PREFACE

Big changes have been going on in labor markets over the last century. First, for most countries fertility rates declined. Second, women's labor force participation has risen, but men's has not. Third, college attendance increased, again more so for women than men. Finally, not well spelled out, transportation has become cheaper, and as a result, business travel increased. This volume contains eight articles pertaining to the causes and consequences of changing labor markets. Of the eight articles, the first two deal with changing demographics; the next four with new or changing government programs and policies; the final two articles deal with education and knowledge acquisition.

In the United States, women's labor force participation increased dramatically from 17% in 1890 to 58% in 2012. College graduation rates increased six-fold from 5% in 1940 (for white males) to over 30% in 2008. Births per thousand population declined from 30.1 in 1910 to 13.8 in 2009. At the same time, men's labor force participation fell from 83% in 1890 to 70% in 2012. The gender wage gap narrowed from 41% in 1960 to about 23% today. Are these trends related, and is there a unified model to explain them? In the first article, Matthias Cinyabuguma, William Lord, and Christelle Viauroux devise a model that synthesizes various strands of the burgeoning household labor supply, fertility, human capital, and macroeconomic growth literature consistent with these trends. They then calibrate the model based on historical data. They find that changes in the net cost of children, concomitant with rising relative women's to men's wages, explains the decline in fertility and the rise in schooling.

When one retires constitutes another change. With more women working for pay, a new increasingly observed pattern is spouses often retire together during the same year, this despite the younger age of most wives. Such a pattern implies at least some husband—wife coordination, for example, motivated by the leisure time of both spouses being complements in the maximization of utility. As a result, modeling individual retirement as an individual decision might be inadequate, given that a family model appears more applicable. Early family models made a number of simplifications, in particular, that retirement decisions constitute a binary choice,

xii PREFACE

namely to retire, or not. In the second article, Alan L. Gustman and Thomas L. Steinmeier relax this and a number of other restrictions. As a result, they obtain richer more general results, including spikes in retirement at 62 and 65 along with the spike in couples' retirement in the same year. In addition, given the robustness of their model, they are able to address a number of other phenomena unexplained by conventional models. One example constitutes differences in wealth accumulation by families with similar earnings opportunities.

The role of government in the US economy also changed dramatically. Federal spending was about 3% of GNP in 1900 but rose to slightly less than 20% in 2010. Combined federal, state, and local US government spending was about 8% of GNP in 1900 and about 37% in 2010. The same increase is true for Sweden and many other countries. Concomitant with these increases were a host of government programs. Early programs were designed to educate the population, to promote agriculture, to protect the poor, and to safeguard workers. Some government programs work like expected, others have unintended consequences. In either case, government programs need to be scientifically evaluated to assess their worth. The next four articles deal with assessing aspects of government programs.

The Job Corps is the largest training program for disadvantaged youth 16–24 years old in the Unites States. It provides job placement, residential services, social skills, vocational instruction, and the opportunity to earn a GED or high school diploma. A number of studies already found a positive impact of the Job Corps in raising earnings and increasing the probability of employment. However, no study to date has broken down the impact, either to which particular subsamples of the disadvantaged gain more, or to examine which aspects of the Job Corps's instruction and socialization techniques provide the most benefits. In the next article, Maria Bampasidou, Carlos A. Flores, Alfonso Flores-Lagunes, and Daniel J. Parisian utilize a new statistical technique to obtain surprising, yet important, results bounding the effects of particular Job Corps interventions.

Often government programs have secondary effects. Economic agents, such as the firm, respond to legislation, and these responses also have consequences. For example, many firms across Europe now require long periods of temporary employment. This trend is partly in response to redundancy legislation, which forces firms to show cause to terminate an employee. In Europe, from 1990 to 2011, temporary employment increased from 11% to 15%. One country exhibiting a particularly quick rise in temporary employment is Italy. In 1990 a mere 5% of Italy's workers were temporary; by 2011 this figure was 13% - a 150% gain. One question is

Preface xiii

the effect on workers of having to take temporary employment. In the next article, Vincenzo Carrieri, Cinzia Di Novi, Rowena Jacobs, and Silvana Robone examine this question. They concentrate on psychological health and happiness mostly for the young and focus on gender differences. Using a propensity score matching estimator with data from the Italian "Health Conditions and Use Health Service" they find an interesting asymmetry between men and women. Temporary contracts damage psychological well-being of young men and individuals without family economic support, but not the mental health of women. This result has implications regarding women's labor force participation and occupational choice as well as for government policies regarding temporary employment and welfare support for young employees.

