

PS8<sub>Tao</sub>

jiongliangtao

March 2019

## 1 Introduction

Table 1:

1.501
-0.991
-0.247
0.744
3.504
-1.999
0.502
0.997
1.256
1.999

My estimate is very similar to the true value of beta in (1).

Table 2:

1.501	-0.991	-0.247	0.744	3.504	-1.999	0.502	0.997	1.256	1.999
-------	--------	--------	-------	-------	--------	-------	-------	-------	-------

Table 3:

1.501	-0.991	-0.247	0.744	3.504	-1.999	0.502	0.997	1.256	1.999
-------	--------	--------	-------	-------	--------	-------	-------	-------	-------

Table 4:

1.462	-0.977	-0.234	0.775	3.507	-1.971	0.537	0.971	1.243	2.002
-------	--------	--------	-------	-------	--------	-------	-------	-------	-------

From the table above, we can see that the Nelder Mead is less accurate than the LBFGS method.

Table 5:

1.501	-0.991	-0.247	0.744	3.504	-1.999	0.502	0.997	1.256	1.999	-0.500
-------	--------	--------	-------	-------	--------	-------	-------	-------	-------	--------

$\hat{\mathbf{z}}$

Table 6:

<i>Dependent variable:</i>	
Y	
X1	1.501*** (0.002)
X2	−0.991*** (0.003)
X3	−0.247*** (0.003)
X4	0.744*** (0.003)
X5	3.504*** (0.003)
X6	−1.999*** (0.003)
X7	0.502*** (0.003)
X8	0.997*** (0.003)
X9	1.256*** (0.003)
X10	1.999*** (0.003)
Observations	100,000
R <sup>2</sup>	0.971
Adjusted R <sup>2</sup>	0.971
Residual Std. Error	0.500 (df = 99990)
F Statistic	338,240.000*** (df = 10; 99990)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01