

The Economic Impact of Remote Workers

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The idea of working from home began in the early 70's and was better known as telecommuting. Since then, working from home has been a growing phenomenon with a surging demand during the Covid-19 pandemic in 2020. Now, most workers prefer to work from home and companies are searching for ways to make it happen. Remote work is becoming the future of the labor market, and with this shift in employment methods comes economic costs and benefits. In this paper I will reveal popular remote work statistics, demographics, and the overall economic effects in different markets.

Remote Work Statistics

Before the pandemic, workers holding remote jobs were those earning a wage premium and mothers willing to accept lower wages for more flexible work arrangements. In the aftermath of the Pandemic, the demand for remote positions has increased significantly due to a newfound preference and increased productivity levels in home offices. In addition, technological advancements aid in increased productivity at home, making it more appealing to both employees and employers.

According to an ACS measure from the *Institute of Labor Economics*, 4.1% of workers were remote in 2019 while 19.7% workers were remote in 2020. Furthermore, in 2019, remote workers earned 7.7% more than on-site workers while in 2021 that percentage almost doubled to 14.2%. In 2019, remote workers worked longer hours than those on-site, however, in 2021

remote workers worked fewer minutes than those that worked on-site. The study concluded that remote work increases productivity, but workers do not have enough incentives to work remotely for lower wages. Therefore, workers are requiring higher wage premiums in order to shift to remote operations. (Pabilonia, S. W., & Vernon, V., 2023). Companies are maximizing profits when their marginal revenues are equal to their marginal costs. When workers are increasing productivity, they are increasing marginal revenue product of labor. An increase in marginal revenue product of labor requires an increase in marginal costs in order to maximize profits. Therefore, employees are compensated for their contribution through increased wages.

In addition, Forbes Advisor, Katherine Haan suggests that remote work is the future of the labor industry as an estimated 32.6 million Americans (22% of the labor force) will work remote by 2025 and 16% of companies are already navigating a completely remote system. She also found that remote workers earn an average of \$19,000 more than in-office workers per year. The top industries leading the crusade for remote work include Computer and IT, Marketing, and Accounting and Finance with an Accountant being the most common remote job posting in 2022. (Haan, K., 2024).

Remote Work Demographics

According to *Forbes Advisor*, “workers with more education are more likely to have remote work options” (Haan, K., 2024). A source from McKinsey & Company found that 45% of full-time remote workers have advanced degrees, 40% have a bachelor's degree, 31% have an associate degree, 29% have a high school degree, and 32% have less than a high school degree. Workers with an advanced degree make up almost half of the full-time remote labor force. Regarding wage gap inequalities between sex, 38% of men work remotely full-time while only

30% of women work remotely full-time. These demographics indicate that men who hold advanced degrees will benefit most in the future of remote work. (Haan, K., 2024).

Older workers with established careers are more likely to reap the benefits from remote work relative to younger workers who are just starting a career. Older workers have made connections through networking, likely have a family to take care of, and can be more productive and happier from home. On the other hand, younger workers have little experience and less networking. Many are excited to be in the workplace and connect with other coworkers, therefore, it will benefit these employees to work in an office with face-to-face contact even if it is through a hybrid model. (Kahn, Matthew E., 2022).

The future of the labor market will include more remote workers. With the advancement of technology, companies have the opportunity to grant employees more flexibility and increase work-life-balance while still maximizing profits. These companies will continue to thrive, however, this comes with a cost. Throughout the rest of this paper I will be discussing the economic impact that working remotely has had and will continue to have in the future.

Economic Impact of Remote Work on Different Markets

Working remotely has significantly changed people's daily habits and therefore, their influence on the economy. Granting employees the opportunity to work remotely has significantly impacted the labor market and the housing market, along with imposing positive and negative impacts on firms in both inner cities and suburbs. The following section highlights the impact remote work has within different markets and the resulting costs and benefits.

Labor Market

The labor market has changed over the past few years as remote work has gained popularity. Employees are starting to prefer remote positions since they can work from anywhere and research has shown that it makes them more productive. This increased productivity also benefits firms along with the ability to minimize costs. However, not all companies can easily offer remote work.

