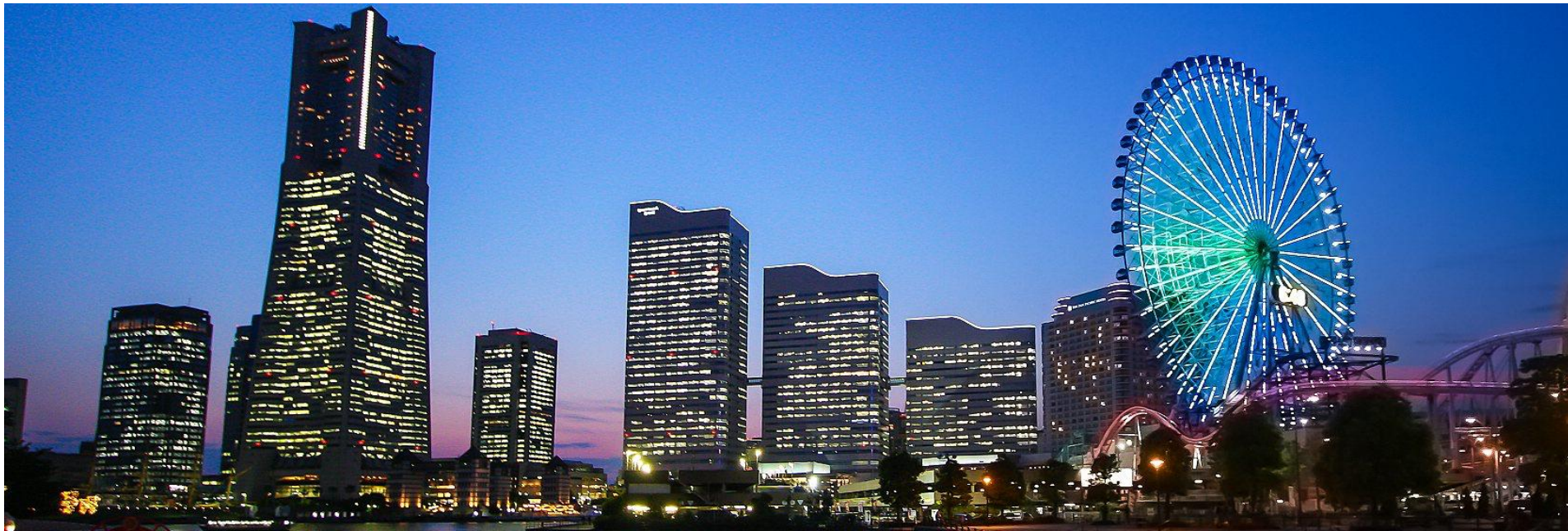


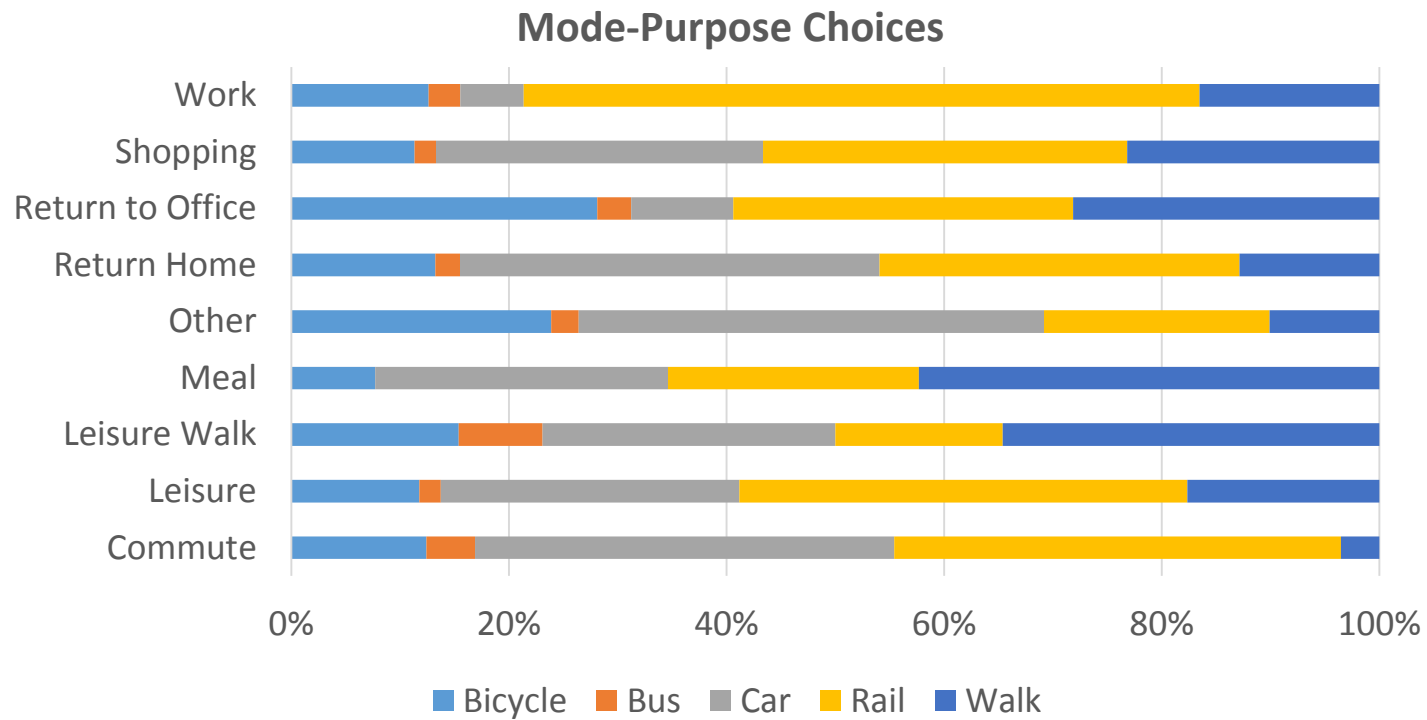
Analysis of travel mode choice behaviors in Yokohama City, Japan



