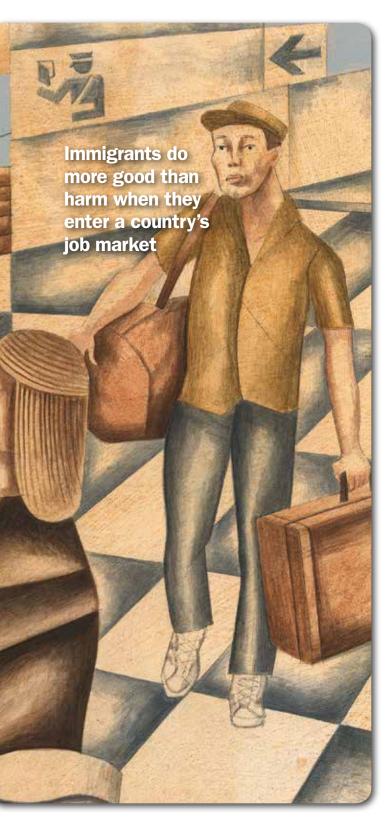
A LONG COMMUTE



Çağlar Özden

OHN, a Wall Street hedge fund manager, and Juan, a Nicaraguan construction worker, have an important trait in common: they are both global arbitrageurs.

John looks for small differences in interest rates across the globe, moves billions of dollars with a keystroke, and presumably contributes to more efficient allocation of capital.

Juan moved from Masaya to California to take advantage of a different but significantly larger price gap—average construction wages 11 times higher than in Nicaragua. He used his family's life savings to pay the smugglers' fees and lives in constant fear of getting caught and deported. Yet he is the envy of the 30 percent of Nicaraguans surveyed by a 2012 Gallup poll who said they would migrate if they had the chance.

John has benefited from the recent swift integration of financial and product markets. And Juan is a success story in his own right. He is one of the few to overcome the geographic, cultural, linguistic, and policy-induced barriers facing most migrants who aspire to move to higher-paying jobs in other countries.

The halting integration of labor markets is the single most important exception to the globalization process, leading to persistent wage differentials. It is the reason why the share of immigrants has been quite stable at about 3 percent of the world population since 1960. There are large wage gaps not only in low-skill sectors like construction and agriculture but also in many higher-skill occupations (ILO, 2012/3). Nurses make seven times more in Australia than in the Philippines; accountants six times more in the United Kingdom than in Sri Lanka; and doctors five times more in the United States than in Egypt—in purchasing power parity terms.

Public perception

The low levels of global migration and large wage gaps between migrant-sending and -receiving countries suggest relative insulation of domestic labor markets and a minimal impact of migration on wages.

But that's not the public perception. Many people in high-income Organisation for Economic Co-operation and Development (OECD) countries consider immigration the most important challenge their countries currently face and blame migrants like Juan for declining wages and high unemployment.

How justified are these sentiments? A key theme of the migration debate is misperception and ignorance. Opinion polls by IPSOS Mori (Duffy and Frere-Smith, 2014) indicate that British people think immigrants make up 24 percent of the population, but the actual number is 13 percent. The gap is even wider in the United States (32 percent versus 13 percent), France (28 percent versus 10 percent), and Spain (24 percent versus 12 percent). Such perception bias affects sentiments about migration.



Patterns of migration

We should look at actual migration patterns before discussing their impact on jobs. Between 1960 and 2010, the number of global migrants increased from 90 million to 215 million—stable at about 3 percent of the world population. Two-thirds of the growth came from migration to western Europe and the United States. The rest represents increased mobility between the countries of the former Soviet Union, the emergence of the oil-rich Persian Gulf countries as key destinations, greater intra-Africa migration, and migration to Australia, Canada, and New Zealand. Several fast-growing middle-income countries, such as Malaysia, South Africa, and Turkey, became regional magnets for both refugees and job seekers.

Higher south-north migration is the defining feature of the past five decades. Newly released data by the OECD and the World Bank reveal interesting patterns of migration to OECD countries, the focus of most debate over links between migration and job markets. The 113 million migrants in OECD countries as of 2010 represent a 38 percent increase from the previous decade. Migrants make up 11 percent of the OECD population, significantly above the global average, which may explain public anxiety in these countries. Intra-OECD migration is about 40 percent of the total, while the rest of the migrants come from Latin America (26 percent), Asia (24 percent), and Africa (10 percent).

