

CHAPTER 6: TRENDS IN THE LABOUR MARKET

6.1 - ARE BITCOIN AND OTHER DIGITAL CURRENCIES THE FUTURE OF MONEY?

The rising price of Bitcoin during the pandemic has renewed interest in private digital money. While it is unlikely that Bitcoin will replace existing currencies, the emergence of ‘cryptocurrencies’ and ‘stablecoins’ has prompted exploration of central bank digital currencies.

Bitcoin is a decentralised virtual currency or ‘cryptocurrency’: in the words of its anonymous founder, ‘a purely peer-to-peer version of electronic cash [that allows] online payments to be sent directly from one party to another without going through a financial institution.’ When you own Bitcoin, you own the ‘key’ (or password) to an ‘address’ (or account) that contains the virtual currency. Bitcoin can be sent from one address to another by generating a transaction, which is then recorded on an immutable public ‘block’. These blocks are then chained together, creating a ‘blockchain’ – a publicly available record of all historical Bitcoin transactions.

These ‘blocks’ are generated around once every ten minutes by a user of the network, who receives a reward in the form of newly issued Bitcoin. Which user generates this block, and therefore receives the reward, is determined by ‘proof of work’: using computing power to guess repeatedly a very large random number, with the new Bitcoin awarded to the user who guesses closest to this number. This process is known as ‘mining’ Bitcoin. The size of the reward tends towards zero over time, ensuring an absolute limit of 21 million on the quantity of Bitcoin in existence.

What are the advantages of Bitcoin over existing currencies?

According to its supporters, Bitcoin has two advantages over existing currencies. The first is that its supply is limited, making it impossible for a central authority to issue it in quantities that would devalue it. This means it is much less vulnerable to hyperinflation crises, such as those seen in Weimar Germany, Zimbabwe or Venezuela. But a limited supply can also be a weakness, as it makes it impossible to control deflation – a phenomenon that can also lead to very severe economic consequences (Bordo & Filardo, 2005).

The second claimed advantage of Bitcoin is that all transactions are permanent and immutable. When money is held in a bank account, that bank could theoretically expropriate the money from its user and claim that it never existed. With Bitcoin, this is impossible, because the database on which transactions are recorded

cannot be edited by any central authority. Bitcoin is thus often described as ‘trustless’, because it does not require its holder to trust a financial institution not to expropriate it.

These advantages are very much theoretical. Hyperinflation is not currently a major problem in advanced economies, and while financial institutions have been known to engage in fraudulent practices, they are typically more subtle than simply to seize their customers’ funds and deny that they had ever existed.

In practical terms, the main advantage for users of Bitcoin is its anonymity, which allows it to be used to break the law with a lower risk of prosecution. One 2019 study found that 46% of all Bitcoin transactions involved illegal activity, accounting for around \$76 billion per year (Foley et al, 2019). The most common forms of illegal activity using Bitcoin are the purchase of illegal drugs and money laundering. It is also frequently used to solicit anonymous payments during blackmail and extortion schemes.

Banks dealing with cryptocurrency platforms have historically struggled to comply with ‘know-your-customer’ regulation and several governments – most recently the French Minister of the Economy and Finance – have sought to crack down on the anonymity afforded by Bitcoin.

What are the disadvantages of Bitcoin compared with existing currencies?

In economic theory, money is said to have three primary functions: a medium of exchange; a store of value; and a unit of account. How well does Bitcoin fulfil these roles?

As discussed, Bitcoin is an excellent medium of exchange for transactions that require anonymity. But using it for other transactions is often prohibitively expensive. The average Bitcoin transaction fee during 2020 has ranged from 28 cents on 2 January to \$13.41 on 31 October.

Furthermore, transferring Bitcoin without going through a third party, such as a crypto exchange, can be logistically challenging for those without a background in computer science. Most traders therefore use an exchange or a virtual wallet handled by a third party. But this means that the currency is no longer trustless, and Bitcoin holders have historically lost large sums of money to careless or fraudulent third parties. The most famous such episode was the theft of \$460 million worth of Bitcoin held in the Mt. Gox Bitcoin exchange in 2013.

The usefulness of Bitcoin as a store of value is limited by its volatility. In the year to 9 December 2020, the US dollar value of Bitcoin – and therefore the quantity of goods that can be bought with Bitcoin – changed by an average of 2.22% per day. The price of Bitcoin has risen considerably in that time and advocates often argue that the cryptocurrency is a good store of value because its price will continue to rise over time.

