

Analysis: Migration & Employment During Two Recent Recessions

A look at insured unemployment trends and Alaska's economy.

By Brian N. Rae

There are numerous sets of economic data available which gauge the health of the Alaska economy. The monthly industry employment estimates reported in *Alaska Economic Trends* are one such indicator. The unemployment rate series are another way to measure the economy's strength. An additional measure is provided by studying the characteristics of unemployed workers who apply for Unemployment Insurance (UI) compensation.

Examining the records of those who receive unemployment benefits provides insight into the Alaska economy because 90 percent of working Alaskans are covered by the UI system. Alaska's unemployment system operates like an insurance policy; accounts are opened for all employed in jobs covered by the system.^{1/} As a result, there exists detailed information about the unemployed covered by UI.

About one-half of Alaska's unemployed are covered by unemployment insurance. Those unemployed excluded from this analysis of the state UI system include:

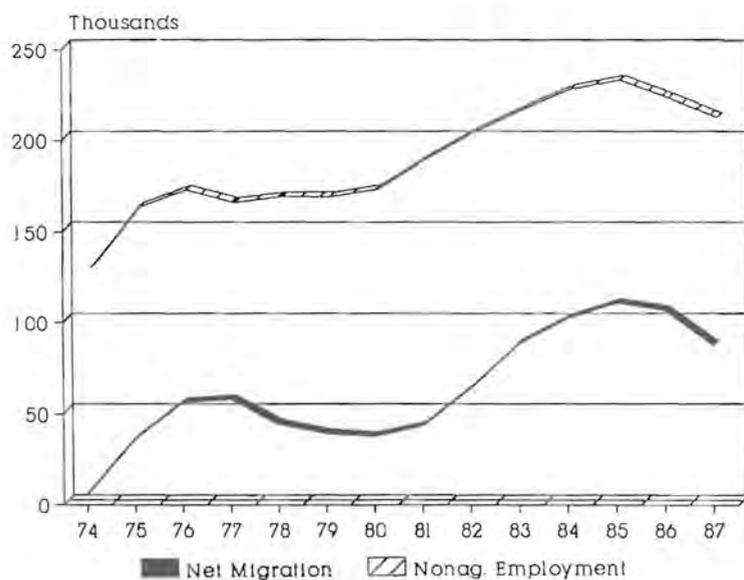
- New workers entering or re-entering the labor force,
- Self-employed individuals, and
- Workers in industries not covered by unemployment insurance. (In Alaska, fish harvesters are the largest group of employees not covered by UI.)

Workers fitting into any one of these three categories could be considered unemployed. They are excluded,

^{1/} For additional information on the UI system see the February 1989 issue of *Alaska Economic Trends*.

Figure 1

Alaska Employment and Migration, 1974-1987



Source: Alaska Department of Labor, Research & Analysis

though, from this analysis which uses only UI benefit information as a data base.

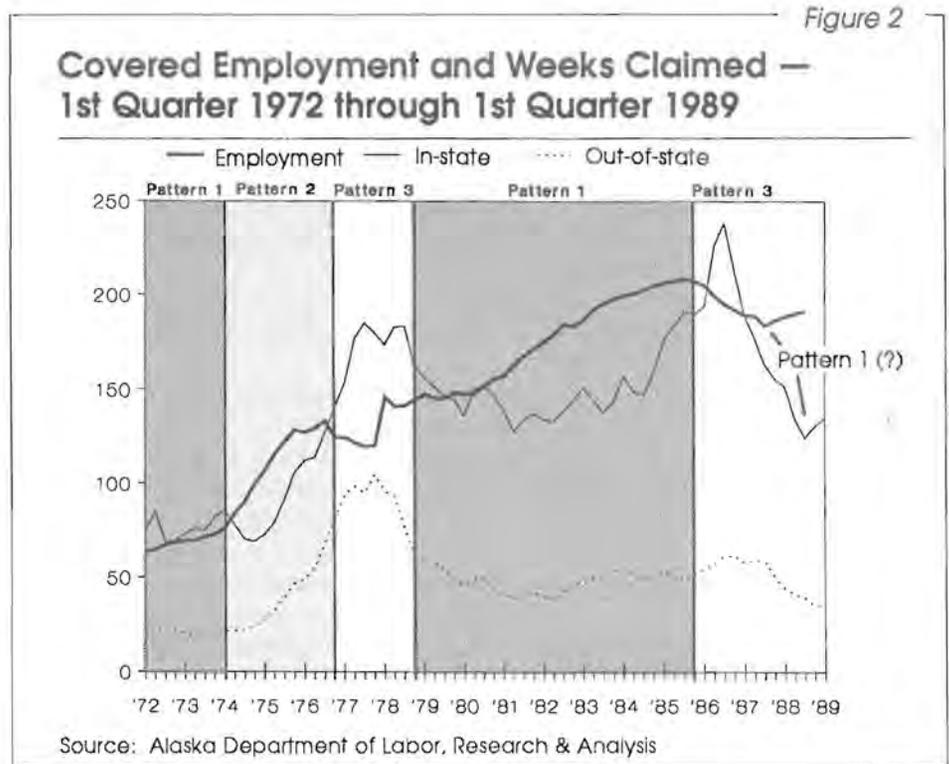
This article focuses on how migration and employment impact the change in levels of UI claimants, with particular emphasis paid to the two most recent recessions.

