81* | -1.632 | 0.49** | -1.379 | 0.65* |
| 2008 | -1.426 | 0.40*** | -1.648 | 0.72* | -1.287 | 0.73 | -1.703 | 0.78* |
| 2009 | -1.423 | 0.39*** | -1.649 | 0.70* | -1.816 | 0.96 | -0.754 | 0.85 |
| 2011 | -0.884 | 0.37* | -0.976 | 0.56 | -0.806 | 0.6 | -0.775 | 0.66 |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|------|--------|------|--------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -0.198 | 0.4 | -0.248 | 0.39 | -0.302 | 0.28 | -0.22 | 0.41 |
| 2007 | 0.084 | 0.44 | -0.242 | 0.55 | -0.354 | 0.34 | -0.291 | 0.47 |
| 2008 | -0.366 | 0.41 | -0.511 | 0.4 | -0.462 | 0.31 | -0.17 | 0.43 |
| 2009 | -0.232 | 0.37 | -0.366 | 0.5 | -0.25 | 0.25 | -0.112 | 0.4 |
| 2011 | -0.027 | 0.38 | -0.208 | 0.29 | -0.2 | 0.18 | -0.241 | 0.43 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where the dependent variable (the ratio of pupils to teachers) is observed, within 2km of a pay area boundary. The coefficient reported represents the percent increase in expenditure per pupil associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 7: Results: Pupil Assistant Ratio: within 2km of the boundary

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|---------|---------|--------|---------|---------|----------|---------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -42.202 | 18.10* | -26.814 | 26.71 | -22.504 | 27.77 | -10.264 | 33.29 |
| 2007 | -1.219 | 10.02 | -7.359 | 17.92 | 1.086 | 18.17 | -15.71 | 16.28 |
| 2008 | -21.054 | 12.23 | -28.293 | 22.4 | -19.448 | 21.58 | -14.967 | 22.64 |
| 2009 | -2.859 | 13.26 | -12.882 | 20.76 | -2.47 | 22.91 | -6.269 | 19.69 |
| 2011 | 1.004 | 2.34 | 3.018 | 4.97 | 0.557 | 2.76 | 1.261 | 3.19 |
| Outer/fringe London boundary: within 2km | | | | | | | | |
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -17.15 | 28.51 | -3.201 | 28.55 | 11.302 | 28.5 | -26.586 | 62.13 |
| 2007 | -42.987 | 14.91** | -38.189 | 17.61* | -26.379 | 19.28 | -35.501 | 25.92 |
| 2008 | -37.166 | 15.15* | -43.89 | 19.71* | -48.435 | 22.45* | -68.744 | 28.51* |
| 2009 | -32.015 | 19.89 | -19.978 | 29.79 | -28.407 | 29.42 | -23.193 | 33.53 |
| 2011 | -5.231 | 6.36 | -2.238 | 7.42 | -4.458 | 8.97 | -3.459 | 11.29 |
| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 46.707 | 24.12 | 37.087 | 32.7 | 36.473 | 25.93 | 38.592 | 26.05 |
| 2007 | -5.578 | 28.38 | -7.086 | 26.11 | -8.692 | 16.89 | 4.801 | 31.71 |
| 2008 | 45.397 | 17.33** | 36.794 | 15.41* | 40.067 | 7.76*** | 46.428 | 18.80* |
| 2009 | 26.443 | 24.93 | 17.308 | 22.29 | 19.103 | 18.99 | 28.723 | 27.98 |
| 2011 | -20.989 | 7.32** | -29.851 | 21.62 | -39.36 | 16.16* | -39.359 | 8.72*** |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where the dependent variable (the ratio of pupils to assistants) is observed, within 2km of a pay area boundary. The coefficient reported represents the percent increase in expenditure per pupil associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 8: Results: Total pay for those whose main role is classroom teacher

