

# TIME USE IN ECONOMICS

# RESEARCH IN LABOR ECONOMICS

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RESEARCH IN LABOR ECONOMICS VOLUME 51

# TIME USE IN ECONOMICS

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## PREFACE

Economics is about scarcity – how to allocate resources in the presence of limits. Time is the scarcest factor at a human’s disposal. As Will Rogers said, “Buy land – they ain’t making any more of it.” He might have said the same thing about time. The statement is not quite correct – the Dutch have proved Rogers wrong over the past millennium; and we have obtained some more time due to increases in life expectancy. Those increases, however, are small compared to the increases in incomes in both rich and middle-income countries. Our time has become increasingly scarce relative the purchasing power that we now have. There remain 24 hours in a day (except when we switch to or from Summer Time).

While economic research has concentrated on our spending on goods and services, it has paid relatively much less attention to how we spend our time. That began to change with the fundamental theoretical ideas of Gary Becker in 1965. Small samples of individuals who agreed to keep diaries of how their spent time at every point in a day, or even a week, had been collected as early as the 1910s; but it is only in the 1960s that large samples of time diaries began to be available. Most wealthy and many less-developed countries now have large random samples of their populations for whom time diaries are available, and these underlie most of the articles included in this volume. Indeed, many base their analyses on the American Time Use Survey (ATUS), the only ongoing such study in the world, which includes around 1,000 diaries each month starting in January 2003. The articles included here cover a variety of aspects of time use, including its effects on our feelings about life; how time is used by children and their parents, and how it is important in familial interactions, and in considering how we measure economic inequality.

In the last 20 years the consideration of happiness has become a major focus of economic research. This makes sense; after all, much of economic theory deals with consumers maximizing their utility; and measures of happiness are a reasonable proxy for the theoretical concept of utility. How happiness relates to income has been a central question of this economic analysis. What has been mostly absent is the relationship between happiness, often measured by answers to questions like, “Rate your satisfaction with your life,” and the way people spend their time. In their study *Naomi Friedman-Sokuler* and *Claudia Senik* examine not what people do with their time, but how they allocate it across the day – the variety of things that they engage in during their 24 hours. It is noteworthy and admirable that they study this on two similar sets of data, one from France, and the other the ATUS, thus enabling them to infer whether their findings, about how the variety of uses of time alters feelings of life satisfaction

and feelings about well-being during the moments when one is engaging in a particular activity, are more than single country-specific.

In their study of the relation of time use to happiness, also based on the ATUS, *Jose Ignacio Giménez-Nadal*, *José Alberto Molina*, and *Almudena Sevilla* examine people's work time while on the job. This examination is novel, in that a huge literature investigates how much people work, while almost no research has studied what people do while at work and how they feel about it. Does having more breaks in the workplace make workers feel better? Does the timing of breaks – not only their length, but when they occur during the workday – affect workers' well-being? Is the pattern of time use at work related to how stressed workers feel? These are important questions, and the answers are important, not just in terms of our assessment of the role of time use in the economy, but also for enabling employers to structure workdays so as to make workers better off and, in the end, increase efficiency in the workplace.

How children utilize their time throughout the day plays an essential role in shaping their outcomes later in life, including health, human capital accumulation, and earnings. Whereas a number of studies focus on the United States and OECD countries, very few have analyzed children's time allocation in less-developed countries, let alone how time allocation has changed over the last couple of decades. India, with a population of 361 million children aged 14 or under as of 2020, provides an important setting to study children's time use. *Matthew Gibson*, *Maulik Jagnani*, and *Hemant K. Pullabhotla* utilize two waves of the India Time Use Survey (ITUS) to investigate changes in children's allocation of time between 1998 and 2019. They find that mean learning time increased by 30%, from 310 minutes in 1998 to 420 minutes in 2019, then they decompose the change and explore why and from which activities this increase arose. Did the increase vary across Indian states? Is it related to specific programs like the bicycle program in Bihar? Is it larger for younger children, different for boys than girls? And finally, how did such leisure activities like watching TV, playing games, and simply chatting with friends change? Answers to each of these have to do with social interactions and are important for understanding human development.

A large literature has concentrated on the intergenerational transmission of income/earnings inequality. A less thoroughly researched question is how the community where a child grows up affects her/his economic success later in life. *Sulagna Mookerjee*, *John Pedersen*, and *David Slichter* go one step beyond this literature to consider how parents' time use when there is a young child in the home affects the impact of their community on their children's subsequent incomes. What makes some communities more successful than others in producing young citizens who achieve more later in life? Does the amount of time parents spend with kids in more successful communities contribute to those communities' ability to produce economically successful young adults?