Data Available from UI Files:

Excluding special surveys, the only way to identify industries in which unemployed persons were last employed is through information obtained from UI files.^{2/} UI files also provide insight into migration patterns of those receiving unemployment insurance benefits. This insight is made possible by analyzing the numbers of UI checks mailed to in-state addresses as opposed to those mailed out of state.^{3/}

Alaska Since 1972: Three Types of Employment Patterns

Alaska has had a history of rapid growth, both in our population and our economy, punctuated by periods of short but severe declines. During good economic times, Alaska's employment



gains led the nation on a percentage basis. During these same times, Alaska's net migration rates were the highest in the nation.^{4/} As shown in Figure 1, Alaska's migration and employment closely paralleled each other in recent years. Both of these factors have played a large role in the number and destination of Alaska UI checks.

Figure 2 shows the level of seasonally adjusted covered employment,^{5/} and the number of benefit weeks claimed^{6/} both in-state and out-of-state. The movements of these three components suggest certain relationships among them.

^{2/} Neither the published unemployment rate series nor analysis of the unemployment insurance files can provide an industry unemployment rate. Because workers are free to work in any industry, no such rate can be created.

^{3/} In-state weeks: The total number of weeks claimed by or paid a claimant who worked in Alaska and still lives in the state.

Out-of-state weeks: The number of weeks claimed by or paid a claimant who worked in Alaska but now lives in another state.

^{4/} Net migration is the difference between the number of persons moving into an area and the number of persons leaving an area. The result can be either positive or negative. Cumulative net migration, shown in Figure 1, sums net migration over several time periods. Upward sloping lines indicate positive net migration between two time periods; downward sloping lines indicate negative net migration.

^{5/} Covered employment: The number of persons employed in jobs eligible to receive benefits under the UI system. Approximately 90 percent of all employed Alaskans work in such jobs.

^{6/} After an initial filing, an unemployed person can apply for a week of unemployment insurance. The number of weeks claimed is a tally of UI benefit weeks reported by all applicants. The tally does not differentiate between those claims found eligible or ineligible. (An applicant might be found ineligible for various reasons.)

Weeks paid is a subset of the weeks claimed data. Weeks paid data include only the number of UI benefit payments actually disbursed. The percentage of weeks paid to weeks claimed is usually consistent.

The employment patterns illustrated in Figure 2 can be separated into three different types:

- **1st Pattern: Steady Growth** — Periods in which Alaska's economy is experiencing sustained employment increases. During these times the Alaska economy is not experiencing any economic shocks which would cause employment to shift dramatically. In Figure 2, those periods of time which can be characterized as steady growth are most of 1972-1974, and between mid-1978 and mid-1985.
- **2nd Pattern: Accelerated Growth** — This occurred during the pipeline construction employment boom period from 1974 through 1976.
- **3rd Pattern: Recessions** — The first recessionary period began in late 1976 (as pipeline construction slowed) and continued through mid-1978. The second recession began in late 1985 with a downturn in the business cycle, and escalated into a full-scale recession in 1986 with the drop in world oil prices.

The Three Employment Patterns Affected UI Claims Differently

Several relationships exist between in-state UI weeks claimed and employment levels. Changes in employment will normally precede changes in UI weeks claimed because

employment levels affect the number of UI weeks claimed. If employment levels are steady (either showing no change or changing at a constant rate), UI weeks claimed are relatively stable. This relationship is evident in Figure 2 during the 1st Pattern periods of 1972-1974 and mid-1978 through 1985.

