1. **1975 rent control policy intervention**

```
mod.1975=lm(HSR$OHSrental_units~time+rent_control_1975+`1975_trend`,
            data = HSR)
summary(mod.1975)
```

```
Residuals:
     Min       1Q   Median       3Q      Max
-9056.5 -2856.5   -232.9   2769.3   9758.2

Coefficients:
                              Estimate Std. Error t value Pr(>|t|)
(Intercept)                    46494.5     3862.2  12.038 8.11e-16 ***
time                           -2529.7      991.7  -2.551   0.0141 *
rent_control_1975after 1975 -17850.5     3261.1  -5.474 1.77e-06 ***
`1975_trend`                   2261.3      993.0   2.277   0.0275 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 4149 on 46 degrees of freedom
  (317 observations deleted due to missingness)
Multiple R-squared:  0.873,     Adjusted R-squared:  0.8647
F-statistic: 105.4 on 3 and 46 DF,  p-value: < 2.2e-16
```

The model suggests that, at the beginning of time that is in the year 1969, the rental starts were 46494 units. Over time, the rental starts decreased by 2529 units with each additional year, but only up to the intervention (1975). The result is significant with t value>1.96 and p value<0.05. At the intervention, the rental starts declined by 17850 units. After the intervention that is, after 1975, the rental starts increased by 2261 units per year. The rental starts at the intervention and after the intervention define a statistically significant relationship which is evident from the respective t and p values.

2. Regression model: 1991 policy ammendment

```
> mod.1991<-lm(HSR$OHSrental_units~time+`1991_policy`+`1991_trend`,data = HSR)
> summary(mod.1991)

Call:
lm(formula = HSR$OHSrental_units ~ time + `1991_policy` + `1991_trend`,
    data = HSR)

Residuals:
     Min       1Q   Median       3Q      Max
-11457.3  -2825.9   -567.1   2877.0  14017.8

Coefficients:
             Estimate Std. Error t value    Pr(>|t|)
(Intercept)   50216.1     3809.8  13.181     < 2e-16 ***
time          -4525.0      744.5  -6.078 0.000000221 ***
`1991_policy`  3310.0      800.6   4.134    0.000149 ***
`1991_trend`   4397.7      721.3   6.097 0.000000207 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 4754 on 46 degrees of freedom
  (317 observations deleted due to missingness)
Multiple R-squared:  0.8333,    Adjusted R-squared:  0.8224
F-statistic: 76.62 on 3 and 46 DF,  p-value: < 2.2e-16
```

The model suggests that, at the beginning of time that is in the year 1969, the rental starts were 37250 units. Over time, the rental starts decreased by 1562 units with each additional year, but only up to the intervention (1991). The result is significant with t value>1.96 and p value<0.05. At the intervention, the rental starts increased by 1955 units but the difference is not statistically significant. After the intervention that is, after 1991, the rental starts increased by 1546 units per year. The rental starts after the intervention define a statistically significant relationship which is evident from the respective t and p values. The model explains 75% of the variance.

3. Policy ammendment 1997

```
> mod.1997<-lm(HSR$OHSrental_units~time+`1997_policy`+`1997_trend`,data = HSR)
> summary(mod.1997)

Call:
lm(formula = HSR$OHSrental_units ~ time + `1997_policy` + `1997_trend`,
    data = HSR)

Residuals:
     Min       1Q   Median       3Q      Max
-15459.2  -1230.7    -79.3   1362.9  16598.2

Coefficients:
             Estimate Std. Error t value            Pr(>|t|)
(Intercept)   34445.8     2168.8  15.883             < 2e-16 ***
time          -1227.5      130.7  -9.395 0.00000000000285 ***
`1997_policy`   977.2     3209.6   0.304               0.762
`1997_trend`   1478.0      228.7   6.463 0.00000005839347 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 5585 on 46 degrees of freedom
  (317 observations deleted due to missingness)
Multiple R-squared:  0.7699,    Adjusted R-squared:  0.7549
F-statistic: 51.29 on 3 and 46 DF,  p-value: 1.028e-14
```

The model suggests that, at the beginning of time that is in the year 1969, the rental starts were 34445 units. Over time, the rental starts decreased by 1227 units with each additional year, but only up to the intervention (1997). The result is significant with t value>1.96 and p value<0.05. At the intervention, the rental starts increased by 977 units but the difference is not statistically significant. After the intervention that is, after 1997, the rental starts increased by 1478 units per year. The rental starts after the intervention define a statistically significant relationship which is evident from the respective t and p values. The model explains 75% of the variance.

4. 2017 policy impact

```
> mod.2017<-lm(HSR$OHSrental_units~time+`2017_policy`+`2017_trend`,data = HSR)
> summary(mod.2017)

Call:
lm(formula = HSR$OHSrental_units ~ time + `2017_policy` + `2017_trend`,
    data = HSR)

Residuals:
     Min       1Q   Median       3Q      Max
-11709.6  -5809.1   -525.1   2886.1  22166.4

Coefficients:
             Estimate Std. Error t value Pr(>|t|)
(Intercept)  26452.92    2221.77  11.906 1.19e-15 ***
time          -621.33      78.94  -7.871 4.59e-10 ***
`2017_policy` 10770.08    7895.55   1.364    0.179
`2017_trend`    651.33   10715.08   0.061    0.952
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 7577 on 46 degrees of freedom
  (317 observations deleted due to missingness)
Multiple R-squared:  0.5765,    Adjusted R-squared:  0.5488
F-statistic: 20.87 on 3 and 46 DF,  p-value: 0.00000001111
```

The model suggests that, at the beginning of time that is in the year 1969, the rental starts were 26452 units. Over time, the rental starts decreased by 621units with each additional year, but only up to the intervention (2017). The result is significant with t value>1.96 and p value<0.05. At the intervention, the rental starts increased by 10118 units but the difference is not statistically significant. After the intervention that is, after 2017, the rental starts increased by 651 units per year but not statistically significant. The model explains 54% of the variance.