Certain industries experience larger costs than others when it comes to remote work. The tech and financial industry, for example, can easily implement remote work options for their employees, while industries such as manufacturing and service require an onsite presence. As remote work becomes more appealing to employees, industries that can easily implement remote work will attract more applicants and have a larger employee pool than industries that cannot offer remote work. Remote workers are more likely to be skilled. Due to a strong preference for remote work, jobs that offer remote positions become more appealing to skilled workers.

Industries that struggle to offer remote positions, such as manufacturing industries, have found it difficult to fill open positions with skilled workers because there is less incentive. The World Economic Forum determined that 2.4 million skilled positions could be left unfilled between 2018 and 2028 due to a gap in skill. (World Economic Forum, 2021). Therefore, companies that can easily implement remote work reap the benefits while companies that rely on in person services are finding it more difficult to hire and retain workers.

For firms that easily implement remote work, it has been beneficial because it allows them to hire from anywhere, reducing wage growth. As prices rose over 8.6 percent over a 12-month period that ended in May of 2022, purchasing power decreased significantly for workers. This has put pressure on employers to increase wages, which increases the costs of production, which causes higher inflation. Monetary policy is required to combat this inflation, increasing

the likeliness of recession. However, companies have turned to compensating their employees with remote opportunities rather than an increase in pay. A recent study from the National Bureau of Economic Research investigated how the shift to remote work has lessened wage-growth pressures. 38% of firms responded yes when asked if “they expanded opportunities to work from home (or other remote locations) as a way to keep employees happy and to moderate wage-growth pressures” (Barrero, J. M., 2022) and 41% of firms are expecting to in the future. The ability to reduce wage growth has positively impacted the economy and helped to curb inflation.

In addition to reducing wage growth rate, remote workers lower overall labor costs for firms. Furthermore, the study mentioned above also asked firms about how the shift to remote work brought other changes to labor costs. They found that along with remote work, firms increased part-time employees, hired independent contractors, increased both domestic outsourcing and offshoring, and hired more disabled workers all of which lower labor costs. With technology and remote work opportunities it makes these changes easier for firms to implement. The study also mentions how employee retention increases because employees value their ability to work from remote locations which benefits firms. (Barrero, J. M., 2022). Another benefit to hiring remote workers is that firms can expand their applicant pool and hire talent from anywhere, creating a more diverse work environment that brings new strategies and ideas.(Vick, A., 2020).

Furthermore, an increased number of women have had the opportunity to join the labor force as remote work offers a more flexible work schedule. This opportunity for female workers has aided in closing the gender wage gap because women are no longer having to step away from their careers to act as caregivers. (Kahn, Matthew E., 2022). As the pandemic brought a potential

threat for recession, women entering the labor force also aided in reducing wage growth and curbing inflation. Although inflation has still been significant, it has not been as bad as it was predicted to be.

Covid-19 Impact on Women in the Labor Market

A study from the *Journal of Economic Perspectives* observed how the Covid-19 Recession impacted the US Labor Market regarding occupation, family, and gender. The Covid-19 Pandemic influenced labor supply and demand for both male and female workers, hitting women the hardest. Women were more likely to experience job loss during the pandemic because they typically hold cyclical, service jobs which were deemed unessential. In addition, married women with children exited the labor force at higher rates than others due to a need for childcare in the home.

The study also looked at the continuing impacts that the Covid-19 Recession will have on the labor market. Albanesi and Kim state that this recent reduction of women's labor supply due to the pandemic might cause an increase in the wage gap between men and women in the future. However, new remote work trends could help to close this gap due to its flexibility. This will allow more women to enter the workforce while remaining in caregiver positions. (Ibanesi, S., & Kim, J., 2021).

Remote work is the future of the labor market and firms are now pressured to to maximize profits while offering their employees remote positions. For most firms, advanced technology has made this an easy transition, however, other firms are finding it difficult to recruit skilled workers. Ultimately, firms will not offer remote work opportunities if it does not benefit them.

Housing Market

When working remotely, workers can live anywhere. In other words, workers are not tied down to a specific location and they do not have to worry about being within commuting distance to the office. This new freedom for workers has heavily impacted the housing market for both urban and suburban areas.

