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HQT ECONOMETRIC MODELING

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*** IMPORT TRANSFORMED DATA ***
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```
*** NOTE: replace [dir] with the filepath to the transformed data
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```
import excel "[dir]\EconometricData_Transformed.xlsx", sheet("Sheet 1") firstrow
```

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```
*** ESTIMATE TOTAL COST ECONOMETRIC MODEL AND OBTAIN BENCHMARKING RESULTS ***
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```
*** Estimate Total Cost model without HQT
```

```
reg rtc ym ym2 yptx yptx2 ymyptx mva0919pernsb0919 nsub0919perym load_tx pctpoh pctptx_peg
trend if snlid != 1, robust
```

```
*** Predict HQT's total cost using the model
```

```
predict rtc_predicted
```

*** Calculate the difference between actual total cost and predicted total cost

gen diff_rtc= rtc-rtc_predicted

*** ESTIMATE CAPITAL COST ECONOMETRIC MODEL AND OBTAIN BENCHMARKING RESULTS

*** Estimate Capital Cost model without HQT

reg rck ym ym2 yptx yptx2 ymyptx mva0919pernsb0919 pctpoh pctptx_peg nsub0919perym load_tx
trend if snlid != 1, robust

*** Predict HQT's capital cost using the model

predict rck_predicted

*** Calculate the difference between actual total cost and predicted total cost

gen diff_rck = rck-rck_predicted

*** ESTIMATE CNE ECONOMETRIC MODEL AND OBTAIN BENCHMARKING RESULTS ***

*** Estimate CNE model without HQT

reg rcom ym ym2 yptx yptx2 ymyptx mva0919pernsb0919 pctptx_peg pforgis1 rto trend if snlid != 1,
robust

*** Predict HQT's CNE cost using the model

predict rcom_predicted

*** Calculate the difference between actual CNE cost and predicted CNE cost

```
gen diff_rcom = rcom - rcom_predicted
```

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*** BENCHMARK HQT ***
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```
egen hqt_rtc_score = mean(diff_rtc) if snlid == 1 & year > 2016
```

```
egen hqt_rck_score = mean(diff_rck) if snlid == 1 & year > 2016
```

```
egen hqt_rcom_score = mean(diff_rcom) if snlid == 1 & year > 2016
```

```
*consolidate results
```

```
replace hqt_rtc_score = . if snlid == 1 & year < 2019
```

```
replace hqt_rck_score = . if snlid == 1 & year < 2019
```

```
replace hqt_rcom_score = . if snlid == 1 & year < 2019
```

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```
*** SORT AND EXPORT RESULTS ***
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```
sort snlid year
```

```
*** NOTE: replace [dir] with the filepath to the transformed data
```

```
export excel using "[dir]\benchmark_scores.xlsx", firstrow(variables)
```