The future price is inherently unpredictable, but even if optimists are correct that its price will rise, this is only an argument that Bitcoin is a good speculative investment – not that it is a useful form of money (Baur et al, 2018). Countries typically aim to have a stable currency rather than an appreciating but highly volatile currency, because the former is much more conducive to a healthy economy. This volatility also limits the effectiveness of Bitcoin as a unit of account: denoting the value of an asset in Bitcoin makes little sense when the real value of Bitcoin changes by an average of 2.22% per day.

See graphical representation of bitcoin prices at [coindesk.com \[New Tab\]](https://www.coindesk.com/price/bitcoin) (<https://www.coindesk.com/price/bitcoin>).

These problems are significant, but may be surmountable in the long term. Perhaps a much more profound barrier to the widespread adoption of Bitcoin is the scalability of the blockchain. Each block is currently equipped to handle 1MB of data, meaning that it can only process between 3.3 and 7 transactions per second (Croman et al, 2016). During a period of intense speculative trading in 2017, the blockchain was overwhelmed by the quantity of requested transactions, causing the average Bitcoin transaction cost to rise to over \$55.

This limit is several orders of magnitude too low for Bitcoin to function as a country's main currency. For comparison, Visa alone handles around 1,736 transactions per second, and the company claims that its network can handle over 24,000 transactions per second. Despite several proposals to alleviate this scalability problem, it is not clear that a solution exists, or that any solution could gain the confidence of enough Bitcoin stakeholders to be implemented successfully.

These problems with Bitcoin resulted in several attempts to create new digital currencies that solve these volatility and scalability problems – some of which have come to be known as 'stablecoins'.

What are stablecoins?

A stablecoin is a cryptocurrency that has its market value pegged to another asset or basket of assets. If traditional cryptocurrencies could be said to have a floating exchange rate, in that their price is allowed to fluctuate, stablecoins have a fixed exchange rate, in that their price is held constant by the guarantee of a central authority.

The most widely used stablecoin is Tether, which is purportedly pegged to the US dollar at a 1:1 ratio by the Tether Corporation. While the corporation's original 'white paper' stated that Tethers would be fully backed by US dollars, this is no longer the case. But Tether still trades at very close to \$1 on secondary markets.

Why do people use Tether rather than the US dollar? Buying or selling cryptocurrency with traditional money, especially in large quantities, can incur considerable compliance costs. By holding Tethers rather than

US dollars, frequent crypto traders do not have to incur these costs as often. Major financial institutions have often been reluctant to deal with the Tether Corporation because of the potential for Tether to facilitate money laundering, and the corporation is currently under investigation by the state of New York.

Another well-known stablecoin is Facebook's Libra, which has recently been rebranded as Diem. This is a proposal for a virtual currency, run by a conglomerate of firms led by Facebook, which would be pegged to a basket of major currencies. As of December 2020, this stablecoin has not yet been launched, and the response from regulators has been so hostile that it may never be launched. Steven Mnuchin, US Secretary of the Treasury, responded to the initial white paper with the comment 'I hate everything about this [New Tab] (<https://fortune.com/longform/facebook-libra-stablecoin-digital-currency-crypto/>)', and Libra was later criticized in a tweet by President Trump.

Partly in response to the perceived threat posed by private currencies, central banks around the world have begun to research ways in which these technologies could be used to create state-controlled digital currencies.

What are central bank digital currencies?

A central bank digital currency (or CBDC) is a form of electronic money issued by a central bank. Existing national currencies can be traded electronically, so what is the benefit of a CBDC? This varies from one proposal to the next: it might be to allow the public to access central bank lending or to facilitate a move to a smoother payments system. A more sinister possibility is that a CBDC could allow an authoritarian government to record all transactions on a blockchain for the purposes of law enforcement.

To date, only a small number of CBDC schemes have been attempted. Finland's 'Avant' digital currency was rendered obsolete by improvements to the debit card system in the early 2000s. Uruguay has issued 'e-Pesos [New Tab]' (<https://www.suerf.org/studies/7025/do-we-need-central-bank-digital-currency-economics-technology-and-institutions>) in a successful trial of the concept of a CBDC, and is currently considering whether to continue the project on a larger scale. The largest project in development is the People's Bank of China's 'digital cash/electronic payments' project, which is intended partly to replace physical cash and has been piloted in several regions.

While a successful CBDC would lead to economic gains from a more efficient payments system, a botched implementation could pose risks to financial stability (Kumhof & Noone, 2018). For this reason, central banks globally are proceeding with caution. As of January 2019, only a small number of central banks in countries with atypical monetary circumstances had plans to implement a CBDC in the short to medium term (Barontini & Holden, 2019).

What else do we need to know?

