Motivation and Goals: Costa (2000) documents the US trends in hours from the late XIXth century to 1991. She shows that the ratio of hours worked between the top decile and the one at the bottom has increased throughout. Nevertheless, two distinct periods mark this relative change. Until 1970’s, hours have been declining for all deciles but relatively more for the ones at the bottom; since then, weekly hours have still declined for lower wage groups but have increased for the ones at the top. Moreover, the levels cross in the early 1980’s. Vandenbroucke (2006) explains these facts for the first part of the sample period. He proposes a model where the decline in wage inequality is the only reason for the cross-sectional changes in hours: in the first half of the XXth century, real wages increased for all groups, but relatively more for the ones at the bottom. However, this argument cannot be applied to the US since 1970. While the ratio of hours between the highest to lowest group has continued to rise, the relative changes in wages have reverted: wages have continued to rise for the top income groups but have stagnated or even fallen for the lower ones. Our paper focuses on the period between 1976-2006 and it tries to reconcile the cross-sectional trends in both hours and wages for the US economy. The objective is twofold: first, we propose a mechanism driving the facts and estimate it from our dataset. Second, we feed this explanation into a general equilibrium model and evaluate quantitatively its potential to deliver the trends.

Mechanism: We investigate the robustness of the cross-sectional facts by sex, race, education, age, and occupation. The possibility that the changes in hours could be a reflection of changes in the US demographics is ruled out. Instead, we propose a mechanism in which the individuals’ current decisions of how much to work take into account two components: the wage level from each hour supplied to the market and how current hours affect the probability of moving across the wage distribution in later periods. In particular, the latter dynamic component implies a positive impact of current hours on wage growth. Hence, the stronger the dynamic mechanism is, the more incentives workers will have to increase current labor supply.

Results: We use March CPS data and we divide the sample into 5 quintiles. We estimate how current hours affect mobility across the quintiles for each of the groups. The analysis focuses on the contrast between the beginning and the end of the sample period (77-79 and 04-06). We find that the dynamic component of labor supply has strengthened for the highest quintile and has weakened for the one at the bottom. In absolute terms, the marginal effect in wages from five additional hours of work (1h per day in a 5 days workweek) has actually declined for the lowest wage group (from a 3.4% yearly probability of going to a higher wage group to 0.9%) while it has increased for the one at the top (from 0.1% in the late 70’s to 1.5% in the beginning of the new century). Thus, the mechanism we propose is empirically relevant and has the potential of explaining the co-movement of hours and wages across income groups.

We provide a general equilibrium model where both components of labor supply are included. The transition probability functions used are the ones estimated from the data. Although, the changes in hours predicted by the model overshoot the ones observed in the data, the numerical results compare fairly well to the data with respect to the pattern. We are able to replicate the decline in hours at the bottom of the wage distribution, as well as the increase at the top. The ratio of hours worked between the two extreme quintiles delivered by the model also fits the data. Our counterfactual exercises show that the changes over time in the dynamic effect of hours are crucial to explain the rank reversal of hours between the two extreme quintiles, as well as, the trends in hours.