When Employment Is Growing . . .

If employment growth is accelerating, the relationship between UI claims and employment growth is altered. Initially, UI weeks claimed fall as employment growth accelerates, a negative correlation. New job opportunities lower the number of persons on the UI rosters, and therefore the number of weeks claimed is also lowered. This negative relationship is short-lived however. Increased employment and demand for more workers soon attracts new persons to the state. (See Figure 1.) This development offsets the initial decline in weeks claimed, and the employment rate and the number of weeks claimed are soon parallel. ^{7/} Exemplifying this relationship is the 2nd Pattern of Figure 2, which covers 1974 through 1976.

When Employment Growth Subsides . . .

When employment growth decreases as it does during recessions, the number of UI weeks claimed increase sharply. Such movements are shown in the 3rd Pattern. Employment and weeks claimed move in opposite directions for two to three quarters. Then the number of weeks claimed begins to decrease. Some of this can be attributed to unemployed workers finding jobs, a

development which decreases the number of UI payments. Since UI benefits have a set duration (usually between 16 and 39 weeks), even those who don't find jobs are eventually unable to claim benefits, causing the number of weeks claimed to drop again.

Migration Affects UI Claims, Too

Migration out of state can expedite the downward movement in UI payments. Various barriers (such as the inability to sell a home) cause some to remain in-state for awhile after having become unemployed. Still, if local jobs are unavailable, a certain percentage of people are forced to move, often to other states with stronger economies. If these unemployed people succeed in finding jobs out of state, they too are removed from the UI roster.

After employment levels stop falling, the economy reaches a new equilibrium, and a positive correlation again surfaces between the number of weeks claimed and employment.

Two Recent Recessions: Similarities and Dissimilarities

The two recent recessionary declines, which began in 1976 and in 1985, shared in common some characteristics. ^{8/} In both, net migration closely paralleled the level of employment. (See Figure 1.) Also, both recessions were preceded by impressive growth in employment related to the oil industry, the first directly and the second only somewhat less directly.

^{7/} A concept known as the 'natural rate of unemployment' explains why the number of unemployed (and therefore weeks claimed) will increase even as employment rises. The rationale is that a certain portion of persons will always be between jobs. As the number of employed workers increases, so too does the number of unemployed persons.

^{8/} Although the pipeline was not completed until mid-1977, pipeline related construction employment peaked in 1976. The UI system was affected earlier — than was the overall Alaska economy — by worker layoffs. For the purposes of UI data analysis, the last quarters of 1976 marked the beginning of the post-pipeline construction employment decline.

However, there are several significant differences between these two recessions. One distinction is the industry composition of the workforces. In the 1970s, many who moved to Alaska to work on the pipeline were employed in the construction industry. Most of these workers had little intention of remaining in the state after the pipeline's completion — a normal characteristic in construction employment. Thus, large employment gains were expected to be followed by large employment declines.

The more recent recession came as a surprise to many workers. Most of those who lost their jobs had no idea they were at risk of becoming unemployed. Few had plans to leave the state. Substantiating this point are the different patterns in weeks claimed by in-state and out-of-state claimants. (See Figure 2.)

During the pipeline construction employment downturn, the number of both in-state and out-of-state claims initially rose dramatically. As employment again showed growth at the end of 1977, the number of weeks claimed began to drop. Both in-state and out-of-state weeks paid continued to decline until early 1980. (Notice in Figure 2 that the two weeks claimed lines nearly parallel each other during this period.)

In the recent recession, in-state weeks claimed shows movements similar to the post-pipeline bust — a sharp initial rise followed by an equally rapid decline. Out-of-state weeks, however, showed little increase during the recent recession (unlike the movements during the prior economic downturn). Much of this divergence can be explained by analyzing different industries' number of weeks claimed.

