University of the People

ECON 1580 Introduction to Economics

Unit 5 Written Assignment 5

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# Unemployment Rate Calculation and Interpretation

## Problem Statement:

Suppose an economy has 10,000 people who are not working but are looking and available for work, and 90,000 people who are working. What is its unemployment rate?  
  
Now suppose 4,000 of the people looking for work get discouraged and give up their searches. What happens to the unemployment rate? Would you interpret this as good news for the economy or bad news? Explain.

## 1️ Initial Unemployment Rate

We are told:  
- Number of unemployed people: 10,000 (people not working but actively looking and available for work)  
- Number of employed people: 90,000  
  
Labor force = employed + unemployed = 90,000 + 10,000 = 100,000  
  
The unemployment rate formula is:  
  
Unemployment rate = (Number of unemployed / Labor force) × 100  
  
Plugging in the numbers:  
  
Unemployment rate = (10,000 / 100,000) × 100 = 10%

## 2️ After 4,000 People Give Up Looking

The 4,000 people who give up looking are now considered discouraged workers, meaning they are no longer part of the labor force.  
  
- New number of unemployed = 10,000 - 4,000 = 6,000  
- New labor force = 90,000 + 6,000 = 96,000  
  
Calculating the new unemployment rate:  
  
Unemployment rate = (6,000 / 96,000) × 100 ≈ 6.25%

## 3️ Interpretation

Although the unemployment rate falls from 10% to about 6.25%, this is misleading. The drop occurs because 4,000 people became discouraged and stopped looking for work, which means they are no longer counted in the labor force. This is generally viewed as bad news because:  
  
- It shows declining labor force participation.  
- It indicates that many people are discouraged and see little hope in finding employment.  
  
Thus, even though the headline unemployment rate improves, the true health of the labor market is actually worse.

## ✅ Final Answers:

- Initial unemployment rate: 10%  
- New unemployment rate after 4,000 leave the labor force: ~6.25%  
- Interpretation: The fall in the unemployment rate reflects discouraged workers exiting the labor force, which is a sign of economic weakness, not strength.

## Reference:

OECD. (2020). Labour Force Statistics 2020. Organisation for Economic Co-operation and Development.