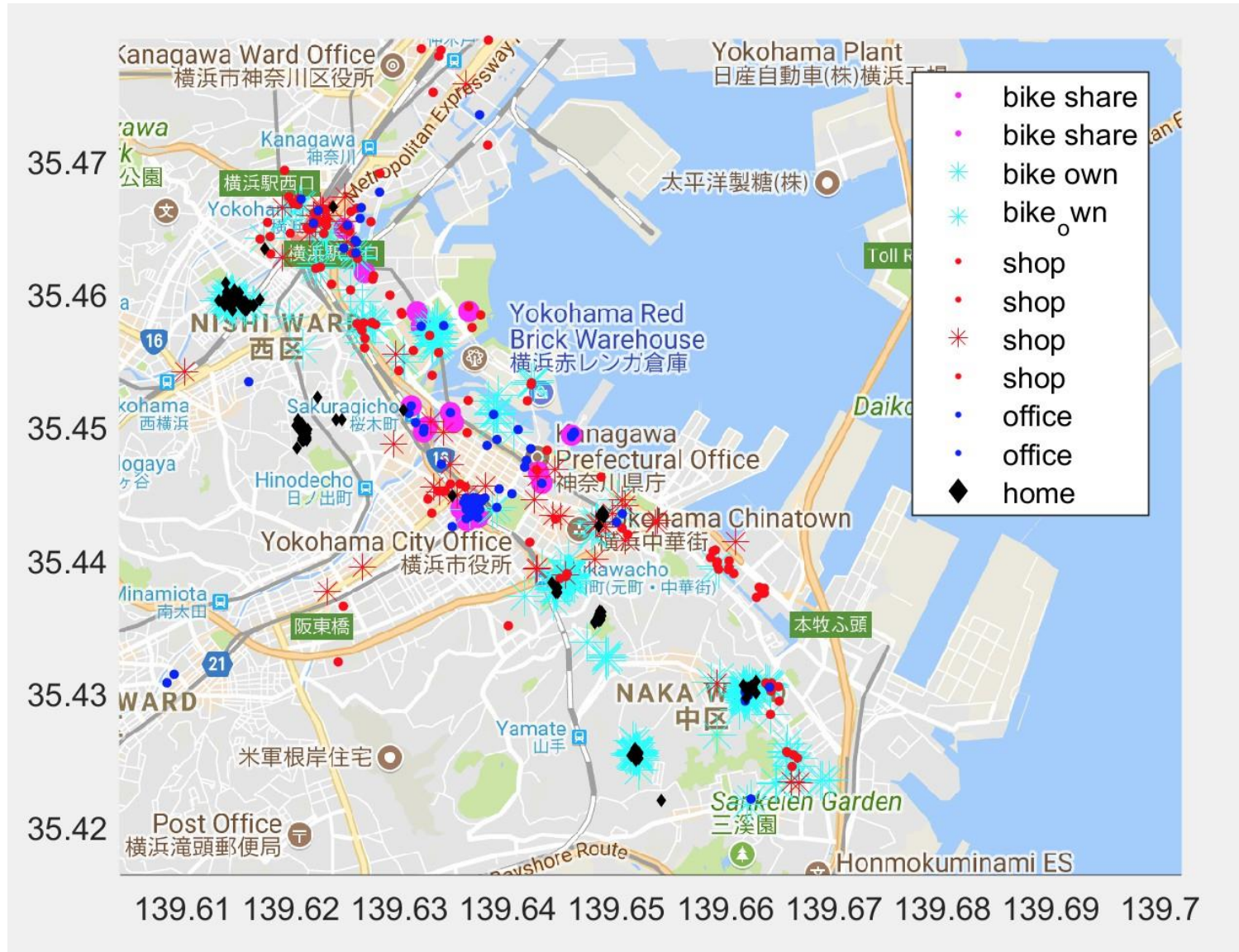
Content

- Introduction
- Characteristics of mode-choices
- Estimation
- Results
- Policy implications