The most critical determinant of the labor market impact of immigration is the skill composition of migrants. In OECD countries, migrants are almost equally divided between tertiary- (30 percent), secondary- (36 percent), and primary-educated (34 percent) people. Relative to natives, migrants are overrepresented among the tertiary educated (23 percent among natives), but underrepresented among the secondary-educated workers (41 percent among natives).

These numbers vary tremendously across OECD countries, making it difficult and dangerous to generalize. In Australia, Canada, New Zealand, and Switzerland migrants exceed 25 percent of the total population, while Japan has a barely noticeable 1 percent. Migrants to Australia, Canada, New Zealand, the United Kingdom, and the United States are more educated and account for 70 percent of all tertiary-educated migrants in OECD countries (see chart).

Migration does not take place in a vacuum. It is a response to different push and pull forces. As long as large wage gaps exist, millions of people like Juan will risk their lives to climb heavily guarded walls, swim rivers, and sail oceans to enter high-income countries. Migration and local labor market conditions influence each other, so economic analysis must account for these feedback mechanisms. (See Borjas, 2014, for an excellent review of the academic literature.)

Impact on jobs

Does migration create or destroy jobs? This is generally asked about jobs *for* native workers, not the overall level of employment in a country. Over 60 percent of voters in the United Kingdom and the United States, 50 percent in Spain and Italy, and 40 percent in France and Germany think immigrants take jobs away from natives. No wonder politicians became

more anti-immigration over the past decade as the financial crisis slammed labor markets in OECD countries.

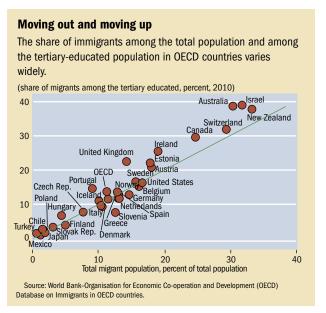
Politics and perceptions aside, there is fierce academic debate on the issue. But the numbers show relatively small wage and employment effects. For example, the widely cited Ottaviano and Peri (2008) study found that immigration caused an average 0.6 percent wage *increase* for U.S. natives during 1990–2006. Borjas and Katz (2007), however, found the effect to be around zero. Either way, the wage impact of immigration is clearly minimal and holds for EU countries as well. For example, Docquier, Peri, and Özden (2014) found that the average wage effect of new migrants (who arrived

The wage impact of immigration is clearly minimal.

between 1990 and 2000) was an increase of about 0.3 percent in Germany and France, 0.8 percent in the United Kingdom, and somewhere in between for most other EU countries. Even Oxford economist Paul Collier, one of the most vocal critics of immigration, admits positive yet small effects on the labor markets in western countries, basing his opposition solely on cultural diversity and cohesion arguments.

There is wisdom in such analysis, but there are also shortcomings. First, these are *average* results, and so may obscure heterogeneous effects across society. Some groups, such as older and relatively less educated male workers who cannot compete and have little hope of gaining new skills, suffer significant losses.

Second, many of these workers may simply *exit* the labor force rather than take a wage cut. For them, early retirement, disability, or unemployment benefits may be more attractive options. Such effects will not show up in the numbers if analysis does not account for this type of semivoluntary unemployment and focuses only on the wages of the employed. Third,





these are mostly big picture analyses that ignore sectoral differences. Many occupations are simply taken over by migrants willing to accept lower wages than native workers. So there may be little impact on high school graduates overall, but a huge impact on, say, the subcategory of high-school-educated machine operators.

Most labor economists would agree that migration is not the major culprit for the recent labor market challenges faced by older and less educated workers. Technological innovations, offshoring, financial volatility, rigid labor markets, and demographic change shape labor market outcomes more than migration. Migrants happen to be more visible and easier scapegoats for politicians and the public.

Dynamic effects

While most widely cited studies find minimal *average* impact of migration on labor markets, recent research is casting a wider net. The focus is now on dynamic effects that lead to structural and behavioral changes in labor markets. What matters is how migrants fit into destination labor markets—whether they complement or substitute native workers' skills, the kinds of jobs they take away, and, most important, native workers' responses in terms of job selection, education decisions, and other labor market choices. These have longer-term implications and warrant careful analysis.

