Online Appendix 1 about the moments we used for simulation:

Our Goal is to show just we could have the similar shock but the misallocation which Hsie and Klenow(2009) refer as a consequence of the distortion does not exist. To show this we try to match the moments of the article for China and India in that article and its structural model in the simple SMM model. In Hsie and Klenow(2009) we have 3 moments come from the form of the dispersion so we use the table 2 and take standard error , 75-25 percentile and 90-10 percentile of the dispersion of the TFPR for this 2 country. In addition, we take TFP gains from equalizing TFPR within the Industry which came out from the Table IV of this article. For the distributional characteristics of the article we use the table V, the ratio of the actual vs. efficient size of the plants for 4 different quantile of the TFPR. And finally we use table A.1 the correlation coefficients of the distortion.

Our ambition in this unit is not to find out how excellent Hsie-Klenow (2009) model fit or something like that and we just try to have the model which is well fitted with the status forced Hsie-Klenow(2009) to conclude about the effects of dispersion on the loss of efficiency caused by the misallocation. So we try to fit their moments of efficiency and dispersion at first and we omit all the moments which makes this results faraway.

Furthermore we use the weighted SMM for match 2 moments of dispersion and efficiency as well as could. Our last moments are TFPR standard error, TFPR difference between the 75th and 25th percentiles, TFP gains from equalizing TFPR within the Industry and all the correlations.

explanation	Moment	Description
Dispersion of TFPR	1	Dispersion of TFPR
Dispersion of TFPR 75%	2	Difference between the TFPR 75th percentile and 25th percentile
TFP gain from efficient allocation	3	percentage of gain when switch to the efficient allocation
correlations	4	correlation between derivation of distortion of capital and distortion of labor
	5	correlation between derivation of distortion of labor and labor
	6	correlation between derivation of productivity and labor
	7	correlation between derivation of productivity and labor distortion
	8	correlation between derivation of productivity and distortion of the capital
	9	correlation between derivation of distortion of capital and labor

China										
explanation		Dispersion of TFPR	Dispersion of TFPR 75%	TFP gain from efficient allocation	Correlations					
Moment		1	2	3	4	5	6	7	8	9
actual		0.63	0.82	0.866	0.073	0.061	0.073	0.059	0.085	0.06
Simple estimated	mean	0.531	0.764*	0.942	0.218	-0.204*	0.611	0.533*	0.502	-0.074*
	s.d	0.004	0.014	0.007	0.001	0.002	0.002	0.007	0.006	0.001
weighted efficient	mean	0.629*	0.821*	0.866*	0.981	0.028	0.362*	0.904	0.866*	-0.054*
	s.d	0.001	0.001	0.000	0.022	0.014	0.222	0.125	0.165	0.029
normal efficient	mean	0.634*	0.862*	1.090*	0.101	-0.251	0.691	0.422	0.378	-0.073*
	s.d	0.009	0.027	0.095	0.002	0.003	0.013	0.012	0.019	0.002

India										
explanation		Dispersion of TFPR	Dispersion of TFPR 75%	TFP gain from efficient allocation	Correlations					
Moment		1	2	3	4	5	6	7	8	9
actual		0.67	0.81	1.275	0.004	0.01	0.69	0.538	0.398	-0.038
Simple estimated	mean	0.599	0.843	1.312	0.004*	0.010*	0.751	0.529*	0.378*	-0.038*
	s.d	0.013	0.014	0.005	0.000	0.000	0.006	0.009	0.013	0.000
weighted efficient	mean	0.671*	0.808*	1.275*	0.009*	0.015*	0.849	0.513*	0.188*	0.027*
	s.d	0.003	0.004	0.000	0.015	0.005	0.021	0.034	0.111	0.117
normal efficient	mean	0.718	0.888*	1.155*	0.002	0.013	0.812	0.554*	0.178	-0.026
	s.d	0.018	0.033	0.339	0.001	0.000	0.049	0.058	0.036	0.001

Table 1: SMM modelling. First moment is dispersion of TFPR (S.D) the second one is dispersion of TFPR(75-25 percentile) from table II and third is the TFP GAINS FROM EQUALIZING TFPR WITHIN INDUSTRIES from Table IV and the rest are correlation of six parameters which were came out from the appendix

In all different modelling we've done I table 1 our model can match the moments of dispersion and efficiency which were reported in HK. As we see, the weighted model in China and India could match significantly to correlation moments as well. But for more confidence and avoid any error or extra assumption we see the different consequence of each estimation between all these model. Table 2 shows the estimated parameter related to each way of estimation. Although some of coefficient of Cholesky matrix are insignificant but it's not the negative point because we put more freedom to shock of the model in contrast to HK to match our results.

China										
explanation		average productivity	Cholesky matrix coefficient				beta distribution coefficient			
sign		μ_a	σ_1	ρ_{12}	ρ_{13}	ρ_{23}	a_y	b_y	a_k	b_k
coefficient		1	2	3	4	5	6	7	8	9
Simple estimated	mean	5.13	-0.17	-83.51	-0.38	-6.64	25.51	0.18	0.33	-0.83
	s.d	0.02	0.29	15.53	0.73	13.96	3.06	0.29	0.59	0.92
weighted efficient	mean	4.21	0.70	9.97	5.47	9.98	278.55	38.76	167.37	-31.09
	s.d	0.26	0.16	9.44	2.65	5.54	4.73	8.80	0.94	4.79
normal efficient	mean	5.02	0.00	-16.29	0.00	-0.14	21.81	-0.17	-0.07	0.02
	s.d	0.02	0.34	1.73	0.56	1.17	2.88	0.36	0.07	0.05

India										
coefficient		1	2	3	4	5	6	7	8	9
Simple estimated	mean	4.99	-0.17	-17.54	-0.38	-0.10	40.39	0.29	-0.76	-0.03
	s.d	0.02	0.28	1.71	0.61	0.92	2.66	0.57	1.00	0.12
weighted efficient	mean	3.69	-0.50	-26.75	-0.59	11.29	29.13	6.27	4.13	3.20
	s.d	0.47	0.03	13.38	0.06	6.34	10.55	1.07	21.73	4.86
normal efficient	mean	4.14	-0.47	-37.63	-0.69	17.17	32.52	3.92	-6.65	0.97
	s.d	0.47	0.06	2.61	0.14	2.11	7.95	1.92	3.98	4.76

Table 2 coefficient which is estimated