THE IMPACT OF THE MARIEL BOATLIFT ON THE MIAMI LABOR MARKET

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INTRODUCTION

One of the primary issues of immigration policy-makers is the scale to which the immigrants depress the labor market opportunities of less skilled locals. The Mariel Boatlift is a prime scenario to start our exploration on how immigrants affect the labor market and whether they depress or increase labor force. Also, do they acquire less skilled jobs from the natives causing unemployment for the locals in the region.

The story of The Mariel Boatlift dates to April 20, 1980, where the Castro regime announces that all Cubans wishing to emigrate to the U.S. are free to board boats at the port of Mariel west of Havana, launching the Mariel Boatlift. The first of 125,000 Cuban refugees from Mariel reached Florida the next day.

Extracting and using sample data from the Current Population Survey (CPS) to find out the change in wages, labor market, employment rates and changes in employment status in the years 1979 to 1985. We compare these three main topics- wages, labor market and employment changes in Miami with respect to other cities – *Atlanta, Houston, Los Angeles* and *Tampa-St. Petersburg*. These cities share similar characteristics with the city of Miami before the immigration.

BUILDING MODELS FOR THE INVESTIGATION OF CPS DATA

The models are broken down into cases for better understanding and for an organized data management.

The sample CPS data was filtered for several required fields-

- 1) **Race**_— White, Black, Hispanic and Cuban. (If we're comparing one group of immigrants then we will need a group of races that were previously present in our geographical view of study and how they were affected by the immigration).
- 2) Metropolitan Area Miami and '4 comparison cities'.(4 comparison cities include Atlanta, Houston, Los Angeles and Tampa-St. Petersburg).
- 3) Labor Force (in-labor or not in-labor) and Work status (part-time or full-time).
- 4) **Education** High School Graduate or a College Graduate.
- 5) Age between 16-61 (as this age group makes up for more than 65% of the population).
- 6) Wage.
- 7) Year We select Years 1979-1985 to examine the trends before and after immigration.
- Case 1- Comparison of Unemployment rates for Different races in Miami and 4 Comparison cities.
- Case 2- Log wages of non-Cubans in Miami by quartile, 1979-1985.
- <u>Case 3</u>- Linear regression model

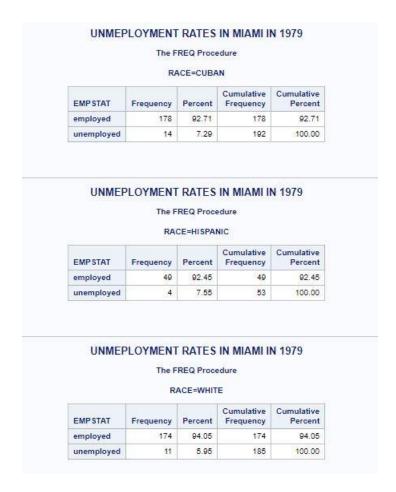
Target variable - Log(wage)

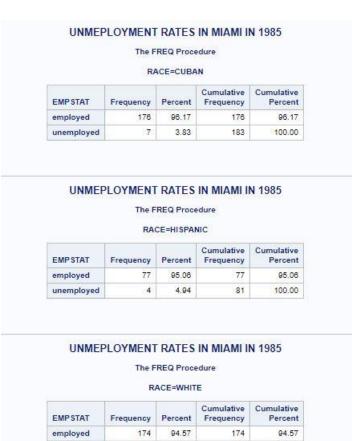
Chosen predictor variables - Education, marital status, sex, work status and employment status.

Case 4- Miami Labor Force for the years 1979 and 1980.

CASE 1

Unemployment Rates of Individuals Age 16—61 in Miami, 1979 and 1985.





For race=black

unemployed

EMPSTAT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
employed	61	95.31	61	95.31
unemploy	3	4.69	64	100.00

EMPSTAT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
employed	61	96.83	61	96.83
unemploy	2	3.17	63	100.00

5.43

184

100.00

10

Table 1: Employment as a percentage of total sample CPS data for Miami from 1979-1985

Exploring the CPS sample for Miami in the year 1979 and 1985, we can observe a decrease in unemployment rates. While there is no drastic decrease in unemployment for the whites and blacks already living there but we can see a slight decrease for the Cubans and Hispanics in Miami. From 7.29% to 3.83% for Cubans and 7.55% to 4.94% for the Hispanics.

Unemployment Rates of Individuals Age 16—61 in 4 Comparison Cities, 1979 and 1985.