A common mistake in media coverage of Bitcoin is to assume that a change in its price is indicative of a change in the long-term probability of its adoption. But Bitcoin market movements are rarely related to economic fundamentals, for two reasons:

- First, prices are highly sensitive to the issuance of additional unbacked Tethers (Griffin & Shams, 2020).
- Second, the ownership of Bitcoin is highly concentrated: by one estimate, 2% of accounts control 95% of Bitcoin. As a result, many significant price changes are simply the result of large trades by a single investor (Shen et al, 2020).

Attribution

Except where otherwise noted, this chapter is adapted from “Are Bitcoin and other digital currencies the future of money? (<https://www.economicsobservatory.com/are-bitcoin-and-other-digital-currencies-future-money/>)” by William Quinn, licensed under CC BY-SA 4.0. / Adaptations include removal of coindesk graph.

Original Source References

- Barontini, C. & Holden, H. (08 January 2019). Proceeding with caution: a survey on central bank digital currency. *BIS Working Papers*, 101. <https://www.bis.org/publ/bppdf/bispap101.pdf>
- Baur, D.G., Hong, K. & Lee A.D. (2018). Bitcoin: Medium of exchange or speculative assets? *Journal of International Financial Markets, Institutions and Money*, 54, 177-189. <https://doi.org/10.1016/j.intfin.2017.12.004>
- Bordo, M., & Filardo, A. (2005). *Deflation in a historical perspective* (BIS Working Paper No. 186). Bank for International Settlements. <https://www.bis.org/publ/work186.pdf>
- Croman, K., Decker, C., Eyal, I., Gencer, A. E., Juels, A., Kosba, A., Miller, A., Saxena, P., Shi, E., Sirer, E.G., Song, D., & Wattenhofer, W. (2016). On scaling decentralized blockchains. In Clark, J., Meiklejohn, S., Ryan, P. Y.A., Wallach, D., Brenner, M., Rohloff, k. (Eds.), *Financial cryptography and data security: FC 2016 Lecture notes in computer science: Vol. 9604* (pp. 106- 125). Springer. https://doi.org/10.1007/978-3-662-53357-4_8
- Foley, S., Karlsen, J. R., & Putniņš, T.J. (2019). Sex, drugs, and bitcoin: How much Illegal Activity Is Financed through Cryptocurrencies? *The Review of Financial Studies*, 32(5), 1798-1853. <https://doi.org/10.1093/rfs/hhz015>

- Griffin, J.M. (2020). Is bitcoin really untethered? *The Journal of Finance*, 75(4), 1913-1964. <https://doi.org/10.1111/jofi.12903>
- Kumhof, M. & Noone, C. (2018). *Central bank digital currencies: design principles and balance sheet implications*. (Staff Working Papers No. 725). Bank of England. <https://www.bankofengland.co.uk/-/media/boe/files/working-paper/2018/central-bank-digital-currencies-design-principles-and-balance-sheet-implications>
- Shen, D. , Urquhart, A., & Wang, P. (2020). Forecasting the volatility of bitcoin: the importance of jumps and structural breaks. *European Financial Management*, 26(5), 1294-1323. <https://doi.org/10.1111/eufm.12254>

6.2 - LABOUR MARKETS

Bring It Home

Baby Boomers Come of Age

The Census Bureau reports that as of 2013, 20% of the U.S. population was over 60 years old, which means that almost 63 million people are reaching an age when they will need increased medical care.

The baby boomer population, the group born between 1946 and 1964, is comprised of approximately 74 million people who have just reached retirement age. As this population grows older, they will be faced with common healthcare issues such as heart conditions, arthritis, and Alzheimer's that may require hospitalization, long-term, or at-home nursing care. Aging baby boomers and advances in life-saving and life-extending technologies will increase the demand for healthcare and nursing.

Additionally, the Affordable Care Act, which expands access to healthcare for millions of Americans, has further increase the demand, although with the election of Donald J. Trump, this increase may not be sustained.

According to the Bureau of Labor Statistics, registered nursing jobs are expected to increase by 16% between 2014 and 2024. The median annual wage of \$67,490 (in 2015) is also expected to increase. The BLS forecasts that 439,000 new nurses will be in demand by 2022.

These data tell us, as economists, that the market for healthcare professionals, and nurses in particular, will face several challenges. Our study of supply and demand will help us to analyze what might happen in the labour market for nursing and other healthcare professionals, as we will discuss in the second half of this case at the end of the chapter.

The theories of supply and demand do not apply just to markets for goods. They apply to any market, even markets for things we may not think of as goods and services like labour and financial services. Labour markets are markets for employees or jobs. Financial services markets are markets for saving or borrowing.

