Ln VAT export  $tax_{k,t-1} \times Density_{ck}$ 

Density<sub>ck</sub> × Ln VAT import  $tax_{k,t-1}$ 

Ln VAT export  $tax_{k,t-1}$ 

Ln VAT import  $tax_{k,t-1}$ 

City-product fixed effects

product-year fixed effects

Observations

at the 1%.

 $R^2$ 

City-sector-year fixed effects

Product-destination fixed effect

Table 1: VAT export tax and firm's quality upgrading, Effect of density

(1)

-0.357\*\*\*

(0.101)

-0.090

(0.078)

0.434

(0.315)

0.583

(0.366)

Yes

Yes

Yes

No

3.998.921

0.408

This table estimates eq(3). Note that 'Eligible' refers to the regime entitle to VAT refund, our treatment group. Our control group is processing trade with supplied input, 'Non-Eligible' to VAT refund. Sectors are defined following the Chinese 4-digit GB/T industry classification and regroup several products. Heteroskedasticity-robust standard errors clustered at the product level appear inparentheses. \* Significance at the 10%, \*\* Significance at the 5%, \*\*\* Significance

Eligible

Dependent variable: Product quality (city/product/trade regime/year)

(2)

0.228

(0.269)

0.268

(0.320)

Yes

Yes

No

Yes

3.998.921

0.260

Non-Eligible

(4)

0.888

(0.696)

-0.036

(1.262)

Yes

Yes No

Yes

745,297

0.359

(3)

-0.053

(0.163)

0.201

(0.261)

-0.045

(0.817)

-1.714

(1.630)

Yes

Yes

Yes

No

745.297

0.607