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|-----------|----------|-----------|---------|-----------|----------|-----------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | 2427.77 | 250.17*** | 2415.978 | 455.84*** | 2483.52 | 432.12*** | 2448.856 | 429.84*** |

| Outer/fringe London boundary: within 2km | | | | | | | | |
|--|----------------|-----------|----------|----------|---------|---------|----------|----------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | 2524.479 | 439.67*** | 1868.221 | 524.52** | 1527.09 | 544.82* | 2100.428 | 724.80** |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|---------|---------|--------|--------|--------|----------|--------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | 915.519 | 462.64* | 475.126 | 274.01 | 369.63 | 293.45 | 720.759 | 590.26 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where dependent variable (expenditure per pupil) is observed, within 2km of a pay area boundary. The coefficient reported represents the increase in total pay for those whose main role is classified as classroom teacher (based on their full-time equivalent in each role) associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 9: Results: Spinepoint (grade) for those whose main role is classroom teacher

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|---------|-------|------|------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | -0.622 | 0.16*** | -0.05 | 0.34 | 0.25 | 0.31 | 0.025 | 0.34 |

| Outer/fringe London boundary: within 2km | | | | | | | | |
|--|----------------|------|-------|------|-------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | 0.258 | 0.23 | 0.377 | 0.49 | 0.465 | 0.34 | 0.423 | 0.31 |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|-----|-------|------|-------|-----|----------|-------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | 0.062 | 0.2 | 0.145 | 0.16 | 0.285 | 0.2 | 0.57 | 0.26* |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where dependent variable (expenditure per pupil) is observed, within 2km of a pay area boundary. The coefficient reported represents the increase in spinepoint (or grade) for those whose main role is classified as classroom teacher (based on their full-time equivalent in each role) associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 10: Results: Proportion with additional responsibilities, for those whose main role is classroom teacher

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|------|-------|------|-------|-------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | 0.02 | 0.02 | 0.035 | 0.04 | 0.083 | 0.04* | 0.061 | 0.04 |

| Outer/fringe London boundary: within 2km | | | | | | | | |
|--|----------------|---------|-------|------|-------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | 0.091 | 0.02*** | 0.062 | 0.03 | 0.047 | 0.04 | 0.038 | 0.03 |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|------|-------|------|-------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | 0.032 | 0.02 | 0.013 | 0.02 | 0.016 | 0.02 | 0.018 | 0.03 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where dependent variable (expenditure per pupil) is observed, within 2km of a pay area boundary. The coefficient reported represents the increase proportion of those with additional responsibilities, for those whose main role is classified as classroom teacher (based on their full-time equivalent in each role) associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 11: Results: Total pay for those whose main role is teaching assistant

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|----------|-------|-------|-------|-------|----------|--------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | 1556.0 | 276.1*** | 554.1 | 540.9 | 562.2 | 551.4 | 1082.0 | 447.7* |

| Outer/fringe London boundary: within 2km | | | | | | | | |
|--|----------------|----------|--------|----------|--------|----------|----------|----------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | 2597.8 | 289.8*** | 2374.4 | 408.8*** | 2196.1 | 349.8*** | 2202.5 | 442.7*** |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|----------|---------|--------|---------|--------|----------|----------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2011 | -1600.0 | 344.7*** | -1600.0 | 696.1* | -2000.0 | 677.7* | -1800.0 | 449.8*** |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where dependent variable (expenditure per pupil) is observed, within 2km of a pay area boundary. The coefficient reported represents the increase in total pay for those whose main role is classified as teaching assistant (based on their full-time equivalent in each role) associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 12: Results: KS2 English Points (std): within 2km of the boundary

