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# Some Causes of Unemployment and Their Relationship with the Creation and the Destruction of Jobs.

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#### **Abstract**

There are substantial societal and economic consequences of unemployment. The effects of job creation and destruction on the unemployment rate are examined in this article. It considers job loss and re-employment rates to provide the authentic unemployment rate. Costs associated with looking for work and salary stagnation are the root causes of structural and frictional unemployment. After that, the article delves into the effects of unemployment, including less GDP, tax money, human capital, and welfare expenditure. Fiscal measures such as public expenditure and tax cuts, monetary easing via reduction to interest rates and the money supply, and structural changes to improve skills and labor mobility are all part of the policy solutions that are described to lessen the impact of these factors. This article delves deeply into unemployment's origins, implications, and policy solutions. Long-term unemployment causes a lot of problems; therefore, solving them will need policies that are well-coordinated in the fiscal, monetary, and structural areas.

**Keywords:** natural rate of unemployment; the rate of job separations and findings; job search; wage rigidity

#### 1 Introduction

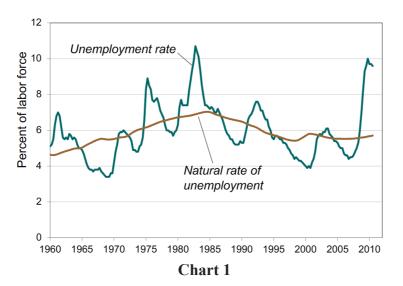
Unemployment is one of the most pressing economic issues faced by nations worldwide. It indicates the underutilization of labor resources and lost output for the economy. For individuals, unemployment means loss of income and is associated with social problems. Therefore, understanding the drivers of unemployment and ways to mitigate it has significant policy relevance(Balsmeier, B., & Woerter, M., 2019).

This essay analyzes the relationships between unemployment and job creation and destruction. The causes and impacts of unemployment are explored, providing insights into why it persists even in times of economic growth. Subsequently, potential fiscal, monetary, and structural policy responses are discussed. The analysis has both theoretical and practical value. On a conceptual level, it elucidates the dynamics between labor demand and supply that determine the natural unemployment rate. For policymakers, the essay outlines actionable measures across macroeconomic and labor market domains to maintain high employment.

### 2 Relationships between Unemployment and the Destruction of Jobs

#### 2.1 Nature Rate of Unemployment

To understand how unemployment occurs, we should understand the nature of the unemployment rate in advance. The natural unemployment rate refers to the unemployment rate under full employment, which is the average level around which the unemployment rate fluctuates. The natural unemployment rate is a nonaccelerating inflation rate of unemployment that does not cause inflation and is also an unemployment rate where the labor market is in a stable state of supply and demand. From the perspective of the entire economy, there are always people looking for jobs. Economists refer to unemployment in this situation as the natural unemployment rate. Therefore, economists' definition of the natural unemployment rate is sometimes called the unemployment rate in a fully employed state or the unemployment rate without accelerated inflation(Su, C. W., Yuan, X., Umar, M., & Lobont harassed, O. R., 2022). Chart 1 shows the Actual and natural rates of unemployment in the US from the 1960s to the 2010s. The actual rates of unemployment are always around the natural rates of unemployment. In a recession, the actual unemployment rate rises above the natural rate. In a boom, the actual unemployment rate falls below the natural rate.



## 2.2 Derivation of Nature Rate of Unemployment

The derivation begins by setting some variables. L stands for the workers in the labor force, E stands for employed workers in the labor force, and U stands for unemployed workers in the labor force. Therefore U/L is equal to the unemployment rate. s stands for the rate of job separations, which means the fraction of employed workers that become separated from their jobs; thus, s\* f equals the number of job separations. Similarly, f stands for the rate of job finding, which means a fraction of unemployed workers that find jobs; thus, f \*u means the number of unemployed workers that find jobs(Szabó-Szentgróti, G., Végvári, B., & Varga, J., 2021).

A few assumptions are needed before the derivation. Firstly, L is exogenously fixed because labor is usually connected to the population and structure. Secondly, f and s are exogenous, which we will discuss later. Third, the labor market is in a steady state, or long-run equilibrium, while the unemployment rate is constant, which means the numbers of workers separated from their jobs and e unemployed workers that find jobs should be equal.

Then, we can derive an equation: s \* E=f \* U where the former stands for the number of job separations and the latter stands for the number of job findings(Nusair, S. A.,2020).