For developing countries, providing property rights, particularly titles to land, is often viewed as an important requisite to instigate economic development, growth, and poverty reduction. One purported mechanism through which property rights work is to provide credit access because property can be used as collateral, but the evidence is mixed. Another mechanism recently gaining more attention is through the labor market. The privilege of not having to guard one's living quarters enables adult household members to shift away from work at home towards supplying more time to the labor market. Interestingly, recent evidence at least for Peru indicates more adult labor supply leads to less child labor, which can result in more children in school, more human capital accumulation, and higher long-term growth. But the evidence on this process is still relatively scant. In the next article, Mauricio Moura and Rodrigo Bueno utilize a unique data set for two Brazilian cities comparing similar neighboring communities in metropolitan San Paulo, first in March 2007, and then in August 2008, before and after inhabitants in one of the cities received land titles. The other city did not receive land titles until 2012. Using a difference-in-difference estimation technique, Moura and Bueno are able to find the effect of property titling, particularly on child labor.

Changes in government policies can have other effects, as well. In the early 1990s many believed the United States was in the throws of a welfare crisis. An increasingly large number of women joined and remained on the welfare rolls. Further, the likelihood of exiting seemed to diminish with time on AFDC. By the mid-1990s, Bill Clinton, working with Congress, introduced welfare reform (the Personal Responsibility and Work Opportunity Reconciliation Act passed in 1996) designed to force welfare recipients to get off welfare rolls and get back to work. Welfare beneficiaries dropped dramatically, in part because of this reform, and in part

xiv PREFACE

because of improved economic conditions. One concern was the impact on children. If mothers were enticed back to work, what would happen to mothers' time spent with their kids? Clearly changes in time devoted to childcare could influence child well-being. Using simple difference-in-difference techniques along with ATUS data, past studies claimed time spent with children surprisingly increased. In the next article Marie Connolly employs propensity score techniques along with five new time-use studies and is able to question the strength of these past results. As in past studies, she finds time spent at work increased, but time spent with children did not.

As academics, we all recognize knowledge is important. Given the large body of research on education, we are aware how individuals acquire knowledge through formal schooling and on-the-job post school training, but there are still a number of unanswered questions about the acquisition of knowledge. The next two articles deal with such issues.

A number of studies point to widely varying rates of return to education. In part, this variation stems from differing student abilities, fields of study, and economic conditions at graduation, but some of this heterogeneity in school outcome arises for other reasons. One, in particular, is school quality. Using 2009 earnings data for a set of 7000 United Kingdom students who graduated in 2003, Arnaud Chevalier employs a generalized propensity score selection-on-observables technique to isolate the effect of school quality. He finds, on average, a one standard deviation increase in school quality is associated with one to three percent higher earnings. This premium is nonlinear with graduates from the most prestigious institutions benefiting 5% more than graduates from third quality quartile institutions.

Less well known is how firms, rather than individuals, acquire knowledge. Surely, businesses can purchase technology outright, surely they can invest in R&D, but certainly there must be other methods of knowledge propagation. In the final article, Massimiliano Tani examines an aspect of corporate knowledge propagation, not yet analyzed in the literature. As such, it is path breaking. He seeks to make inroads on how business travel increases a firm's knowledge base. He does so via a unique survey of business travelers taken at airports. From this data he estimates a two-equation empirical model to establish that business travel enhances corporate knowledge. He then determines the type business travel that enhances knowledge the most.

As with past volumes, we aim to focus on important issues and to maintain the highest levels of scholarship. We encourage readers who have prepared manuscripts that meet these stringent standards to submit them to

Preface xv

Research in Labor Economics (RLE) via the IZA website (http://rle.iza.org) for possible inclusion in future volumes. For insightful editorial advice, we thank Aslan Akay, Thomas Andrén, Christian Brinch, Lorenzo Cappellari, Stéphane Carcillo, Julia Darby, Nele de Cuyper, Marloes de Graaf-Zijl, Ross Finnie, Patrick Emerson, Björn Gustafsson, Jörgen Hansen, Stephen Jenkins, Katarina Katz, Marike Knoef, Sebastian Königs, Deborah Levinson, Stephan Lindner, Peter R. Mueser, Pimrak Pakdeethai, Andreas Peichl, Rosario Sánchez-Pérez, Jessamyn Schaller, John Robst, Arne Uhlendorff, Robert Valletta, Ulrika Vikman, April Wu, Christoph Wunder, and Zhong Zhao.

Solomon W. Polachek Konstantinos Tatsiramos Editors