UNEMPLOYMENT RATES FOR 4 COMPARISON CITIES IN 1979 The FREQ Procedure Cumulative Cumulative **EMPSTAT** Frequency Percent Frequency Percent employed 2265 94.65 2265 94.65 unemployed 128 5.35 2393 100.00

	The F	REQ Proce	edure		
VACUACIONES POR SANCO					
EMPSTAT	Frequency	Percent	Cumulative Frequency	Cumulative Percent	
mployed	2737	93.25	2737	93.25	
nemployed	198	6.75	2935	100.00	

Table 1: Employment as a percentage of total sample CPS data for 4 Comp Cities from 1979-1985

Following suit, the above table does not show the same results as we thought. The unemployment rates for the 4 Comparison cities have increased in the past few years. This insight can explain that the Labor force in Miami has increased and therefore harbor more jobs to the upcoming immigrants and thereby increasing employment rates. Another reason could also be that most of the immigrants were relatively high-skilled workers and were educated enough to be employed for the job.

CASE 2

LOG WAGES OF NON-CUBANS IN MIAMI BY QUARTILE,1979-1985

	YEAR=1979	
(212.2)		2000
1,000,000	sis Variable :	
Lower Quartile	Median	Upper Quartile
8.4118327	8.8818363	9.3926619
	YEAR=1980	
Analys	sis Variable :	lwage
Lower Quartile	Median	Upper Quartile
8,6656132	8.9871968	9.5468126
	YEAR=1981	
Analys	sis Variable :	lwage
Lower Quartile		Upper Quartile
8.5171932	9.1049799	9.6158055
Analys	sis Variable :	lwage
Lower Quartile	Median	Upper Quartile
8,6995147	9.2103404	9,6518107
	YEAR=1983	
Analys	sis Variable :	lwage
Lower Quartile	Median	Upper Quartile
8.6995147	9.2103404	9.6803440
	YEAR=1984	
Analys	YEAR=1984 sis Variable :	lwage
Analy:		lwage Upper Quartile
	sis Variable :	
Lower Quartile	Median 9.3926619	Upper Quartile
Lower Quartile 8.8296854	Median 9.3926619 YEAR=1985	Upper Quartile 9.8521943
Lower Quartile 8.8296854	Median 9.3926619	Upper Quartile 9.8521943

If the Mariel immigration reduced the wages of less-skilled natives, one would expect to observe a decline in the wage of workers in the lowest skill quartile, at least relative to workers in the upper quartile.

The actual averages show no evidence of this effect. Apart from the temporary increase in relative wages of workers in the lowest quartile between 1979 and 1981, the distribution of non-Cubans' wages in the Miami labor market was remarkably stable between 1979 and 1985.

Table 3: Log of wages for Non-Cubans in Miami by Quartile

Taken together with the data in Table 1, these data provide little evidence of a negative effect of the Mariel influx on the earnings of natives.

CASE 3

Linear regression model

Target variable - Log(wage)

Fit Statistics

Chosen predictor variables - Education, marital status, sex and work status.

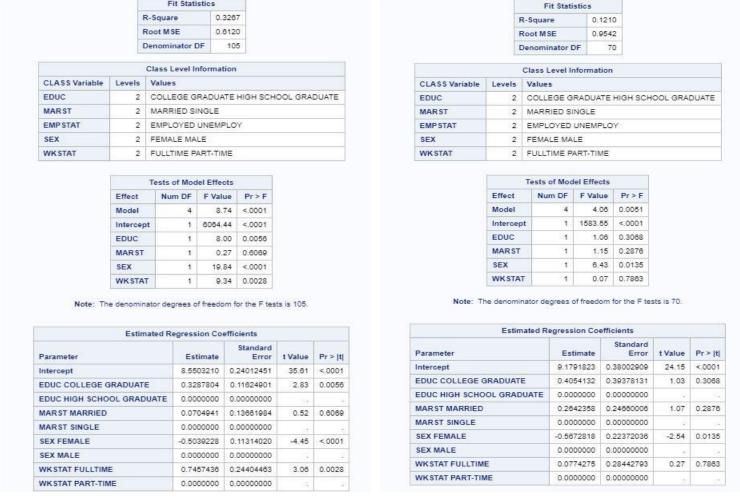


Table 4: Linear regression model for log(wage) for the year 1979(left) and 1985(right) for Cubans living in Miami

According to our regression model, for Cubans living Miami –

- 1) College graduates earn about 8% more than high school graduates in 1985 than in 1979. The Mariel Influx had many individuals who were skilled and educated and that resulted in an increase in wages for the respective college graduates.
- 2) Married Cubans now earn 20% more than Cubans who are single in 1979.
- 3) Females now earn 6% lesser wages than males in 1985.
- 4) Individuals who work Full time now earn only 7.7% more than part time which was not the case in 1979 where Full-timers earned more than 74% than part-timers. Which goes to show that there has been economical development and many more jobs were created due to the immigration so that now part timers only earn a little lesser than full-timers. This in turn increases the labor force of Miami.