We know that U equals E + U, now we put that in the equation so we can turn it into the following equation: f \* U = s \* L - s \* U. Now we solve it for u / L, which stands for the unemployment rate., we can derive that u / l = s / (s + f).

#### 2.3 Application of the Derivation

According to the equation, the natural unemployment rate is just connected to the rate of job separations and job finding. The nature of the unemployment rate is positively correlated with the job separation rate and negatively correlated with the job-finding rate. For example, if 1% of employed workers lose their jobs while 19% of unemployed workers find jobs in a certain month, s equals 0.01 and f equals 0.19. Then, the unemployment rate should be equal to 5%. The detailed calculations are listed below.

$$\frac{U}{L} = \frac{s}{s+f} = \frac{0.01}{0.01+0.19} = 0.05$$

# 3 Two Main Reasons for unemployment

From the derivation, we can get that If job finding were instantaneous (f = 1), then all spells of unemployment would be brief, and the natural rate would be near zero frictional unemployment caused by the time it takes workers to search for a job. However, it is almost impossible in the actual situation. There are two main reasons for this: job search and wage rigidity.

#### 3.1 Job search

Job search occurs because workers have different abilities and preferences, while jobs have different skill requirements, so it takes time to match labor and work. The geographic mobility of workers is also not instantaneous. Besides, the flow of information about vacancies and job candidates is imperfect; workers can not find the most suitable work for them perfectly.

When there are sectoral shifts, which mean changes in the composition of demand among industries or regions, job search issues will be more serious. We call it frictional unemployment. For example, when there is a Technological change, more jobs repairing computers are needed. Still, fewer jobs repairing typewriters are needed,

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which will increase the natural unemployment rate in a short time(Hall, R. E., & Kudlyak, M., 2022).

#### 3.2 wage rigidity

Chart 2 shows how wage rigidity influences unemployment. From the chart, we can see the diminishing trend curve, which is the labor demand curve, and the other vertical curve is the labor supply curve. While the rigid wage is above the equilibrium level, there is a gap between the demand and supply of labor, which causes unemployment. The more the rigid wage above the equilibrium wage, the more unemployment occurs. If real wage is stuck above equilibrium, there aren't enough jobs. Then, firms must ration the scarce jobs among workers. Wage rigidity and job rationing will cause Structural unemployment, increasing unemployment (Mindell, D. A., & Reynolds, E., 2023).

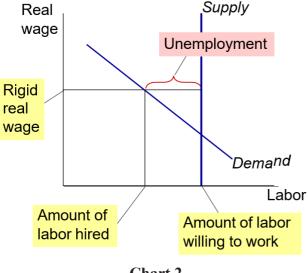


Chart 2

So why does wage rigidity exist? Three main reasons are listed below.

#### 3.2.1 the Minimum Wage

A minimum wage is the lowest wage per hour a worker may be paid, as federal law mandates. It is a legally mandated price floor on hourly wages, below which nonexempt workers may not be offered a job or agree to work. The government periodically assesses the federal minimum wage level with changes in inflation or the cost of living. The Fair Minimum Wage Act of 2007 ordered the minimum wage to be raised from \$5.15 in three increments, rising to \$5.85, \$6.55, and finally to \$7.25. The min. Wages may exceed the equilibrium wage of unskilled workers, especially teenagers. A study said a 10% increase in minimum wage increases teen unemployment by 1-3%. But the min. Wage cannot explain the majority of the natural unemployment rate,

as most workers' wages are well above the minimum. wage(Thompson, M. N., & Dahling, J. J., 2019).

#### 3.2.2 the Labor Union

Workers form a labor union in a particular trade, industry, or company to improve pay, benefits, and working conditions. Officially known as a "labor organization," also called a "trade union" or a "workers union," a labor union selects representatives to negotiate with employers in a process known as collective bargaining. When successful, the bargaining results in an agreement stipulating working conditions for some time. Labor unions always tend to increase wages and - working hours, which will exceed the equilibrium wage. Therefore, unemployment increases.

#### 3.2.3 Efficiency Wage Theory

The idea of the efficiency wage theory is that increasing wages can lead to increased labor productivity because workers feel more motivated to work with higher pay. Therefore, if firms increase wages – some or all of the higher wage costs will be recouped through higher labor productivity. Efficiency wage theory holds that higher wages increase worker productivity by attracting higher quality job applicants, increasing worker effort, reducing "shirking", reducing turnover, which is costly to firms, and improving the health of workers in developing countries. Therefore, companies should pay above-equilibrium wages to raise productivity, which will cause structural unemployment.