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|---------|-------|---------|-------|---------|----------|-------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -0.15 | 0.03*** | 0.014 | 0.06 | 0.05 | 0.04 | -0.012 | 0.05 |
| 2007 | -0.114 | 0.03*** | 0.047 | 0.05 | 0.068 | 0.04 | -0.008 | 0.05 |
| 2008 | -0.105 | 0.03*** | 0.011 | 0.04 | 0.004 | 0.03 | -0.034 | 0.06 |
| 2009 | -0.071 | 0.03** | 0.063 | 0.05 | 0.076 | 0.03* | 0.036 | 0.04 |
| 2011 | -0.064 | 0.03* | 0.056 | 0.04 | 0.073 | 0.03* | 0.01 | 0.04 |
| Outer/fringe London boundary: within 2km | | | | | | | | |
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.003 | 0.05 | 0.056 | 0.04 | 0.08 | 0.05 | -0.092 | 0.11 |
| 2007 | 0.011 | 0.05 | 0.071 | 0.03* | 0.091 | 0.04* | 0.125 | 0.08 |
| 2008 | -0.004 | 0.04 | 0.077 | 0.04 | 0.119 | 0.04* | 0.08 | 0.07 |
| 2009 | 0.037 | 0.04 | 0.131 | 0.04** | 0.186 | 0.07* | 0.227 | 0.09* |
| 2011 | 0.067 | 0.04 | 0.153 | 0.04*** | 0.171 | 0.03*** | 0.097 | 0.07 |
| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.002 | 0.05 | 0.01 | 0.03 | 0.018 | 0.01 | 0.01 | 0.05 |
| 2007 | 0.027 | 0.05 | 0.027 | 0.03 | 0.018 | 0.02 | 0.025 | 0.05 |
| 2008 | 0.014 | 0.04 | 0.002 | 0.03 | 0.006 | 0.02 | 0.007 | 0.05 |
| 2009 | 0.025 | 0.04 | 0.005 | 0.03 | 0 | 0.02 | -0.022 | 0.05 |
| 2011 | 0.011 | 0.04 | 0.012 | 0.03 | 0.01 | 0.03 | -0.003 | 0.05 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where the dependent variable (maths scores in Key Stage 2 tests) is observed, within 2km of a pay area boundary. The coefficient reported represents the percent increase in expenditure per pupil associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 13: Results: KS2 Maths Points (std): within 2km of the boundary

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|---------|--------|------|--------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -0.171 | 0.03*** | -0.017 | 0.05 | 0.008 | 0.03 | -0.054 | 0.05 |
| 2007 | -0.117 | 0.03*** | 0.03 | 0.05 | 0.039 | 0.04 | -0.025 | 0.05 |
| 2008 | -0.117 | 0.03*** | -0.011 | 0.04 | -0.007 | 0.03 | -0.052 | 0.06 |
| 2009 | -0.085 | 0.03** | 0.033 | 0.04 | 0.034 | 0.03 | -0.022 | 0.06 |
| 2011 | -0.053 | 0.02* | 0.049 | 0.04 | 0.053 | 0.03 | -0.008 | 0.04 |

| Outer/fringe London boundary: within 2km | | | | | | | | |
|--|----------------|-------|-------|---------|-------|---------|----------|-------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.058 | 0.05 | 0.13 | 0.03*** | 0.169 | 0.04*** | 0.052 | 0.1 |
| 2007 | 0.014 | 0.04 | 0.067 | 0.04 | 0.113 | 0.04** | 0.126 | 0.07 |
| 2008 | 0.027 | 0.04 | 0.132 | 0.04** | 0.182 | 0.04*** | 0.133 | 0.07 |
| 2009 | 0.059 | 0.04 | 0.127 | 0.05* | 0.175 | 0.05** | 0.173 | 0.09* |
| 2011 | 0.096 | 0.04* | 0.171 | 0.04*** | 0.203 | 0.02*** | 0.156 | 0.07* |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|------|--------|------|--------|-------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -0.053 | 0.05 | -0.049 | 0.02 | -0.047 | 0.02* | -0.054 | 0.05 |
| 2007 | -0.004 | 0.05 | -0.017 | 0.03 | -0.026 | 0.01 | -0.023 | 0.05 |
| 2008 | 0.008 | 0.04 | 0.012 | 0.01 | 0.011 | 0.01 | 0.017 | 0.04 |
| 2009 | -0.028 | 0.04 | -0.048 | 0.02 | -0.04 | 0.02* | -0.043 | 0.05 |
| 2011 | -0.007 | 0.04 | -0.014 | 0.03 | -0.019 | 0.02 | -0.025 | 0.05 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where the dependent variable (English scores in Key Stage 2 tests) is observed, within 2km of a pay area boundary. The coefficient reported represents the percent increase in expenditure per pupil associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 14: Results: KS2 Maths Points (std): within 2km of the boundary, accounting for pupil:teacher ratio and pupil:assistant ratio