The United States provides a useful laboratory for exploring such dynamic effects. Migrants make up 16 percent of the U.S. labor force but they are concentrated in several occupations. For example, they constitute 60 percent of many construction-related occupations and the majority of farm workers and butchers. At the other end of the education spectrum, over one-third of medical, physical, and mathematical scientists; doctors; and economists are also foreign born. These ratios increased gradually over the past decade, indicating that migrants had already specialized in these two ends of the skill spectrum. These are also the occupations in which native worker seem to be in short supply. The United States simply needs more doctors, scientists, and engineers as well as construction and farm workers and housekeepers than natives are willing or able to supply at current wages.

One possible response by natives—especially in low-skill occupations—is to exit the labor force and enjoy the generous unemployment benefits of the welfare state. Or, as Giovanni Peri from University of California at Davis argues in many of his articles, immigrants may push natives toward more complex tasks by taking away their manual-routine jobs (see "Toil and Technology," in this issue of F&D). This job upgrading is critical for productivity and income growth and is more prevalent in countries with more flexible labor laws, such as the United Kingdom and the United States. Such reallocation across occupations may also take place among tertiary-educated workers. When immigrants with advanced degrees migrate, they tend to choose occupations that require more quantitative and analytical skills. When the share of

foreign-born workers rises, native workers with similar graduate degrees choose new occupations with less analytical but more communication and managerial requirements.

These complementarities between migrant and native workers also appear elsewhere. In a rare study from a middle-income migrant-receiving country, Mathis Wagner, from Boston College, and I found that arrival of low-skilled Indonesian and Filipino workers shook up the Malaysian labor market. During 1990-2010, Malaysia's remarkable national education program boosted the share of young people with at least secondary education from 50 percent to 80 percent. The resulting shortage of low-skilled workers was met by migrant workers who were employed in large numbers in construction, on plantations, and in export-oriented low-tech manufacturing. Young high-school-educated Malaysians became their supervisors. We found that the arrival of 10 migrant workers led to almost 7 mediumskill jobs for natives in Malaysia. Absent this migration, these recent high school graduates would not have gotten jobs commensurate with their education. Most important, the large supply of unskilled migrants encouraged young Malaysians to invest in their education to distinguish themselves in the labor market and take better advantage of the skill complementarities.

Such complementarity extends to women's decisions to participate in the labor force. Women shoulder most household responsibilities in many countries, so their decision to enter the labor force involves more complex trade-offs than men's. Many women, especially the highly educated, choose not to work full time or at all. The arrival of low-skilled migrant women willing to provide household services at lower prices can radically alter the labor force decisions of women in destination countries. Patricia Cortes, of Boston University, and her colleagues show that foreign domestic workers increased the employment levels of native young mothers and highly educated women in Hong Kong SAR and in the United States. Given that over half of current university students in many countries are women, including in 32 OECD countries, this job-creation effect can be critically important for long-term economic prosperity.

Another example of complementarity comes from the world of soccer, probably the most integrated global labor market (see "On the Ball," in the March 2014 F&D). When the best 736 players of the world converged in Brazil last summer for the FIFA World Cup, they represented 32 national teams. But almost half of these stars were playing in the English Premier League, Italian Serie A, German Bundesliga, and Spanish La Liga. Only 6 of the 92 African players were playing in their home country.

In research labs, universities, and high-tech companies, skilled workers complement each other. Agglomeration of skills improves productivity and further expands economic activity. Real Madrid, Google, the New York Philharmonic, and Hollywood all benefit from this phenomenon and become global brands with superior products. Such spillovers are one reason we see less opposition to migration among the high-skilled, who clearly see their individual productivity increasing when they work with people like themselves.

Winners and losers

So far we have focused on how immigration creates jobs, especially through complementarities in the labor force between native and migrant workers. The overall effect of immigration tends to be positive, and definitely not as harmful as most public opinion assumes. Immigrants take jobs natives are unable or unwilling to perform. They are the engineering professors and fruit pickers, hedge fund managers and construction workers.