In-state Weeks Paid by Industry, 1970-1988

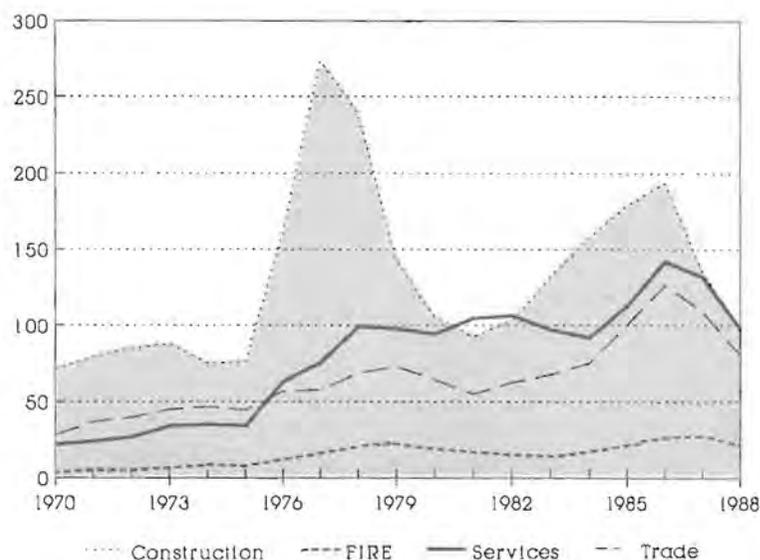
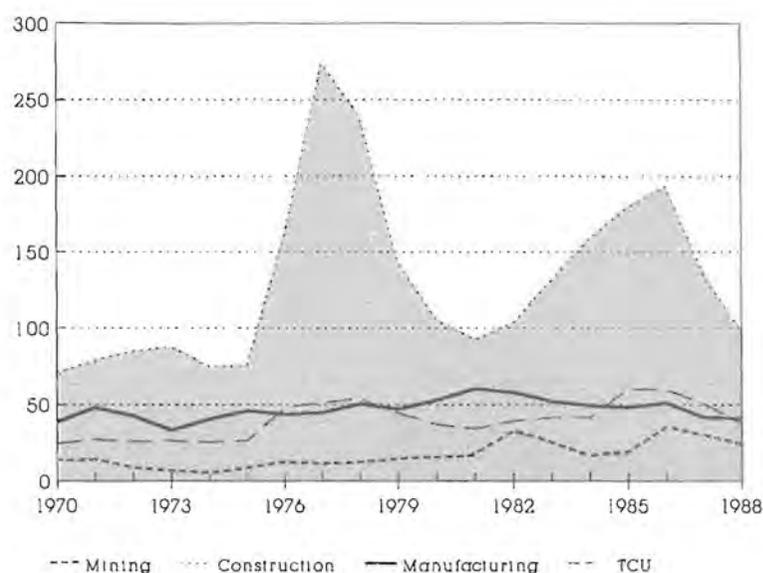
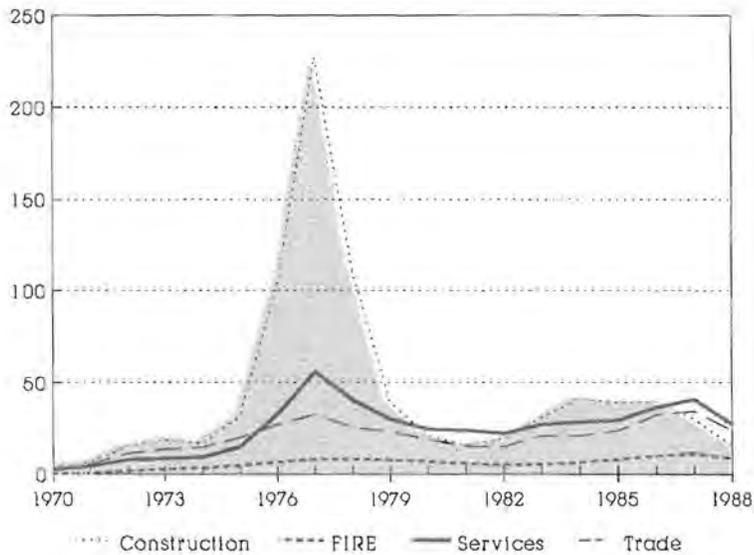
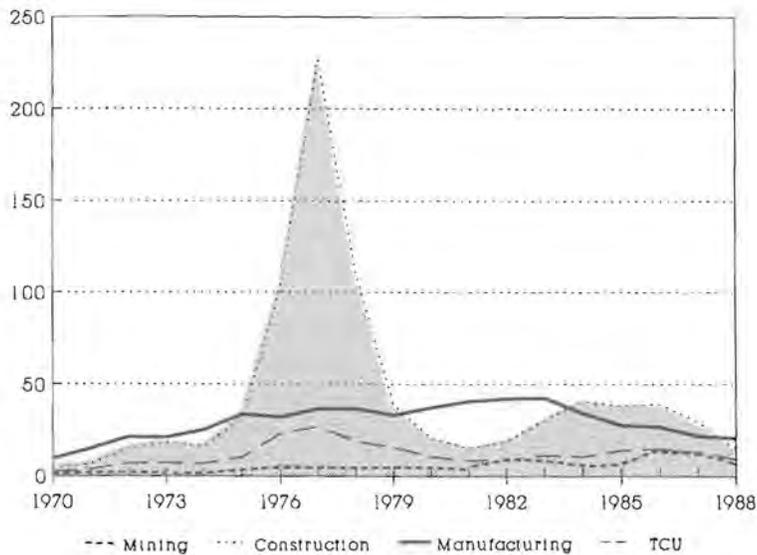