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|---------|--------|------|--------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -0.171 | 0.03*** | -0.016 | 0.05 | 0.014 | 0.03 | -0.041 | 0.05 |
| 2007 | -0.117 | 0.03*** | 0.031 | 0.05 | 0.047 | 0.04 | -0.023 | 0.04 |
| 2008 | -0.117 | 0.03*** | -0.013 | 0.04 | -0.013 | 0.03 | -0.034 | 0.06 |
| 2009 | -0.085 | 0.03** | 0.035 | 0.04 | 0.044 | 0.03 | -0.016 | 0.06 |
| 2011 | -0.053 | 0.02* | 0.047 | 0.04 | 0.054 | 0.03 | 0.004 | 0.04 |

| Outer/fringe London boundary: within 2km | | | | | | | | |
|--|----------------|-------|-------|---------|-------|---------|----------|--------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.058 | 0.05 | 0.145 | 0.03*** | 0.17 | 0.04*** | 0.27 | 0.12* |
| 2007 | 0.014 | 0.04 | 0.087 | 0.04* | 0.138 | 0.03*** | 0.139 | 0.12 |
| 2008 | 0.027 | 0.04 | 0.15 | 0.04*** | 0.191 | 0.04*** | 0.234 | 0.10* |
| 2009 | 0.059 | 0.04 | 0.164 | 0.04** | 0.22 | 0.04*** | 0.175 | 0.09 |
| 2011 | 0.096 | 0.04* | 0.174 | 0.04*** | 0.21 | 0.02*** | 0.172 | 0.07** |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|------|--------|------|--------|-------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -0.053 | 0.05 | -0.046 | 0.02 | -0.042 | 0.02* | -0.064 | 0.05 |
| 2007 | -0.004 | 0.05 | -0.014 | 0.03 | -0.031 | 0.02 | -0.022 | 0.05 |
| 2008 | 0.008 | 0.04 | 0.014 | 0.02 | 0.008 | 0.01 | 0.005 | 0.04 |
| 2009 | -0.028 | 0.04 | -0.042 | 0.02 | -0.041 | 0.02* | -0.05 | 0.05 |
| 2011 | -0.007 | 0.04 | -0.011 | 0.04 | -0.025 | 0.03 | -0.047 | 0.05 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where the dependent variable (maths scores in Key Stage 2 tests), pupil:teacher and pupil:assistant ratios are observed, within 2km of a pay area boundary. The coefficient reported represents the percent increase in expenditure per pupil associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary. Pupil teacher ratio and pupil assistance ratio are accounted for linearly.

Table 15: Results: KS2 English Points (std): within 2km of the boundary, accounting for pupil:teacher ratio and pupil:assistant ratio

| Inner/outer London boundary: within 2km | | | | | | | | |
|---|----------------|---------|-------|------|-------|--------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -0.15 | 0.03*** | 0.016 | 0.06 | 0.059 | 0.04 | 0.009 | 0.05 |
| 2007 | -0.114 | 0.03*** | 0.048 | 0.05 | 0.074 | 0.04 | -0.006 | 0.05 |
| 2008 | -0.105 | 0.03*** | 0.015 | 0.04 | 0.015 | 0.03 | -0.024 | 0.06 |
| 2009 | -0.071 | 0.03** | 0.064 | 0.05 | 0.083 | 0.03* | 0.038 | 0.04 |
| 2011 | -0.064 | 0.03* | 0.056 | 0.04 | 0.075 | 0.03** | 0.02 | 0.05 |