Parents will have more time available to spend with their children if they are compelled to spend less time on other activities. The second-most important activity in the average person's day is time spent working for pay. If a parent loses his/her job, that will give the parent much more time that might potentially be

spent with the child. But do they? And if so, how much more time? By utilizing the 2005–2019 American Time Use Survey, *Anja Gruber* not only explores these questions, but in addition analyzes whether the answers depend upon which parent, father or mother, loses their job, as well as on family income. The results shed light on why the negative impact of parental job loss is experienced more severely by children in low-income families.

While Gruber focused on an involuntary reduction in work time through job loss, *Taehyun Ethan Kim* and *Dean R. Lillard* consider another, more felicitous involuntary reduction, namely one created by a legislated mandate and incentives to reduce hours of paid work. Over a period of years, the South Korea government created these mandates, which applied at different times to enterprises of different size. Along with data from the South Korean Labor and Income Panel Study (KLIPS), these phase-ins enabled Kim and Lillard to examine, like Gruber, how time is spent with children. In addition, with this extra time available, an interesting question that they also answer is how expenditures on children – purchasing child care – are altered.

Understanding poverty and assessing individual welfare is crucially important for public policy. However, conventional studies on poverty and inequality tend to focus solely on material consumption, ignoring variations in individuals' time use. Nonetheless, it is worth questioning whether two individuals who have the same level of material consumption can be considered equally well-off if one of them has twice as much leisure time as the other. *Ruben Bostyn*, *Laurens Cherchye*, *Bram De Rock*, and *Frederic Vermeulen* utilize the MEqIn survey to evaluate whether incorporating disparities in how individuals allocate their time can affect the outcomes of empirical welfare analyses. They consider how expenditure shares affect the likelihood of women being classified as poor, and whether lesser material consumption can be compensated for by more leisure time? If so, how does this affect poverty and inequality rates? Similarly, in what way does accounting for economies of scale affect the poverty rate of multi-person households differently from singles?

Bostyn et al. show that examining each partner's time allocation in the household is important for welfare analysis. But how is that sharing affected by the nature of the relationships between the people in the household? Using data from the 2001–2019 waves of the Australian HILDA survey, *Leslie S. Stratton* examines how time use changes as men and women transition into and out of relationships and how reported specialization differs by relationship type. She answers such questions as whether cohabitating couples specialize less than married couples. Is specialization different in marriage for previously cohabitating men and women? And in which activities do men rather than women bear the brunt of specialization? Getting the answers to these questions is clearly important to understanding intrahousehold behavior given the roles couples have in family formation and the labor market.

In the past, as is mirrored in most theoretical and empirical studies, a clear boundary existed between time spent at home and time spent at work. However, with advancements in technology, such as email, cellphones, and the internet, this distinction has become increasingly blurred. The COVID-19 pandemic further

intensified this delineation, but by how much is not known. *Sarah M. Flood* and *Katie R. Genadek* utilize the 2019–2021 American Time Use Survey to determine where workers performed their jobs during the pandemic, and how this changed from 2019 to 2020. Further, were there any changes in the length of workdays and when workers worked during the pandemic? Did the changes in where workers performed their jobs persist into 2021? Which group of workers experienced the most significant increase in working from home during the pandemic, and which group lost ground?

Independent of COVID-19 and new technology, one job where work–life balance has been particularly blurred is teaching. However, how much so has not been studied. *Victoria Hunter Gibney*, *Kristine L. West*, and *Seth Gershenson* analyze daily American Time Use Survey time-diary data on 3,168 teachers and 1,886 professionals in comparable prosocial occupations, from 2003 to 2019, to investigate variations in time use between occupations. They determine how much time teachers spend working for pay, volunteering, and working on main job duties outside of the workplace. Further, they analyze the nature of differences in time use between weekdays and weekends.

The contributions to this volume resulted from an open Call for Abstracts that elicited 28 responses, out of which we solicited complete articles from authors of 12 submissions. All were then refereed, each by two scholars whose identity was held anonymous from the contributors. Sadly, two contributions could not be accepted, with the 10 articles included here passing muster by the referees and us. The process was aided by the diligent refereeing provided by: Tina Asgeirsdottir, Cynthia Bansak, Marie Connolly, Dhaval Dave, Osea Giuntella, Nabanita Datta Gupta, Tor Eriksson, Shoshana Grossbard, Tim Halliday, Nathan Jones, Loukas Karabarbounis, Daiji Kawaguchi, Costas Meghir, Richard Murphy, Michal Myck, Monika Oczkowska, Nuria Rodriguez Planas, Jennifer Roff, Anna Sanz de Galdeano, Frank Schilbach, Elena Stancanelli, Jay Stewart, Chao Wei, and Riley Wilson. This volume would not have been possible without their thorough and expeditious help.

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