#### 4 Economic Impact of Unemployment

Unemployment is more than just a personal tragedy; it's a disruption to the economy as a whole, affecting national revenue, budget balance, and society welfare in complex ways. This article explores these effects, which explains how unemployment causes societal problems and weakens a nation's economy.

#### 4.1 Impact of Unemployment on National **Income**

#### 4.1.1 Decrease in GDP

The Gross Domestic Product (GDP) is a vital indication of economic health by encapsulating the entire value of goods and services generated inside a country. A decline in GDP is a direct consequence of high unemployment. Total output falls when people cannot work and contribute to creating products and services. A lower GDP is the result of fewer people participating in the workforce. In addition, a downward spiral of declining GDP and, therefore, fewer job openings is a common consequence of high unemployment, which in turn worsens the

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unemployment crisis(Zizzamia, R.,2020).

#### 4.1.2 Decline in Consumption and Investment

Loss of income due to unemployment has a direct impact on spending habits. Less discretionary money means less demand for products and services, which hurts companies and might cause them to cut back on investment. Decreased investment further dampens the economy's potential for expansion and new ideas. The economy feels the pinch of falling investment and consumption, slows growth and development.

#### 4.2 Fiscal Impact of Unemployment

#### 4.2.1 Decline in Tax Revenues

Companies and employees contribute a disproportionate share of most governments' income, payroll, and consumption taxes. Tax revenues fall in tandem with rising unemployment rates because fewer individuals are working and, therefore, can pay taxes. When tax revenues fall short of projections, governments face budget deficits. They must decide whether to increase taxes, reduce expenditure, or borrow money, all of which affect the economy differently (Kannan, K. P., & Raveendran, G.,2019).

### 4.2.2 Increase in Expenditure on Unemployment Benefits

Unemployment benefits frequently force governments to boost expenditure despite falling tax collections. While these benefits are essential for helping the jobless in the short term, they may burden public budgets. If this continues, the government may cut spending in other areas or borrow more money, which might cause interest rates to rise and investment to fall(Rasoulinezhad, E., & Ranjbar, O.,2022).

#### 4.3 Social Impact of Unemployment

#### 4.3.1 Loss of Human Capital

Unemployment, from a societal standpoint, may cause human capital to erode. Expertise and skills deteriorate over time, and a workforce that has been out of work for an extended period may be less equipped to meet the demands of a dynamic job market. The economy's ability to expand and compete globally might be negatively impacted by this loss of human capital in the long run.

#### 4.3.2 Increased Pressure on Social Welfare

Reliance on social assistance services is heightened when unemployment rates are high. While these programs are crucial for providing a safety net, they may get overwhelmed during high unemployment and can be expensive. There may be a need to expand or alter social welfare programs in response to mounting demand, but doing so without raising the budget deficit is difficult and may cause political divisions.

#### 4.3.3 Social Problems Brought About

Social difficulties might be worsened by unemployment as well. As people try to make ends meet after losing their jobs, they may turn to criminality, drug misuse, and despair. Additionally, it can potentially exacerbate societal discontent and political instability; this is supported by several historical instances when high unemployment rates preceded major social revolutions.

# 5 Policy Measures to Reduce Unemployment

In their fight against unemployment, governments and central banks may use a range of policy instruments. These policies aim to improve the economy, increase employment, and keep labor markets running smoothly. Reducing unemployment rates may be achieved by fiscal, monetary, and structural strategies outlined in this article.

#### **5.1 Fiscal Policy**

### 5.1.1 Tax Reduction and Increased Government Expenditures

Reducing unemployment may be achieved by monetary policy measures such as changing tax rates and increasing government expenditure. Tax cuts may stimulate the demand for products and services since they raise disposable income for consumers and strengthen the financial reserves of enterprises. More jobs may be created when companies grow in response to rising demand. Increased government spending, especially on consumption and investment, may directly impact job creation and economic development. Various kinds of government expenditure include initiatives to create jobs, programs that provide unemployment compensation, and incentives for firms to increase their staffing levels.

### 5.1.2 Infrastructure Development and Public Employment

Investment in infrastructure development is a powerful fiscal stimulus that may generate both immediate and long-term employment opportunities. Unemployment is immediately reduced since such initiatives need a large staff. Infrastructure investment also has the added benefit of increasing economic production and productivity, making it easier for businesses to hire new workers. Extending public employment programs is another way to alleviate unemployment, especially for the long-term jobless and those living in economically disadvantaged areas.