When we think about demand and supply curves in goods and services markets, it is easy to picture the demanders and suppliers: businesses produce the products and households buy them. Who are the demanders and suppliers in labour and financial service markets? In labour markets job seekers (individuals) are the suppliers of labour, while firms and other employers who hire labour are the

demanders for labour. In financial markets, any individual or firm who saves contributes to the supply of money, and any who borrows (person, firm, or government) contributes to the demand for money.

As a college student, you most likely participate in both labour and financial markets. Employment is a fact of life for most college students: According to the National Center for Educational Statistics, in 2013 40% of full-time college students and 76% of part-time college students were employed. Most college students are also heavily involved in financial markets, primarily as borrowers. Among full-time students, about half take out a loan to help finance their education each year, and those loans average about \$6,000 per year. Many students also borrow for other expenses, like purchasing a car. As this chapter will illustrate, we can analyze labour markets and financial markets with the same tools we use to analyze demand and supply in the goods markets.

Attribution

Except where otherwise noted, this chapter is adapted from “Introduction to Labor and Financial Markets (<https://openstax.org/books/principles-microeconomics-2e/pages/4-introduction-to-labor-and-financial-markets>)” in *Principles of Microeconomics 2e* (<https://openstax.org/books/principles-microeconomics-2e/pages/1-introduction>) (Open Stax) by Steven A. Greenlaw & David Shapiro licensed under CC BY 4.0.

Access for free at <https://openstax.org/books/principles-microeconomics-2e/pages/1-introduction>

Original Source Chapter References

American Community Survey. 2012. “School Enrollment and Work Status: 2011.” Accessed April 13, 2015. <http://www.census.gov/prod/2013pubs/acsbr11-14.pdf>.

National Center for Educational Statistics. “Digest of Education Statistics.” (2008 and 2010). Accessed December 11, 2013. nces.ed.gov.

CreditCards.com. 2013. <http://www.creditcards.com/credit-card-news/credit-card-industry-facts-personal-debt-statistics-1276.php>.

6.3 - THE CHANGING WORKFORCE

Learning Objectives

- Understand some of the key social factors that influence the evolution of the workforce.
- Understand the distinct, common and integrated Canadian Federal and Provincial legal systems with respect to employment legislation.
- Understand the distinction between direct and indirect discrimination.
- Understand the concepts of job relatedness, Bona Fide Occupational requirements, duty to accommodate and undue hardship.
- Understand the steps needed to ensure employment equity in organizations.

The focus of human resource management is people. People bring with them feelings, emotions, perceptions, values, prejudices and are often unpredictable. Data, on the other hand is generally neat, quantifiable and often predictable. Thus, HR processes have to adapt and be particularly sensitive to how people and society change and evolve over time. Workers, like the society in which they live, are subject to constant change. Some of these changes have been slow and steady while others are very sudden (COVID-19). We discuss these changes, and their implications for HRM in this section.

Social Factors: The Constantly Evolving Workers

Diversity

The makeup of the Canadian workforce has changed dramatically over the past 50 years. In the 1950s, more than 70 percent of the workforce was composed of males.^[19] Today's workforce reflects the broad range of differences in the population—differences in gender, race, ethnicity, age, physical ability, religion, education, and lifestyle. Most companies strive for diverse workforces and HR managers work hard to recruit, hire, develop, and retain employees from different backgrounds. As we will see later in this chapter, these efforts are

motivated in part by legal concerns: mismanagement in recruiting, hiring, advancement, disciplining and firing has legal consequences under applicable law. However, reasons for building a diverse workforce go well beyond mere compliance with legal standards. It even goes beyond commitment to ethical standards. Diversity is simply good business! In a competitive market, an organization cannot afford to limit their talent pools arbitrarily. Imagine a hockey team that would only hire players who love Death Metal music (let's assume that 20% of the population falls into that category). This means that this team would exclude 80% of all available players from the draft. The likelihood of that team ever winning the Stanley Cup with such a restricted pool of players is very, very slim! The point is that organizations cannot afford to exclude workers based on frivolous characteristics. When they do exclude workers, as it is their prerogative, it should be based on characteristics that are proven to be related to performance. In the case of a hockey team: skating, puck handling, vision, etc.

A study by Cedric Herring called *Does Diversity Pay?* (Herring, 2006) reveals that diversity does in fact pay. The study found that the businesses with greater racial diversity reported higher sales revenues, more customers, larger market shares, and greater relative profits than those with more homogeneous workforces. Other research on the topic by Scott Page, the author of *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies* (Page, 2007) ended up with similar results. Page found that people from varied backgrounds are more effective at working together than those who are from similar backgrounds, because they offer different approaches and perspectives in the development of solutions.

