

(Preliminary)

**When do people work?:
Measuring trends in work timing with a Japanese time-use survey**

April 2009

Sachiko Kuroda^{*} and Isamu Yamamoto^{}**

Abstract

Using a Japanese time-use survey, we find a secular increase in the share of workers who work in the late-night and early-morning hours over the past 20 years. This trend remains when controlling for changes in hours worked associated with the business cycle and for changes in demography and the occupational mix. This is a contrast trend seen in the US, where the share of workers working late-night hours declined gradually over time. We also found that the share of workers who work at the same time (the degree of employment rate agglomeration) has been in a declining trend over the years. Although this dispersion of work timing is similar to the trend found in the US, a major difference is that in Japan, it was an increase in the share of workers working late-night or early-morning hours that drove this diversification. In addition, the notable increase in the employment rate for evening work (until about 10 pm) was for highly educated, high-income workers, whereas the increase in the employment rate of those working in mid-night, early-morning hours was for workers with low levels of both education and income. We also found differences in employment rate based on day of the week, observing a notable decline in the fraction of highly educated, high-income individuals working on Saturday, but an increase in the employment rate of less educated, low-income workers in the late-night, early morning hours on Saturday.

Key words: Work timing, Hours worked

JEL classification: J22

* The University of Tokyo (kuroda@iss.u-tokyo.ac.jp)

** Keio University (yamamoto@fbc.keio.ac.jp)

Micro data used in this paper are data from the *Survey of Time Use and Leisure Activities* (Statistics Bureau, Ministry of Internal Affairs and Communications; MIAC). The Authors deeply appreciate the MIAC for letting use the precious data. The remaining errors are solely of our own.