Labor Market Perspective
Two completely different monthly surveys provide much key information for economists regarding employment and unemployment


➢ The Current Population Survey (CPS), sponsored jointly by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics (BLS)

➢ The primary source of labor force statistics for the population of the United States.

➢ About 60,000 households nationwide sampled each month

➢ Source of “Employment”, “Labor Force” and “Unemployment”

   o Even here in Marin County (although sample size is pretty small)
The “Establishment Survey” : The Current Employment Statistics Program

- A Federal-State cooperative program.
- The CES survey is based on approximately 141,000 businesses and government agencies representing approximately 486,000 worksites throughout the United States.
- Generates measurement of jobs, wages and salaries
- Markets react to the monthly announcement of the “nonfarm payroll employment” number relative to the “expected” number.
Household Survey vs. Employment Survey

Different surveys generate similar numbers over time, but in short periods can signal different trends.
<table>
<thead>
<tr>
<th>Population Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>328 Million</td>
</tr>
<tr>
<td>Civilian Non-institutional Population (16+)</td>
<td>258 Million</td>
</tr>
<tr>
<td>Civilian Labor Force</td>
<td>163 Million</td>
</tr>
<tr>
<td>Employed</td>
<td>157 Million</td>
</tr>
<tr>
<td>Employed</td>
<td>157 Million</td>
</tr>
<tr>
<td>Unemployed</td>
<td>6.0 Million</td>
</tr>
<tr>
<td>Not in Labor Force</td>
<td>95 Million</td>
</tr>
<tr>
<td>Children, Military, Inst. Pop</td>
<td>70 Million</td>
</tr>
</tbody>
</table>

**Table: Population and Labor Market Definitions: Feb 2019**

- **Total Population:** 328 Million
- **Civilian Non-institutional Population (16+):** 258 Million
- **Civilian Labor Force:** 163 Million
- **Employed:** 157 Million
- **Unemployed:** 6.0 Million
- **Not in Labor Force:** 95 Million
- **Children, Military, Inst. Pop:** 70 Million
Unemployment Classifications

Three types sources of unemployment:

- Frictional unemployment
- Cyclical
- Structural unemployment
Frictional Unemployment

- Frictional Unemployment is related to job search
- Some level of frictional unemployment is considered to “socially beneficial”
  - Job matching is important and some search (during which an individual is counted as unemployed) makes the economy better off
  - The job search process can increase efficiency and sustain a better-performing economy
Cyclical Unemployment

- Cyclical unemployment is related to recessions
- Job losers are those “thrown out of work due to the recession with some expectation of being rehired when conditions improve.”
  - Large manufacturing employers frequently rehire their workers that they had laid off.
  - Some union contracts are written to account for this process and provide additional income during these periods.
Structural unemployment is defined by people without marketable job skills

- Sometimes this is due to a “mismatch” with available jobs
- Sometimes this is because an individual has few skills
- Structural unemployed experience both longer unemployment spells and more frequent unemployment spells than average.
- Frequency of transition in/out of the labor force with economic conditions is higher than average.

Examples:
- Ghettos
- West Virginia coal mining country
- Northern California redwood logging workers
Natural Rate of Unemployment & NAIRU

Pre 1968

Actual unemployment rate
= frictional U rate
+ structural U rate
+ cyclical U rate

Labor Market Approach

By Early 70s

Actual unemployment rate
= NAIRU
+ cyclical U rate

Modern Macroeconomic Approach
How to Count the Labor Force Matters

U-6 is total unemployed, plus all persons marginally attached to the labor force, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all persons marginally attached to the labor force.
60,000 households provides a rich source to understand how unemployment varies over time and by cohort. As is well known, the statistics confirm the differential impacts of unemployment by race. Unemployment rates by gender have been very close.
Note the correlation within CA in the movement of the unemployment rate. How much can local politicians affect unemployment rates in their districts?
Seasonal Adjustment

Civilian Employment in Millions

Civilian Employment: Seasonally Adjusted vs. Not Seasonally Adjusted

The Underlying Economy is Far More Dynamic than Aggregate Seasonally Adjusted Time Series Indicate
We can count “change in status” as a measure of “how calm is the economy” at a granular level.
### Labor Force Status Jan – Feb 2019

<table>
<thead>
<tr>
<th>Labor Force Status</th>
<th>To:</th>
<th></th>
<th></th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employed</td>
<td>Unemploy</td>
<td>Not in CLF</td>
<td></td>
</tr>
<tr>
<td>From:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>149.1</td>
<td>1.5</td>
<td>4.3</td>
<td>154.9</td>
</tr>
<tr>
<td>Unemployed</td>
<td>2.1</td>
<td>3.3</td>
<td>1.8</td>
<td>7.1</td>
</tr>
<tr>
<td>Not in CLF</td>
<td>5.0</td>
<td>1.8</td>
<td>89.2</td>
<td>95.9</td>
</tr>
<tr>
<td>Totals</td>
<td>156.1</td>
<td>6.6</td>
<td>95.3</td>
<td>258.0</td>
</tr>
</tbody>
</table>

16.5 million people are estimated to have changed labor force status between Jan 31 and Feb 28