Eric Foss, chairperson and CEO of Pepsi Beverages Company opined, "It's not a fad. It's not an idea of the month. It's central and it's linked very directly to business strategy" (Holstein, 2009). A study by the late Roy Adler of Pepperdine University shows similar results. His 19-year study of 215 *Fortune* 500 companies shows a strong correlation between female executives and high profitability (Adler). Another study, conducted by Project Equality, found that companies that rated low on equal opportunity earned 7.9 percent profit, while those who rated highest with more equal opportunities resulted in 18.3 percent profit (Lauber, 2011). These numbers show that diversity and multiculturalism are certainly not a fad, but a way of doing business that better serves customers and results in higher profits.



Figure 6.3a Class of 58
<https://concordia.accesstomemory.org/class-of-58> [P0050-02-01] by
 Concordia University Records
 Management and Archives

Link It Up

Read [Canadian workforce facing demographic shift, StatsCan predicts](https://www.investmentexecutive.com/news/research-and-markets/canadian-workforce-facing-demographic-shift-statscan-predicts/) [New Tab] (<https://www.investmentexecutive.com/news/research-and-markets/canadian-workforce-facing-demographic-shift-statscan-predicts/>) for information about shifting workforce demographics.

Employees' Expectations

Another trend that HRM needs to account for is how employees' values and attitudes are evolving. It is important for HRM to meet employees' expectations when it comes to work. We outline three broad areas for which expectations have evolved drastically over the past 20 years.

Rights and ethics

Employees are more demanding than ever when it comes to their rights and the behaviour of their employers. Regarding their rights, employees are more informed than ever. With the rise of social media, a new phenomenon is also taking place in organizations: employee militancy. People are willing to commit their time and energy to an organization, but if that organization fails to meet their expectations in terms of values or ethics, they will no longer remain silent. Employee militancy has moved from advocating for workers' rights (e.g., better pay, gender equity) to pushing for a better society. A good example of this is how [Facebook employees staged a virtual protest](https://www.wired.com/story/facebook-employees-rare-step-call-out-mark-zuckerberg/) [New Tab] (<https://www.wired.com/story/facebook-employees-rare-step-call-out-mark-zuckerberg/>), pressing Facebook executives to take a tougher stand on Donald Trump's inflammatory posts. Some of the issues that have become very important for employees are listed below, with a relevant example demonstrating it:

Sustainability: At Amazon, employees organized an 'online walk out' to protest the company's stance on climate change. Since late last year, a group of workers within Amazon have been organizing to push the company to radically reduce its carbon emissions. On 2020-09-20, Amazon workers around the world will walk out of their offices to join the Global Climate Strike. Read [Hey, Jeff Bezos: I work for Amazon – and I'm protesting against your firm's climate inaction](https://www.theguardian.com/technology/2019/sep/10/jeff-bezos-amazon-climate-strike-aecj) [New Tab] (<https://www.theguardian.com/technology/2019/sep/10/jeff-bezos-amazon-climate-strike-aecj>) to learn more.

Privacy: [Humanyze](https://www.humanyze.com/organizational-health-score/) [New Tab] (<https://www.humanyze.com/organizational-health-score/>), a Boston-based start-up makes wearable badges equipped with sensors, an accelerometer, microphones and Bluetooth. The devices — just slightly thicker than a standard corporate ID badge — can gather audio data such as tone of

voice and volume, an accelerometer to determine whether an employee is sitting or standing, and Bluetooth and infrared sensors to track where employees are and whether they are having face-to-face interactions (see video below). The privacy of workers is increasingly threatened by such technological advances and many employees are taking their opposition to this technology to court.

Watch It!

Watch High-Tech ID Badge Tracks Workers' Entire Day On The Job
(https://www.youtube.com/watch?v=nzch8_u77T4)(2 mins)



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/laboureconomics/?p=607#oembed-1>

Video Source: CBS Boston. (2017, May 17). *High-tech ID badge tracks workers' entire day on the job* [Video]. YouTube. https://www.youtube.com/watch?v=nzch8_u77T4

Work life balance

Work-life balance is an important aspect of a healthy work environment, and more and more, employees are insisting on it. Maintaining work-life balance helps reduce stress and helps prevent burnouts in the workplace. To satisfy the assumed desires of employees, many employers overcompensate by adding game rooms and beanbags to spice up the work environment. An entire industry has popped up surrounding making workspaces more “millennial-friendly.” WeWork [New Tab] (<https://www.wework.com/>), one of the most well-known of this new breed of property managers, is known for designing such work environments. However, these environments tend to blur the boundaries between work and life, and many employees report that they do not care for these types of perks. One of the answers for employers is to create a flexible work environment, one that satisfies the work-life balance needs of most employees.