But as with any economic activity, there are losers. There is a Spanish player who was kicked out of Real Madrid when Portuguese superstar Cristiano Ronaldo arrived. Some primary school-educated Malaysian construction workers

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could not compete with Filipino workers and were too old to acquire new skills. Many U.S. nannies lost their jobs to Mexican migrants willing to accept lower wages.

The public perception of the job-killing effects of migration is strong because job losses are visible to all, especially to those directly affected. Job-creating effects are less transparent. The Malaysian supervisor of the Indonesian laborer and the U.S. businesswoman who can stay late at the office because she has a great foreign-born nanny rarely consider that they owe their jobs and paychecks to an immigrant.

Labor markets are complex. Immigration, in most cases, is a response to supply and demand. But migrants affect the labor market in ways that further increase complexity. Since the gains seem to be larger than losses, an economist would simply recommend policies that *compensate* the losers by taxing the gains of the winners.

Immigrants create pockets of important skill complementarities that should be nurtured. This is especially true for the highly skilled—whether academics, engineers, movie stars, athletes, or even business executives. No country should ever limit high-skilled migration through quotas. On the contrary, every PhD should come with a permanent residence card. Instead of a quota, the government can charge "administrative fees," which employers would be more than happy to pay in return for easier processing.

Almost all analyses ignore the largest benefit of migration—lower prices for consumers. Our houses are cleaned more cheaply, we have more doctors, and we pay less for the lettuce picked by migrant workers. We do not observe the impact of migration on our daily purchases, and economists cannot calculate them easily. But these gains are real and larger than any other effect. It is neither legally nor practically possible to impose a special tax on lettuce or a doctor's visit simply because its delivery involved a migrant. But we can tax the employment of migrants. That is in essence what is behind the sophisticated migration-management policies of countries like Singapore and Saudi Arabia. An employment visa includes a fee collected from the employer that is

based on skill level and occupation of the migrant, firm size and sector, and current labor market conditions. The fee is adjusted as conditions change and there is continuous feedback from employers, labor unions, and researchers. This fee system is identical to a tariff paid at the border by the importer of a good. Coupled with severe penalties for tax evasion, this system can reduce informal employment of undocumented migrants and generate revenues.

Substitution between natives and migrants is more visible and harmful. Flexible labor markets like those in Canada, the United Kingdom, and the United States seem better able to handle the negative effects, but people who lose their jobs need help. Here's where the taxes we collected above enter the picture. Compensatory policies come in many forms—unemployment insurance or training subsidies. But the most important policy is to encourage people—especially young workers—to acquire newer, superior, and complementary skills, through education.

Migration policies lag in sophistication and efficiency. Treasuries and central banks are ruled by economists, but "no economists are allowed" in most countries when it comes to migration policy. National security and legal concerns dominate the debate and bureaucracies: migration administration tends to fall under the Ministry of the Interior or National Security. Residency, employment authorization, and citizenship are granted on legal or political principles with no consideration for economic conditions. By introducing minimal economic criteria to their decision processes, the migration regimes of Australia, Canada, and Singapore immediately became very effective. Europe and the United States have much to learn from them.

The best policy will not build taller and longer walls to block immigrants like Juan. The best policy will let Juan (and John) in and find a way to tax part of the economic gain he generates to train the workers he replaces. Easier said than done, but worth the gain!

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References

Borjas, George, 2014, Immigration Economics (Cambridge, Massachusetts: Harvard University Press).

——, and Lawrence Katz, 2007, "The Evolution of the Mexican-Born Workforce in the United States," in Mexican Immigration to the United States, ed. by George J. Borjas (Chicago: University of Chicago Press).

Docquier, Frederic, Giovanni Peri, and Çağlar Özden, 2014, "The Labor Market Impact of Immigration and Emigration in OECD Countries," Economic Journal, Vol. 124, pp. 1106–1145.

Duffy, Bobby, and Tom Frere-Smith, 2014, Perceptions and Reality: Public Attitudes to Migration, IPSOS Mori Social Research Institute

International Labor Organization (ILO), 2012/2013, Global Wage Report (Geneva).

Ottaviano, Gianmarco, and Giovanni Peri, 2008, "Rethinking the Effect of Immigration on Wages," Journal of the European Economic Association, Vol. 10, pp. 152–97.