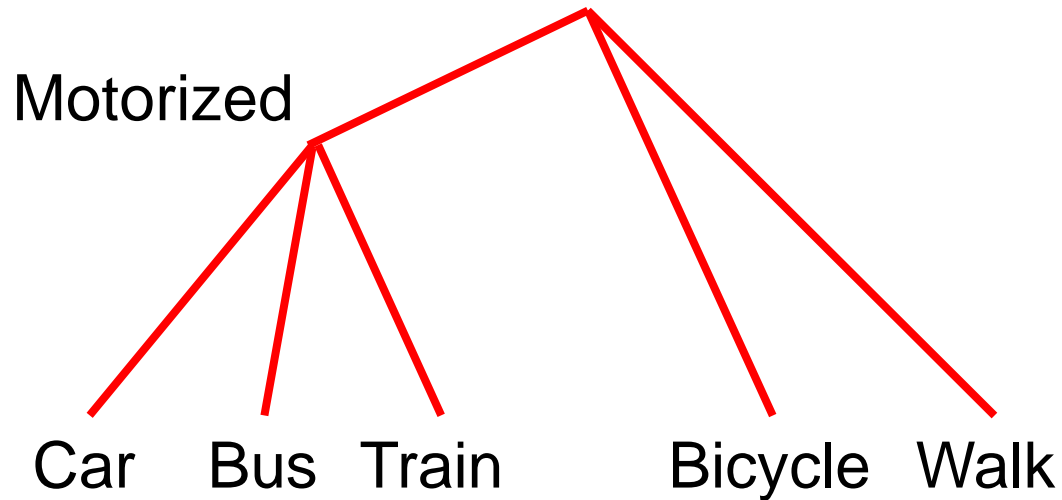
Characteristics of decision makers



OD trips by travel mode choices

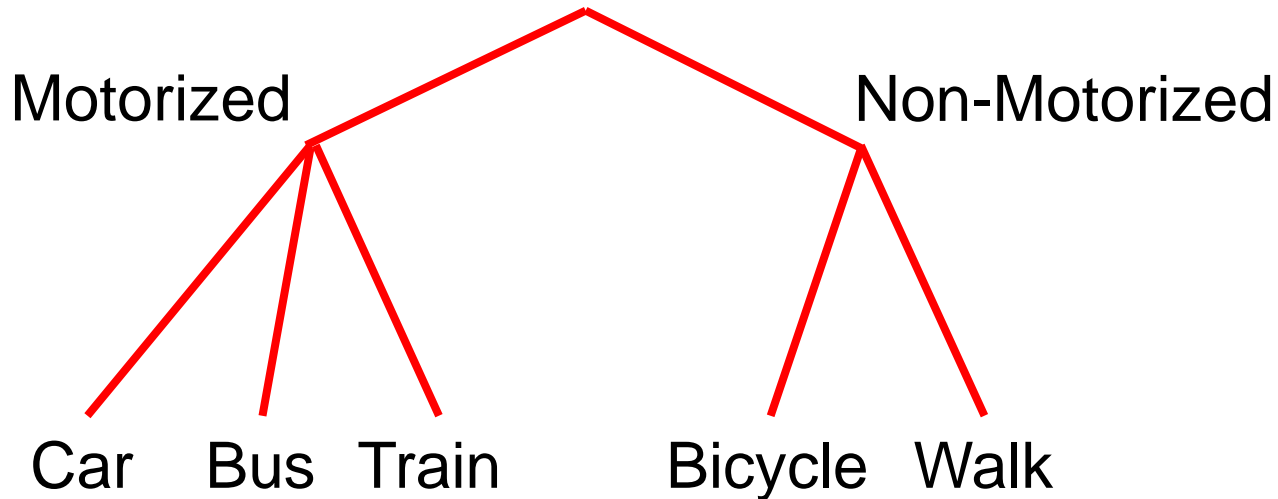


Estimation: Model 1: Motorized mode choice



Estimation:

Model 2: Motorized and Non-motorized mode choices



Model 1: Multinomial logit model (5 modes)

Variables	Parameters	T-statistics
Constant		
train	-0.2053	-1.151
bus	-6.6248	-3.756
car	-1.4099	-11.200
bike	0.7386	2.155
walk(base)		
Travel Time	-11.5433	-20.178
Travel distance		
Age		
bus	0.1286	3.770
bike	-0.0408	-9.543
Male Dummy		
bus	-4.0201	-6.205
Weekdays Dummy		
train	1.1101	5.897
bus	1.5187	2.697
walk(base)		
Departure Time		
bike	-0.0612	-2.959
Peak Dummy		
car	-0.5356	-3.397
bike	-0.6827	-2.899
walk(base)		
Adjusted Rho-square (L0-(LL-K))/L0	0.470	

Model 2: Motorized-based Mode Choice

Variables	Parameters	T-statistics
Constant		
train	-2.5224	-2.554
bus	-8.4643	-5.022
car	-4.1453	-4.368
bike	0.7707	2.217
walk(base)		
Travel Time	-11.6135	-19.906
Travel distance	0.0095	1.471
