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## The Big Trade-Off in the World of Labor

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## **ABSTRACT**

### **The Big Trade-Off in the World of Labor**

The world is changing rapidly. This paper describes key shifts and it discusses their likely impacts on employment-related aspects. Labor market pressures are felt around the globe, and robots and automation increasingly become reality. However, there will be no “end of work”. Rather, it is that work will take on different forms. Important innovations are required nonetheless to carefully and smartly balance the positives and negatives of the changing workforce and workplace. But societies have already shown their ability to cope with great changes in the past.

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Keywords: robots, automation, productivity, technological change, demographic change, informality, flexibility

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## **Introduction**

Many people have long dreamed of becoming less chained to their workplace. Their vision is to become freer in managing their various tasks throughout the day. They especially want to be able to better blend work and leisure. Others dream of no longer having to do monotonous, highly repetitive tasks.

That world is getting ever closer to becoming reality. Even so, instead of feeling freed from past shackles, there is great nervousness all around. The questions anxiously raised now are these: Will we run out of work? More specifically, will there be a job for me in the future?

## **A global perspective**

Remarkably, these worries actually unite much of the world, developed and developing. After all, this is a time when the focus even in China's manufacturing sector is on installing massive amounts of industrial robots (Zimmermann, 2012). Part of the reason is that the size of China's labor force – long the source of existential worries in the Western world about assembly jobs being shipped to China – has peaked (Meng, 2012; Constant et al., 2013). If anyone needed a wake-up call about how much the world as we know it is changing, China betting its future on robots is certainly about the starkest signal imaginable.

Labor market pressures are also felt elsewhere. In India, soon to be the world's most populous nation, over 10 million new jobs are needed each year – just to find employment for new labor market entrants (James, 2011). And all around the globe, university graduates – whether in “rich” countries or developing ones – find that their academic degree alone is no guarantee for getting a job.

Meanwhile, robots don't threaten just assembly line jobs in the manufacturing sector. So-called service robots and computerization are bound to take a toll on a range of occupations – from airline pilots and truck drivers to surgeons, and even cooks (Frey and Osborne, 2013).

Also the military, long a source of steady employment for young men across all skills levels, from frontline ground troops to fighter pilots, is changing. It has begun to rely much more on robots, from unmanned fighter vehicles and aircraft to cyber-defenses and bomb defusing rovers (The Economist, 2012).

## **Robots and jobs**

At present, there is much techno-hype and much techno-phobia when it comes to robots and automation. And many practicalities on either side of that divide that we still need to work out. For example, there are sweeping visions of a world of autonomous, driverless cars (The Guardian, 2014).

If you have ever been stuck in traffic for hours or travelled long distances, that sounds like a great idea. Until you read reports that, freed from the steering wheel and a strict forward orientation inside the car, drivers and passengers may experience motion sickness (The Washington Post, 2015). Or until you hear about the vexingly complex implications for the insurance industry (The Wall Street Journal, 2015a).

True as well that services like Uber usher in a world of independent operator entrepreneurs (Hall and Krueger, 2015). I have seen quite a few graduate students in the U.S. feeling relieved because they can generate income from being Uber drivers on weekends and evenings.

But creating more flexibility and potentially value for customers and drivers alike does not yet result in a world of new wealth. Some of the smartest thinkers in the field – and long-time techno-optimists – now worry that the basic promise of creating “more wealth with less labor” does have a negative impact on employment (The Wall Street Journal, 2015b).

The best evidence we have collected so far points to negative employment effects for low-skilled and also some middle-skilled workers (e.g., Graetz and Michaels, 2015).

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However, Oxford University researchers forecast that, within 20 years, as many as half of all jobs could be impacted (Frey and Osborne, 2013). This includes quite a few job categories that are widely considered to require high skill levels.

To guide policymaking, we will clearly need to track these developments carefully.