Figure 4

Out-of-state Weeks Paid by Industry, 1970-1988



Source: Alaska Department of Labor, Research & Analysis

On Construction and In-state & Out-of-state Weeks Paid:

The construction industry sustained large employment declines during both of the aforementioned economic downturns. The industry almost single-handedly accounted for the two periods' different patterns in the in-state and out-of-state weeks paid.

Figure 3 shows for certain industries a breakout of the number of in-state weeks paid. It's clear that the construction industry was most affected by the completion of the pipeline. Other industries were also affected (mainly those in the services, trade, and transportation, communication and utilities sectors), but to a much lesser degree than construction.

The number of in-state weeks paid by those formerly employed in construction dropped to a low in 1981, at which point it again rose sharply. Unlike the post-pipeline employment decline, this upward movement occurred during a time when the Alaska economy was posting steady growth. Employment was rising in the construction industry during much of this time.

Three factors caused this rise in the number of in-state weeks paid: the highly seasonal nature of construction employment, normal job turnover, and increasing employment. This development in the construction industry was unlike most other industries; most other industries' number of weeks paid remained constant until the economic decline beginning in late 1985.

Figure 4 shows the number of out-of-state weeks paid by those same industries listed in Figure 3. In the out-of-state weeks paid category, it was the construction industry which was once again affected most by the post-pipeline construction crash. Additionally, there was some rise in out-of-state payments attributed to the same industries which showed increases in in-state payments.

The construction industry, although still quite depressed during the more recent recession, had little impact on out-of-state weeks paid. Considering the large rise in in-state payments for this industry, the out-of-state weeks paid number was extremely low.

One major factor contributed to the construction industry's vastly different levels of out-of-state weeks paid during these two periods. The number of specially skilled construction workers living in Alaska during the 1970s was much less than what was needed to build the pipeline. Many workers from other states came to Alaska with the intent of returning home when the work was completed. In recent years, however, the supply of resident construction workers has usually been sufficient to meet the demand. In the early 1980s, the industry sustained a downturn before most other sectors of the economy, and, furthermore, its employment gains lagged behind those of most other industries.

In 1986 and 1987, some industries — especially those in trade, services, FIRE and mining — showed significant percentage increases in out-of-state payments. Still, this rise was very small compared to the total number of out-of-state weeks paid. (See Figure 2.) The number of out-of-state weeks claimed for 1986 and 1987 comprised a smaller portion of total claims in those years as a result of steady increases — from 1980 on — in employment and in-state weeks claimed.

UI Data Helps Confirm the End of the Recession

During the more recent recession, covered employment reached its lowest level during the third quarter of 1987. Since that time, rising employment levels have been used to indicate the end of the recent recession. UI information has supported this assertion.

If the historic relationship between in-state weeks claimed and employment holds constant, the 1988-89 rise in UI weeks claimed (as shown in Figure 2) indicates a return to the more steady employment levels associated with the aforementioned 1st Pattern.

Conclusion

Analyses of unemployment insurance records point out several differences between the two recent Alaska recessions. The post-pipeline construction recession was characterized by a very high portion of unemployment benefits being mailed to out-of-state addresses. The more recent recession caused a significant rise in benefit weeks claimed, nearly all of which came from in-state claimants.

Industry breakouts of claimants show the more recent recession to be much broader based than the post-pipeline construction downturn. Nearly every industry exhibited significant increases in claims. This wasn't the case during the earlier recession. The construction industry accounted for a much larger share of the number of weeks paid during the post-pipeline construction downturn than during the more recent recession.

Finally, the recent rise in in-state weeks claimed, a development which was preceded by employment gains beginning in late 1987, concur with the early stages of steady employment growth. This strengthens assertions that Alaska's most recent recession is indeed over.

About the Author:

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