| Outer/fringe London boundary: within 2km | | | | | | | | |
|--|----------------|------|-------|---------|-------|---------|----------|-------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.003 | 0.05 | 0.068 | 0.04 | 0.096 | 0.05 | 0.139 | 0.13 |
| 2007 | 0.011 | 0.05 | 0.085 | 0.04* | 0.123 | 0.04** | 0.121 | 0.12 |
| 2008 | -0.004 | 0.04 | 0.097 | 0.04* | 0.122 | 0.04* | 0.229 | 0.10* |
| 2009 | 0.037 | 0.04 | 0.149 | 0.04** | 0.21 | 0.07** | 0.218 | 0.10* |
| 2011 | 0.067 | 0.04 | 0.157 | 0.04*** | 0.172 | 0.03*** | 0.128 | 0.06* |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|------|-------|------|--------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.002 | 0.05 | 0.017 | 0.03 | 0.015 | 0.01 | 0.005 | 0.05 |
| 2007 | 0.027 | 0.05 | 0.029 | 0.03 | 0.02 | 0.02 | 0.024 | 0.05 |
| 2008 | 0.014 | 0.04 | 0.008 | 0.03 | 0.011 | 0.02 | 0.006 | 0.05 |
| 2009 | 0.025 | 0.04 | 0.006 | 0.03 | -0.001 | 0.02 | -0.027 | 0.05 |
| 2011 | 0.011 | 0.04 | 0.015 | 0.03 | 0.007 | 0.04 | -0.022 | 0.06 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where the dependent variable (English scores in Key Stage 2 tests), pupil:teacher and pupil:assistant ratios are observed, within 2km of a pay area boundary. The coefficient reported represents the percent increase in expenditure per pupil associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary. Pupil teacher ratio and pupil assistance ratio are accounted for linearly.

Table 16: Results: KS2 Maths Points (std): varying the measure of closeness to the Fringe boundary

| Fringe/outer-fringe London boundary within 1km | | | | | | | | |
|--|----------------|------|--------|------|--------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -0.02 | 0.06 | -0.019 | 0.05 | -0.032 | 0.03 | -0.056 | 0.07 |
| 2007 | 0.053 | 0.07 | 0.036 | 0.07 | 0.019 | 0.03 | 0.019 | 0.07 |
| 2008 | -0.017 | 0.06 | -0.034 | 0.04 | -0.027 | 0.03 | -0.059 | 0.06 |
| 2009 | 0.044 | 0.06 | 0.024 | 0.03 | 0.013 | 0.04 | -0.003 | 0.07 |
| 2011 | -0.031 | 0.06 | -0.003 | 0.05 | -0.015 | 0.04 | -0.029 | 0.06 |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|------|--------|------|--------|-------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -0.053 | 0.05 | -0.049 | 0.02 | -0.047 | 0.02* | -0.054 | 0.05 |
| 2007 | -0.004 | 0.05 | -0.017 | 0.03 | -0.026 | 0.01 | -0.023 | 0.05 |
| 2008 | 0.008 | 0.04 | 0.012 | 0.01 | 0.011 | 0.01 | 0.017 | 0.04 |
| 2009 | -0.028 | 0.04 | -0.048 | 0.02 | -0.04 | 0.02* | -0.043 | 0.05 |
| 2011 | -0.007 | 0.04 | -0.014 | 0.03 | -0.019 | 0.02 | -0.025 | 0.05 |

| Fringe/outer-fringe London boundary: within 3km | | | | | | | | |
|---|----------------|------|--------|------|--------|-------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | -0.024 | 0.04 | -0.014 | 0.02 | -0.016 | 0.02 | -0.016 | 0.04 |
| 2007 | -0.003 | 0.04 | 0.001 | 0.02 | -0.004 | 0.01 | -0.012 | 0.04 |
| 2008 | -0.012 | 0.04 | 0.001 | 0.03 | -0.012 | 0.02 | -0.008 | 0.05 |
| 2009 | -0.045 | 0.04 | -0.034 | 0.02 | -0.04 | 0.01* | -0.041 | 0.04 |
| 2011 | -0.039 | 0.04 | -0.011 | 0.03 | -0.025 | 0.02 | -0.039 | 0.04 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where the dependent variable (maths scores in Key Stage 2 tests), pupil:teacher and pupil:assistant ratios are observed, within xkm of a pay area boundary. The coefficient reported represents the increase in Maths scores associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 17: Results: KS2 English Points (std): varying the measure of closeness to the Fringe boundary