### **Employment trends**

Change is always unnerving. And while the precise shape of the future is uncertain, we know about some key shifts. Lifelong employment by one firm and even formal employment contracts will become rarer than they were over the past three quarters of a century (at least in developed countries).

More “informality” in work arrangements – long considered a phenomenon mostly affecting developing countries – is taking hold also in developed countries. It is, in fact, becoming a great leveler globally.

A future marked by less formal work relationships undoes a core feature that many people in rich countries have taken for granted. This trend also runs counter to what many people in developing economies are very much striving for.

The net effect of this global trend is that, on balance, the risks associated with work are transferred more to individuals.

That is no news whatsoever to many societies and the overwhelming part of the world population, especially in the developing world (World Bank, 2013). There are places that rarely ever had any dependable labor protections or social safety nets to begin with.

As far as the developed world is concerned, some societies are better prepared for that shift to reliance on oneself – to a world individual risk-taking – than others. In particular, the social model of the United States

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has – for good or ill – always put more emphasis on the individual when it comes to absorbing financial and economic risks related to one’s existence.

This implies that the mental shift required will be harder on Europeans. They are much more accustomed to society as a whole, rather than the individual, absorbing existential risks.

### **Redefining work and play**

Here then is the key conundrum: To a considerable degree, the “new economy” gives people what they have asked for. There are fewer hierarchies, more flexibility and more goal orientation (Schneider, 2011). The ability to act in a more entrepreneurial fashion is in demand, as is a compensation model based on results, not just on time put in.

But this gain in flexibility comes at a cost. The key issue is to make sure that this brave new world of labor will not lead to a wholesale shift of risk taking away from firms (and capital) to the individual.

The best guess which labor economists can make at this juncture is not that there will be less work (or even “the end of work”; Rifkin, 1995). Rather, it is that work will take on different forms from the ones many people in the developed world have been accustomed to for a century or so.

Important innovations are required, such as finding more portable ways of social insurance that are not tied to longtime employment in one firm. At the same time, safeguards need to be in place to protect individuals’ retirement savings against extreme swings in financial markets.

As this new world of labor emerges, we can observe its inherent dialectics. On the one hand, smart phones help us overcome the formal separation of work and “play.” On the other hand, we now take our work home, quite literally, in our pocket.



## **Labor flexibility**

As a result, the proverbial 9 to 5 world is rapidly disappearing. That can actually be liberating for quite a few people, who need more flexible schedules, including mothers who work. And, over time, it should also lead to a de-clogging of our traffic arteries, as the twice daily madness of “rush hour” becomes less of an issue in the world’s cities.

This shift to more flexible work patterns also creates new challenges. Flexible work can be too unpredictable to reliably schedule other activities, such as hard-to-get medical appointments, or to pick up additional hours working on another job elsewhere.

For still others, this flexibility means, in effect, that the dividing line between work and leisure time is erased. That can generate considerable stress.

Many Americans, accustomed to working long hours in the office or workplace already, have experienced blurry lines of work and leisure for decades. For other countries, this might come as a sudden shock to the system.

## **We have been here before**

The positives and negatives of the changing workforce and workplace will need to be balanced carefully and smartly. We should be confident in tackling that task. After all, the world’s economies have grappled with far larger changes – and the social stresses and disruptions they have brought – in the past.

One need only look back a century and a quarter ago to find extensive public fretting – from literature and philosophy to political speeches – about what the advent of widespread industrialization, mechanization and electrification might mean for society (e.g., Wells, 1890).

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The transformations of past eras – particularly the move of many millions of people from the fields to the cities – were indeed earth shaking. But the result was dramatically improved standards of living and wider prosperity. And society adjusted to a “new normal” and life became better than it had been for the millions living on the brink of famine.

The coming changes will provide opportunities we cannot even imagine. To get there, developing economies will have to continue their transformations, while the economies of Europe and North America will have to adjust to changed realities.

The main news is that this time we, as humanity, will all be in this realignment together, wherever we live.

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