Age		
bus	0.1295	4.689
bike	-0.0377	-8.904
walk(base)		
Male Dummy		
train		
bus	-5.2179	-6.940
Departure Time		
train	-0.0226	-1.317
bike	-0.0680	-3.238
Weekdays Dummy		
train	1.2561	6.100
bike	1.9612	2.696
Peak Dummy		
train	0.7093	3.801
bike	-0.3683	-1.623
Scal Partameter (Motorized)	0.4356	4.862
Adjusted Rho-square (LO-(LL-K))/LO	0.551	

Model 2: Motorized and Non-motorized mode choice

Variables	Parameters	T-statistics
Constant		
train	-3.3080	-2.801
bus	-8.8016	-4.877
car	-4.5801	-3.893
bike	0.7819	2.095
walk(base)		
Travel Time	-12.5523	-17.417
Age		
bus	0.1322	4.757
bike	-0.0414	-8.615
Male Dummy		
bus	-5.4659	-7.081
walk(base)		
Weekdays Dummy		
train	-0.0684	-3.059
bus	1.2691	5.999
walk(base)		
Departure Time		
bike	1.9056	2.500
Peak Dummy		
train	0.7544	3.977
bike	-0.4399	-1.798
Scal Partameter (Motorized)	0.3560	4.082
Scal Partameter (Non-motorized)	0.8129	11.622
Adjusted Rho-square (LO-(LL-K))/LO	0.485	

Policy implication

- Promoting bike-sharing system