People typically live near their place of work and since cities are a hub for firms, many people choose to live in or around cities. Since remote work has gained popularity people have been moving out of inner cities and into surrounding areas since they no longer have a need to commute. In addition, firms have shut their doors as they found no reason to pay rent when employees are working from home. This migration out of inner cities has caused apartment rents and house prices to increase in the suburbs and decrease in major urban centers. According to a report by Tim Smart, there has been “an approximately 8% decline in central business district office rents, while residential rents increased, especially in outer suburbs of major cities” (Smart, Tim., 2024). The decrease in the demand for office space and apartments in inner cities has caused a decrease in the price, while an increased demand for housing in the suburbs has caused an increase in price.

A study performed by the National Bureau of Economic Research looked at how working from home impacts the housing market in the inner cities and suburbs. They hypothesized that when working from home was an option, people would choose to live in either the cheapest city or the city with the most amenities while still earning high wages. Before the remote work surge, cities were easily able to regulate their wages and maintain a consistent housing market. However, as people have started working remotely and moving away from their offices, many cities have found an unequal balance between population and employment levels.

The study specifically looks at two options that people choose to relocate to: high productivity cities and high amenity cities. High productivity cities will have more firms and more employees. These cities commonly have higher rent along with higher wages because of the increased productivity levels. High amenity cities have more fun to offer their citizens and less firms. These cities commonly have higher rents with lower wages due to the amenities they offer.

When people work from home, however, they are not concerned with a city's productivity level since they are employed remotely. Therefore, when a city only has a productivity advantage over another, their housing demand will decrease, decreasing the price relative to the city with lower productivity levels. This indicates that when employees work remotely, they are more likely to relocate out of high productivity cities. In other words, employment will be greater than the population in the city with higher productivity levels. On the other hand, when a city only has an advantage in amenities over another, their housing demand will increase, increasing the price relative to the city with less amenities. This indicates that when employees work remotely, they are more likely to relocate to cities with higher amenities. Therefore, employment will fall short of the population in cities that have an advantage in amenities. (Brueckner, Jan 2021).

Working from home has shifted the spatial hedonic equilibrium because people can move to lower productivity and higher amenity cities, pay less in expenses, and still maintain their high productivity city wage. The study confirmed that working from home will cause people to move from areas of high productivity to areas of low productivity; however, the migration from low productivity to high productivity areas is not likely. This is because people living in low productivity areas and do not work from home are receiving lower wages, therefore, they can not afford to move to higher productivity areas. People living in the same area with significantly different wages can potentially cause issues in the economy because most cities regulate market

prices based off wages. As working from home becomes more popular and people relocate these wages will become more independent of city characteristics. In other words, firms will no longer associate with or set wages based on a single city. Instead, wage characteristics such as amenities, productivity, and work from home potential of the city's jobs will have less effect on wages. (Brueckner, Jan 2021).

The Impact on Business Location

The increase in employees working from home has caused many firms to shift their operation strategies. Before remote work gained popularity, brick-and-mortar companies located in inner cities had substantial amounts of foot traffic due to employees heading to and from work. Retail establishments and restaurants, for example, were convenient for those working in the area and were accessed often. With the fall in commuters, these brick-and-mortar companies are seeing a decline in revenue forcing them to follow their customers into suburbs. A study performed by JPMorgan Case & Co. highlights that shift stating, "retail establishments have paralleled the movement of residents from large, expensive cities into smaller, Sun Belt cities and from city centers to suburbs" (JPMorgan & Co., January 2023). As populations are declining in cities, firms are struggling to maintain their customer base.

Most brick-and-mortar companies hire low-skilled employees. Since they have relocated and followed consumers to the suburbs these low-skilled employees in cities have lost employment opportunities. Remote work disproportionately affects low-skilled workers because most firms seek to fill remote positions with high-skilled workers. The demand for low-skilled workers has decreased in inner cities which reduces the wages of inner-city workers. On the other hand, the demand for low-skilled workers in the suburbs has increased which increases the wage for suburban workers.