| Fringe/outer-fringe London boundary: within 1km | | | | | | | | |
|---|----------------|------|--------|------|--------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.018 | 0.07 | 0.006 | 0.05 | -0.001 | 0.03 | -0.021 | 0.07 |
| 2007 | 0.123 | 0.07 | 0.101 | 0.08 | 0.076 | 0.05 | 0.087 | 0.08 |
| 2008 | 0.004 | 0.06 | -0.039 | 0.04 | -0.02 | 0.02 | -0.058 | 0.07 |
| 2009 | 0.066 | 0.07 | 0.027 | 0.05 | 0.006 | 0.04 | -0.056 | 0.08 |
| 2011 | -0.017 | 0.06 | 0.016 | 0.05 | 0.004 | 0.05 | -0.021 | 0.07 |

| Fringe/outer-fringe London boundary: within 2km | | | | | | | | |
|---|----------------|------|-------|------|-------|------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.002 | 0.05 | 0.01 | 0.03 | 0.018 | 0.01 | 0.01 | 0.05 |
| 2007 | 0.027 | 0.05 | 0.027 | 0.03 | 0.018 | 0.02 | 0.025 | 0.05 |
| 2008 | 0.014 | 0.04 | 0.002 | 0.03 | 0.006 | 0.02 | 0.007 | 0.05 |
| 2009 | 0.025 | 0.04 | 0.005 | 0.03 | 0 | 0.02 | -0.022 | 0.05 |
| 2011 | 0.011 | 0.04 | 0.012 | 0.03 | 0.01 | 0.03 | -0.003 | 0.05 |

| Fringe/outer-fringe London boundary: within 3km | | | | | | | | |
|---|----------------|------|-------|------|--------|-------|----------|------|
| Year | Raw difference | | OLS | | FILM | | Matching | |
| | b | SE | b | SE | b | SE | b | SE |
| 2006 | 0.01 | 0.04 | 0.023 | 0.03 | 0.025 | 0.01* | 0.022 | 0.04 |
| 2007 | 0.006 | 0.04 | 0.009 | 0.02 | 0.005 | 0.02 | 0.003 | 0.04 |
| 2008 | 0.01 | 0.04 | 0.007 | 0.03 | 0.007 | 0.01 | 0.008 | 0.04 |
| 2009 | -0.01 | 0.05 | 0.008 | 0.03 | -0.013 | 0.02 | -0.018 | 0.04 |
| 2011 | -0.012 | 0.04 | 0.017 | 0.03 | 0.006 | 0.03 | -0.009 | 0.04 |

Note: * denotes significance at 10 percent; ** denotes significance at 5 percent; *** denotes significance at 1 percent. The unit of observation is a primary school. The sample includes all primary schools that are present in the National Pupil Database in all of the academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and where the dependent variable (maths scores in Key Stage 2 tests), pupil:teacher and pupil:assistant ratios are observed, within xkm of a pay area boundary. The coefficient reported represents the increase in English scores associated with the high-pay side of the boundary. OLS, FILM, and Matching specifications additional account for observable characteristics of the school: percentage of pupils eligible for free school meals, with English as an additional language, that are non-white, and have a special educational need, the number of pupils in the school, dummy variables for region (North-East London, South-East London, South-West London), rank of index of multiple deprivation and rank of income deprivation affecting children index. FILM and Matching additionally account for distance to the relevant boundary.