Attribution

Except where otherwise noted, this chapter is adapted from “The Changing Workforce (<https://opentextbooks.concordia.ca/hrmcanadian/chapter/3-1-diversity-and-multiculturalism/>)” In *Human*

Resources Management – Canadian Edition (<https://opentextbooks.concordia.ca/hrmcanadian/>), licensed under CC By-NC-SA 4.0.

Original Source Chapter References

Adler, R., “Women in the Executive Suite Correlate to High Profits,” Glass Ceiling Research Center.

Adler, R. D. (2001). Women in the executive suite correlate to high profits. *Harvard Business Review*, 79(3), 30-32. – what I found online this could be the accurate resource as opposed to the above reference.

Forsythe, J. (2005). Leading with Diversity. *New York Times*. Retrieved July 13, 2011, <http://www.nytimes.com/marketing/jobmarket/diversity/hilton.html>. (fixed? but was unable to find original article)

Herring, C., “Does Diversity Pay? Racial Composition of Firms and the Business Case for Diversity” (paper presented at the annual meeting of the American Sociological Association, Montreal, Canada, August 11, 2006), accessed May 5, 2009, http://citation.allacademic.com/meta/p_mla_apa_research_citation/1/0/1/7/9/pages101792/p101792-1.php.

Holstein, W. J., “Diversity is Even More Important in Hard Times,” *New York Times*, February 13, 2009, Retrieved 25, 2011, from <http://www.nytimes.com/2009/02/14/business/14interview.html>.

Lauber, M. (n.d.). Studies Show That Diversity in Workplace Is Profitable. *Project Equality*. Retrieved July 11, 2011, from <http://www.villagelife.org/news/archives/diversity.html>.

Page, S. E.. (2007). *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies*. Princeton University Press.

Plaut, V. C., Kecia M. Thomas, & Matt J. Goren. (2009). Is Multiculturalism or Color Blindness Better for Minorities? *Psychological Science*, 20(4), 444–46.

Media Attributions

- Class of 58 © Sir George Williams University. Association of Alumni of Sir George Williams University is licensed under a CC BY-SA (Attribution ShareAlike) license

6.4 - IMMIGRATION

Learning Objectives

- Discuss the economic implications of immigration

Most Americans would be outraged if a law prevented them from moving to another city or another state. However, when the conversation turns to crossing national borders and are about other people arriving in the United States, laws preventing such movement often seem more reasonable. Some of the tensions over immigration stem from worries over how it might affect a country's culture, including differences in language, and patterns of family, authority, or gender relationships. Economics does not have much to say about such cultural issues. Some of the worries about immigration do, however, have to do with its effects on wages and income levels, and how it affects government taxes and spending. On those topics, economists have insights and research to offer.

Historical Patterns of Immigration

Supporters and opponents of immigration look at the same data and see different patterns. Those who express concern about immigration levels to the United States point to graphics like Figure 1 which shows total inflows of immigrants decade by decade through the twentieth century. Clearly, the level of immigration has been high and rising in recent years, reaching and exceeding the towering levels of the early twentieth century. However, those who are less worried about immigration point out that the high immigration levels of the early twentieth century happened when total population was much lower. Since the U.S. population roughly tripled during the twentieth century, the seemingly high levels in immigration in the 1990s and 2000s look relatively smaller when they are divided by the population.

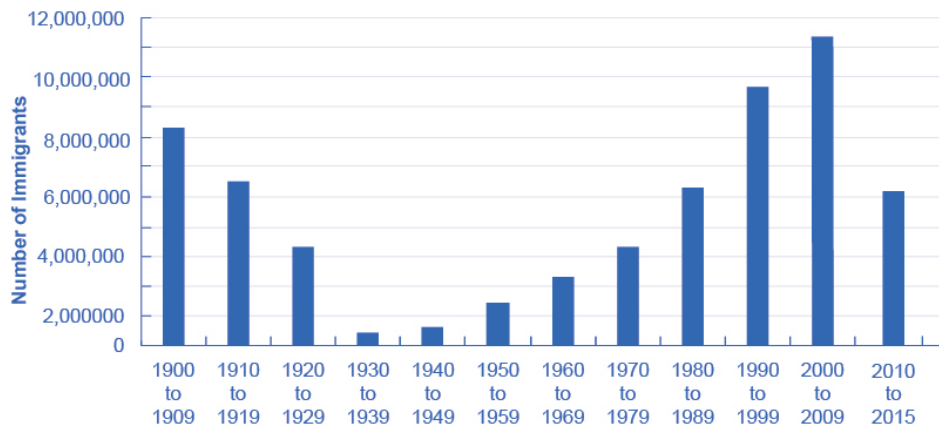


Figure 6.4a
Immigration Since 1900. The number of immigrants in each decade declined between 1900 and the 1940s, rose sharply through 2009 and started to decline from 2010 to the present. (Image Source: U.S. Department of Homeland Security, Yearbook of Immigration Statistics: 2011, Table 1). *Figure* by Steven A. Greenlaw & David Shapiro (OpenStax), licensed under CC BY 4.0.