This is calculated by summing the non-bold values in the table, EXCLUDING the diagonal values.
Roughly 7.8% of the labor force is changing “status” each month. Currently that’s over 12 million people who status changes.
The mix of employment among the sectors even when measured “peak to peak.” Growth varies by industry at a point in time and over time.
Job Growth by an Example Sub-Sector

Construction Industry: Sub-Sectors

The mix of employment within an industrial sector may vary even more than the sector as some sub-sectors grow and others shrink.
Output Volatility Underlying the Economy

Volatility of *Real Value Added* (output) in Manufacturing is far greater than the volatility of GDP
Employment Volatility Underlying the Economy

Volatility of Employment in Manufacturing is far greater than the volatility of total nonfarm employment.
Volatility of *Real Value Added* (output) in Construction is far greater than the volatility of GDP.
Volatility of Employment in Construction is far greater than the volatility of total nonfarm employment.
Output Volatility Underlying the Economy

Volatility of *Real Value Added* (output) in Retail is far greater than the volatility of GDP.
Volatility of Employment in Retail Trade is similar to the volatility of total nonfarm employment.
This is a picture of increases in output per worker reducing employment. This is a function of technological change, not macroeconomic conditions.

Value added = Gross output – intermediate inputs
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Value added = Gross output – intermediate inputs
A Conclusion about Economic Structure

- Macroeconomic policies which “stabilize” the economy from “macroeconomic” perspective that are reducing the volatility of aggregate performance (economic growth, inflation, and unemployment) do NOT stabilize the underlying forces in the economy that affect individual industries differentially.

- Mitigating volatility for the entire economy reduces but does NOT eliminate volatility at a more granular level.

- Economic structure underlying the economy is constantly changing and employment is reallocated as a result, even as the picture of total employment appears relatively stable.
Industrial Structure Trends are Widespread Geographically

Many underlying trends in industrial structure are having common effects in all states.
Behavioral Preferences Toward Work are Captured in Survey

LFPRs (%)

\[
\text{LFPR}_i = \frac{\text{Labor Force}(i)}{\text{Population}(i)}
\]

\(i\) = cohort by age, gender and ethnic group
Selected Economic Costs of High Unemployment

Macroeconomic:
- Cumulative lost output, including lost investment
- Opportunity costs to public Investments and/or higher taxes
  - Public university tuition
  - Cuts in infrastructure
- “Hysteresis” : Structural Impacts on Labor Force Participation that reduce growth rate of Potential GDP

Individual/Family Costs:
- Cumulative lost income/wealth effects
- Permanent job losses for older workers
- Lost job opportunities for young workers/new job entrants
- Associated physical and mental health issues
Frequently referred to as the Phillips Curve.

This relationship has evolved over time to a world of policy constraints and insights into how the Fed chooses to manage the US economy.
Unemployment vs. Inflation

Unemployment

- Basics: Why Simple Demand/Supply Framework Doesn’t Explain Short-run Phenomena
- Demographics and Macroeconomics
- Unemployment Data: What Does It Tell Us?
- Some Costs of Unemployment
Why Doesn’t this Apply to the Macroeconomics of the “Labor Market”?
Wages Don’t Appear to Adjust Very Quickly to Unemployment

Unemployment Rate

Real Wages $ per Hr
Wage Rigidity (aka “Sticky Price of Labor”)

- Wage stickiness is the inability of wages to adjust to the level that would equate supply and demand in the labor market over the short and medium run.
- The is a core theoretical construct of macroeconomic models used to guide macroeconomic policies in the U.S.

The issue isn’t whether the economy and its working in the short run exhibits wage and PRICE rigidity.

The real question is why does the economy incorporate this characteristic.
Price Stickiness Examples

Price of Fruit @ Safeway

Financial Markets

Corporate: Annual compensation adjustments

Price of Haircuts

Multiyear Union Contracts

Perfectly Flexible

Very Inflexible

The point: the economy contains many kinds of prices for goods and services. Some adjust quickly to changing market conditions, some adjust slowly
Wage “Stickiness” is a Key Concept in Macroeconomics

Unemployment

- Severe unemployment has **significant** social and political effects
- The economic system isn’t fair and it is less fair in terms of who experiences unemployment either frequently or for long periods
- Unemployment of long duration is **the challenge** to the “classic model” of economy
- It isn’t a coincidence that the Keynesian economic model evolved from the ashes of the Great Depression

- Key theoretical dispute within the profession is the use of “flexible price assumption” in abstract theoretical macroeconomic models.
Preliminary Conclusions about Unemployment and Macroeconomic Policy

- The performance of the U.S. economy relative to its “full employment potential” is a key indicator of economic performance.
  - Performance across regions, states, age and sex cohorts is largely correlated to this one indicator.
  - Low unemployment is a necessary but not sufficient condition to address structural unemployment problems.
  - Low unemployment is a necessary condition to provide a reasonable social safety net, because the cost of paying welfare costs of large amounts of unemployed for long periods can be material and face political opposition.

- The U.S. economy continues to generate periods of high unemployment and the key macroeconomic question is what do we do about it.

- There is little policy can do to mitigate the constantly changing allocation of resources within the national economy, nor should it.