Table 18: Propensity score matching: test of balance of observable characteristics in main specification: within 2km of the boundary

| Variable | Sample | Inner London boundary: 2km, 2011 | | | | Outer London boundary: 2km, 2011 | | | | Fringe London boundary: 2km, 2011 | | | |
|---------------------------------|-----------|----------------------------------|----------------|--------------|----------------|----------------------------------|-----------------|--------------|----------------|-----------------------------------|-----------------|--------------|-------------|
| | | Mean | | T-test | | Mean | | T-test | | Mean | | T-test | |
| | | Treated | Control | t | p> t | Treated | Control | t | p> t | Treated | Control | t | p> t |
| Prop. FSM | Unmatched | 0.28 | 0.20 | 7.57 | 0.00*** | 0.20 | 0.14 | 3.85 | 0.00*** | 0.09 | 0.10 | -0.33 | 0.75 |
| | Matched | 0.28 | 0.24 | 3.75 | 0.00*** | 0.20 | 0.17 | 1.52 | 0.13 | 0.09 | 0.09 | 0.53 | 0.59 |
| Prop. EAL | Unmatched | 0.50 | 0.40 | 5.10 | 0.00*** | 0.24 | 0.13 | 6.28 | 0.00*** | 0.09 | 0.08 | 0.50 | 0.62 |
| | Matched | 0.50 | 0.50 | 0.28 | 0.78 | 0.24 | 0.22 | 1.06 | 0.29 | 0.09 | 0.07 | 1.11 | 0.27 |
| Prop. non-white | Unmatched | 0.76 | 0.63 | 6.45 | 0.00*** | 0.45 | 0.28 | 7.42 | 0.00*** | 0.18 | 0.17 | 0.52 | 0.61 |
| | Matched | 0.76 | 0.73 | 1.63 | 0.10 | 0.45 | 0.43 | 0.42 | 0.67 | 0.18 | 0.17 | 0.73 | 0.47 |
| FTE Pupils (nursery to KS4) | Unmatched | 364.58 | 365.93 | -0.14 | 0.89 | 330.27 | 268.00 | 4.25 | 0.00*** | 265.11 | 250.09 | 1.02 | 0.31 |
| | Matched | 365.30 | 373.00 | -0.84 | 0.40 | 329.80 | 308.05 | 1.58 | 0.12 | 265.83 | 254.90 | 0.72 | 0.47 |
| Prop. SEN | Unmatched | 0.26 | 0.24 | 2.35 | 0.02** | 0.25 | 0.22 | 2.40 | 0.02** | 0.20 | 0.21 | -0.61 | 0.55 |
| | Matched | 0.26 | 0.25 | 1.83 | 0.07* | 0.25 | 0.24 | 0.84 | 0.40 | 0.20 | 0.20 | 0.34 | 0.73 |
| North-East | Unmatched | 0.32 | 0.27 | 1.29 | 0.20 | 0.27 | 0.19 | 1.50 | 0.13 | 0.25 | 0.16 | 1.75 | 0.08* |
| | Matched | 0.32 | 0.31 | 0.47 | 0.64 | 0.27 | 0.20 | 1.46 | 0.15 | 0.25 | 0.23 | 0.33 | 0.74 |
| South-East | Unmatched | 0.20 | 0.26 | -1.63 | 0.11 | 0.24 | 0.24 | -0.04 | 0.97 | 0.13 | 0.27 | -2.72 | 0.01** |
| | Matched | 0.21 | 0.18 | 0.92 | 0.36 | 0.24 | 0.45 | -3.72 | 0.00*** | 0.13 | 0.14 | -0.32 | 0.75 |
| South-West | Unmatched | 0.30 | 0.19 | 2.91 | 0.00*** | 0.30 | 0.30 | -0.11 | 0.91 | 0.38 | 0.26 | 2.16 | 0.03** |
| | Matched | 0.29 | 0.41 | -3.40 | 0.00*** | 0.29 | 0.23 | 1.07 | 0.29 | 0.38 | 0.40 | -0.28 | 0.78 |