From where have the immigrants come? Immigrants from Europe were more than 90% of the total in the first decade of the twentieth century, but less than 20% of the total by the end of the century. By the 2000s, about half of U.S. immigration came from the rest of the Americas, especially Mexico, and about a quarter came from various countries in Asia.

Economic Effects of Immigration

A surge of immigration can affect the economy in a number of different ways. In this section, we will consider how immigrants might benefit the rest of the economy, how they might affect wage levels, and how they might affect government spending at the federal and local level.

To understand the economic consequences of immigration, consider the following scenario. Imagine that the immigrants entering the United States matched the existing U.S. population in age range, education, skill levels, family size, and occupations. How would immigration of this type affect the rest of the U.S. economy?

Immigrants themselves would be much better off, because their standard of living would be higher in the United States. Immigrants would contribute to both increased production and increased consumption. Given enough time for adjustment, the range of jobs performed, income earned, taxes paid, and public services needed would not be much affected by this kind of immigration. It would be as if the population simply increased a little.

Now, consider the reality of recent immigration to the United States. Immigrants are not identical to the rest of the U.S. population. About one-third of immigrants over the age of 25 lack a high school diploma. As a result, many of the recent immigrants end up in jobs like restaurant and hotel work, lawn care, and janitorial work. This kind of immigration represents a shift to the right in the supply of unskilled labour for a number of jobs, which will lead to lower wages for these jobs. The middle- and upper-income households that purchase the services of these unskilled workers will benefit from these lower wages. However, low-skilled U.S. workers who must compete with low-skilled immigrants for jobs will tend to suffer from immigration.

The difficult policy questions about immigration are not so much about the overall gains to the rest of the economy, which seem to be real but small in the context of the U.S. economy, as they are about the disruptive effects of immigration in specific labour markets. One disruptive effect, as we noted, is that immigration weighted toward low-skill workers tends to reduce wages for domestic low-skill workers. A study by Michael S. Clune found that for each 10% rise in the number of employed immigrants with no more than a high school diploma in the labour market, high school students reduced their annual number of hours worked by 3%. The effects on wages of low-skill workers are not large—perhaps in the range of decline of about 1%. These effects are likely kept low, in part, because of the legal floor of federal and state minimum wage laws. In addition, immigrants are also thought to contribute to increased demand for local goods and services which can stimulate the local low skilled labour market. It is also possible that employers, in the face of abundant low-skill workers may choose production processes which are more labour intensive than otherwise would have been. These various factors would explain the small negative wage effect that the native low-skill workers observed as a result of immigration.

Another potential disruptive effect is the impact on state and local government budgets. Many of the costs imposed by immigrants are costs that arise in state-run programs, like the cost of public schooling and of welfare benefits. However, many of the taxes that immigrants pay are federal taxes like income taxes and Social Security taxes. Many immigrants do not own property (such as homes and cars), so they do not pay property taxes, which are one of the main sources of state and local tax revenue. However, they do pay sales taxes, which are state and local, and the landlords of property they rent pay property taxes. According to the nonprofit Rand Corporation, the effects of immigration on taxes are generally positive at the federal level, but they are negative at the state and local levels in places where there are many low-skilled immigrants.

Proposals for Immigration Reform

The Congressional Jordan Commission of the 1990s proposed reducing overall levels of immigration and refocusing U.S. immigration policy to give priority to immigrants with higher skill levels. In the labour market, focusing on high-skilled immigrants would help prevent any negative effects on low-skilled workers' wages. For government budgets, higher-skilled workers find jobs more quickly, earn higher wages, and pay more in taxes. Several other immigration-friendly countries, notably Canada and Australia, have immigration systems where those with high levels of education or job skills have a much better chance of obtaining permission to immigrate. For the United States, high tech companies regularly ask for a more lenient immigration policy to admit a greater quantity of highly skilled workers under the H1B visa program.