Additional Costs and Benefits Remote Work has on Firms and Employees

Remote work is beneficial to employees. In the modern workforce, employees are more likely to value a work-life-balance, so offering remote opportunities can give firms a competitive advantage in the labor market. Working from home gives workers more leisure time by eliminating the commute to and from the office and allowing them more freedom during breaks. Now, workers can devote this new free time to other activities. Employees also value autonomy and working remotely gives them the freedom and empowerment they need to be successful. This employee satisfaction increases productivity, which is great for firms. (Vick, A., 2020).

Although employees enjoy the freedom that comes with working from home, social aspects of office working are on the decline. Firms now face the challenge of maintaining their culture and encouraging teamwork since the group is geographically dispersed. Many firms have begun experimenting with new strategies to determine the best methods for maximizing productivity and profits through remote work.

Working From Home and Future Economic Impacts

Due to the success that working from home has brought to firms and workers, it is likely to continue to grow in popularity. In the future, working from home will continue to change and evolve, bringing more economic costs and benefits. In the following sections, I will discuss how flexible working models will benefit firms and workers moving forward.

Flexible Working Model

Employees that work remotely have adopted a flexible working model. This flexible working model provides workers with various forms of flexible workspaces. The two most popular include telecommuting (working from home) and coworking spaces. According to a study from the Journal of Urban Management, coworking spaces, “provide a mixture of open

physical space, beneficial characteristics (community, flexibility, social ties) and efficient workplace attributes (shared managed wi-fi, IT security, and consistently available space), potentially facilitating greater opportunities for business collaboration and innovation” (Rongrong, Y, 2019). Although the coworking spaces require fees, workers enjoy the social and cultural aspects they offer. For example, shared workspaces are open to all employees from all firms. When they work together in a shared space, they can gather new perspectives and ideas.

The flexible working model impacts workers along with urban planning, the environment, and the economy. Since workers no longer need to commute daily to the office, traffic and congestion is significantly reduced which benefits the economy. People no longer need to endure the stress and wasted gas that comes with sitting in traffic and workers are no longer late for the office. Less traffic congestion also limits the number of supply chain issues as deliveries can arrive on time. Regarding the environment, less traffic congestion reduces pollution. Even if workers choose to commute to coworking spaces, these spaces are located closer than their office which reduces commute times and therefore, CO2 emissions. (Rongrong, Y, 2019).

The promotion of business collaboration and innovation that coworking spaces provide are significant to the economy. The coworking spaces “improve the exchange of knowledge among members, foster more collaborative practices that can drive innovation, cost savings, as well as increasing employees’ satisfaction” (Rongrong, Y, 2019). Opportunities for collaboration and innovation among different firms can arise in coworking spaces. This allows like-minded companies to combine their efforts to create a competitive advantage over their competitors. In addition, these shared spaces reduce costs for firms and increase employee productivity. This

benefits the economy because it allows firms to allocate more of their resources to innovation and expansion.

Conclusion

Remote work has greatly changed the way firms and workers operate on a daily basis. Firms have been faced with challenges to maintain creativity and innovation from home offices while experiencing reduced costs. Working from home increases worker productivity and marginal product of labor which benefits firms and employees due to firms having increased revenues and workers having increased wages. Workers now have more work-life-balance, can live anywhere, and take on more caregiving roles if necessary. In other words, people can focus on other aspects of life while being productive and earning a livable wage. Economists have studied how this newfound freedom has impacted both the labor and housing markets. As an increase in preference for suburban living has increased the price of real estate in those areas the opposite has occurred in urban areas. In addition, corporations have begun to relocate and follow their customer base. Urban cities will still maintain a civilian population due to their amenities, however, wages and cost of living will be impacted due to people living but not working in the city. The same occurs for people living in suburban areas but not working there.

Remote work caters to higher skilled workers; however, face-to-face interaction will never be eliminated from the working world. Not every industry can provide remote work opportunities for their employees, so these jobs will still be available to lower-skilled workers. In this case, as workers seek more skilled positions the supply of skilled labor will increase and the demand for unskilled labor will increase.

As technology continues to advance, more opportunities for remote work will present themselves in the future. As more people take remote working positions the greater the impact

will be on the economy. Firms are no longer tied to specific cities or geographical areas; therefore, their productivity will no longer impact wages and cost of living for that area. Moving forward, worker's wages and cost of living will average out across the United States and between cities.

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