| IMD rank | Unmatched | 0.27 | 0.45 | -13.33 | 0.00*** | 0.49 | 0.61 | -5.19 | 0.00*** | 0.73 | 0.70 | 1.31 | 0.19 |
| | Matched | 0.27 | 0.30 | -2.67 | 0.01** | 0.49 | 0.47 | 1.19 | 0.23 | 0.73 | 0.75 | -0.62 | 0.54 |
| IMD rank (education) | Unmatched | 0.51 | 0.58 | -4.90 | 0.00*** | 0.53 | 0.52 | 0.26 | 0.80 | 0.62 | 0.58 | 1.42 | 0.16 |
| | Matched | 0.51 | 0.48 | 2.27 | 0.02** | 0.53 | 0.37 | 6.38 | 0.00*** | 0.63 | 0.60 | 0.79 | 0.43 |
| IMD rank (employment) | Unmatched | 0.36 | 0.51 | -10.93 | 0.00*** | 0.55 | 0.64 | -4.17 | 0.00*** | 0.75 | 0.71 | 1.63 | 0.11 |
| | Matched | 0.36 | 0.38 | -2.07 | 0.04** | 0.55 | 0.49 | 2.39 | 0.02** | 0.75 | 0.75 | 0.08 | 0.94 |
| IMD rank (income) | Unmatched | 0.24 | 0.39 | -10.52 | 0.00*** | 0.44 | 0.57 | -5.05 | 0.00*** | 0.68 | 0.67 | 0.81 | 0.42 |
| | Matched | 0.24 | 0.27 | -2.03 | 0.04** | 0.45 | 0.43 | 0.72 | 0.48 | 0.68 | 0.70 | -0.66 | 0.51 |
| Prop. low IMD rank (education) | Unmatched | 0.19 | 0.14 | 2.70 | 0.01** | 0.29 | 0.28 | 0.08 | 0.93 | 0.19 | 0.21 | -0.67 | 0.50 |
| | Matched | 0.19 | 0.23 | -2.25 | 0.02** | 0.28 | 0.51 | -5.61 | 0.00*** | 0.19 | 0.18 | 0.29 | 0.78 |
| Prop. low IMD rank (employment) | Unmatched | 0.50 | 0.24 | 12.18 | 0.00*** | 0.22 | 0.12 | 3.44 | 0.00*** | 0.05 | 0.08 | -1.68 | 0.09 |
| | Matched | 0.50 | 0.37 | 6.17 | 0.00*** | 0.22 | 0.27 | -1.60 | 0.11 | 0.05 | 0.06 | -0.59 | 0.56 |
| Prop. low IMD rank (income) | Unmatched | 0.71 | 0.44 | 11.51 | 0.00*** | 0.37 | 0.19 | 4.90 | 0.00*** | 0.07 | 0.11 | -1.57 | 0.12 |
| | Matched | 0.71 | 0.68 | 1.54 | 0.13 | 0.36 | 0.37 | -0.31 | 0.76 | 0.07 | 0.08 | -0.27 | 0.79 |
| IDACI rank | Unmatched | 6826.60 | 11447.00 | -11.00 | 0.00*** | 12962.00 | 17324.00 | -5.71 | 0.00*** | 21281.00 | 21008.00 | 0.37 | 0.71 |
| | Matched | 6818.80 | 7611.50 | -2.47 | 0.01** | 13016.00 | 13224.00 | -0.30 | 0.76 | 21332.00 | 21826.00 | -0.68 | 0.50 |
| Distance to boundary | Unmatched | 984.77 | 1017.40 | -0.70 | 0.48 | 1147.40 | 1017.30 | 1.96 | 0.05* | 1038.40 | 1091.00 | -0.84 | 0.40 |
| | Matched | 987.42 | 955.82 | 0.74 | 0.46 | 1144.80 | 1110.20 | 0.53 | 0.60 | 1038.80 | 1101.30 | -0.95 | 0.34 |

Note: * denotes $p < 0.10$; ** denotes $p < 0.05$; *** denotes $p < 0.01$. The matching specification includes the following school level characteristics: proportion of pupils eligible for free school meals, proportion of pupils with English as an additional language, proportion of pupils that are non-white, number of pupils, proportion of pupils that have a special educational need, region, IMD and IDACI, and distance rank (as in our main specification).