The Obama Administration proposed the so-called “DREAM Act” legislation, which would have offered a path to citizenship for illegal immigrants brought to the United States before the age of 16. Despite bipartisan support, the legislation failed to pass at the federal level. However, some state legislatures, such as California, have passed their own Dream Acts.

Between its plans for a border wall, increased deportation of undocumented immigrants, and even reductions in the number of highly skilled legal H1B immigrants, the Trump Administration has a much less positive approach to immigration. Most economists, whether conservative or liberal, believe that while immigration harms some domestic workers, the benefits to the nation exceed the costs. However, given the Trump Administration's opposition, any significant immigration reform is likely on hold.

Watch It!

Watch *The Economics of Immigration: Crash Course Economics #33* (<https://www.youtube.com/watch?v=4XQXiCLzyAw>) (11 mins) for a comprehensive overview on the economics of immigration.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://ecampusontario.pressbooks.pub/laboureconomics/?p=624#oembed-1>

Video Source: CrashCourse. (2016, May 18). *The economics of immigration: Crash course econ #33* [Video]. YouTube. <https://www.youtube.com/watch?v=4XQXiCLzyAw>

Try It



An interactive H5P element has been excluded from this version of the text. You can view it online here: <https://ecampusontario.pressbooks.pub/laboureconomics/?p=624#h5p-5>

Try It – Text version

1. Which of the following economic implications of immigration is not correct?
 - a. Typically, when immigration increases, households pay less for projects involving unskilled labor and low-skilled U.S workers end up competing with low-skilled immigrants for these jobs.
 - b. Immigration can benefit the local economy.
 - c. An increase in immigration tends to impact on state and local government budgets by decreasing the use of resources and entitlement programs.

Check your Answer: ¹

Activity source: “Immigration (<https://courses.lumenlearning.com/wm-microeconomics/chapter/immigration/>)” In *Microeconomics* (<https://courses.lumenlearning.com/wm-microeconomics/>) by LumenLearning, licensed under [CC BY 4.0](#). / Converted to H5P and text.

Attribution

Except where otherwise noted, this chapter is adapted from “[Immigration](https://courses.lumenlearning.com/wm-microeconomics/chapter/immigration/) (<https://courses.lumenlearning.com/wm-microeconomics/chapter/immigration/>)” In *Microeconomics* (<https://courses.lumenlearning.com/wm-microeconomics/>) by LumenLearning, licensed under [CC BY 4.0](#). A derivative of “[Immigration](https://openstax.org/books/principles-economics-2e/pages/) (<https://openstax.org/books/principles-economics-2e/pages/>)”

1. 1. c) Correct. A potential disruptive effect to increased immigration is the impact on state and local government budgets. Many of the costs imposed by immigrants are costs that arise in state-run programs, like the cost of public schooling and of welfare benefits.

14-6-immigration)” In *Principles of Economics 2e*. (<https://openstax.org/books/principles-economics-2e/pages/1-introduction>) by Steven A. Greenlaw and David Shapiro (OpenStax), licensed under CC BY 4.0.

Access for free at <https://openstax.org/books/principles-economics-2e/pages/1-introduction>

References

U.S. Department of Homeland Security. (2012, September). Table 1. Persons obtaining legal permanent resident status: fiscal years 1820 to 2011 [2011 Yearbook of Immigration Statistics]. https://www.dhs.gov/sites/default/files/publications/ois_yb_2011.pdf

U.S. Department of Homeland Security. (2012, September). Table 1. Persons obtaining legal permanent resident status: fiscal years 1820 to 2011 [2011 Yearbook of Immigration Statistics]. https://www.dhs.gov/sites/default/files/publications/ois_yb_2011.pdf

Media Attributions

- Figure © Steven A. Greenlaw & David Shapiro (OpenStax) is licensed under a CC BY (Attribution) license

6.5 - READING LIST

1. David Foot/Footwork Consulting Inc. [New Tab] (<http://www.footwork.com/index.asp>)
2. The millennial generation's views on their world of work [New Tab] (<https://www.youtube.com/watch?v=uc8kW2iDA3A>)
3. Retiring baby boomers are going to have a huge impact on the economy [New Tab] (<https://www.weforum.org/agenda/2017/09/retiring-baby-boomers-are-going-to-have-a-huge-impact-on-the-economy>)
4. Artificial Intelligence has changed our world [New Tab] (<https://www.meer.com/en/64215-artificial-intelligence-has-changed-our-world>)
5. Everything you need to know about the Fourth Industrial Revolution [New Tab] (<https://www.cnbc.com/2019/01/16/fourth-industrial-revolution-explained-davos-2019.html>)

Reading List compiled by Norm Smith.