

Econ7115: Structural Models and Numerical Methods
in Economics
Assignment W09

January 16, 2026

Due 10 April 2026

Zi Wang

HKBU

Spring 2026

1. The attached database, CASIF_98_07, comprises input and output variables for Chinese manufacturing firms spanning the years 1998 to 2007. You are requested to use this dataset to estimate firm-level productivities by employing the following methodologies: (i) the Olley-Pakes (OP) method, (ii) the Levinsohn-Petrin (LP) method, and (iii) the Akerberg-Caves-Frazer (ACF) method. Please develop your own code to implement these estimations and subsequently compare your results with those obtained from the existing Stata packages for productivity estimation.