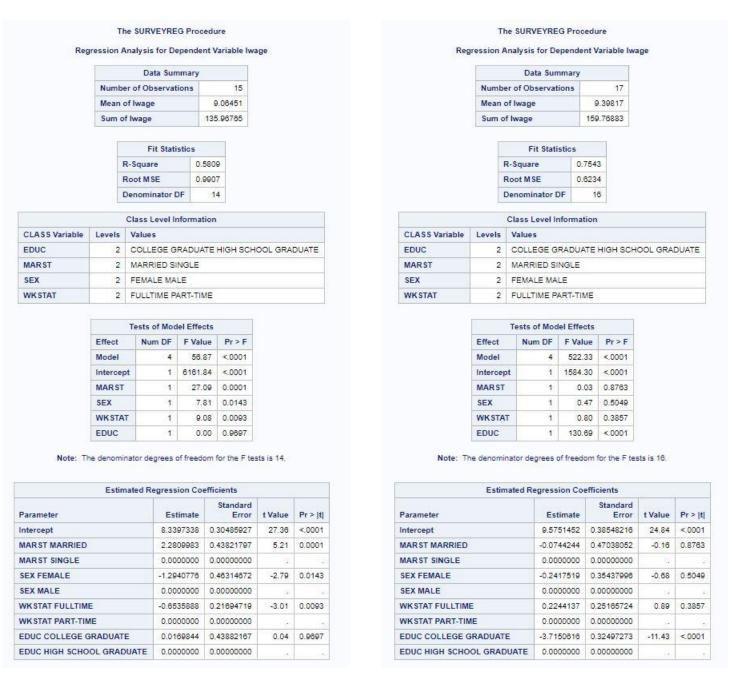


Table 4: Linear regression model for log(wage) for the year 1979(left) and 1985(right) for Cubans living in 4 Comparison Cities

Due to the insufficiency of data and heavy filtering the sample CPS data, we can only look at the work status variable between 1979 and 1985.

During 1979, Cubans living in other parts of US, individuals working part-time earned more than full-time, the reason could be that there were comparably more number of part-time workers than full-time. This could also mean that the Cubans living in other parts of US are less-educated and less-skilled. In 1985, this scenario changed and Full-timers started earning more than part-timers and then wages were 22% more than part timers.

CASE 4

Miami Labor Force for the years 1979 and 1980.

The FREQ Procedure						
LABFORCE	Frequency	Percent	Cumulative Frequency	Cumulative Percen		
1	195	29.19	195	29.19		
2	473	70.81	668	100.00		

			The FREQ Procedure						
LABFORCE	Frequency	Percent	Cumulative Frequency	Cumulative					
1	148	25.35	148	25.35					
2	430	74.65	576	100.00					

Here LABFORCE 2=in-labor and 1=not in-labor

The above tables represent the Miami labor force for the years 1979 and 1980. There is a 4% increase in the labor force after the Mariel immigration. Therefore, it is safe to assume there was an increase in the labor force due to the Mariel influx.

CONCLUSION

The decrease in unemployment rates in Miami and compared to other cities, the stable trend of wages based on skill for non-Cubans residing in Miami, the increase in Labor force by 4% in Miami and the steady changes in income for Cubans in Miami based on education and work status.

The Mariel immigrants increased the Miami labor force by 4%, and the percentage increase in labor supply to less-skilled occupations and industries was even greater because most of the immigrants were relatively unskilled. Nevertheless, the Mariel influx appears to have had virtually no effect on the wages or unemployment rates of less-skilled workers, even among Cubans who had immigrated earlier.

```
Codes Used in SAS-
Case1-
**unemployment rates**;
title "UNEMPLOYMENT RATES FOR 4 COMPARISON CITIES IN 1979";
proc freq data=work.import;
tables empstat;
where YEAR = 1979;
run;
proc sort data=WORK.IMPORT3 out=Work.SortTempTableSorted;
       by HISPAN;
run;
proc freq data=Work.SortTempTableSorted;
       tables EMPSTAT;
       by HISPAN;
       WHERE YEAR=1979;
run;
title "UNEMPLOYMENT RATES FOR MIAMI IN 1979";
proc freq data=work.import;
tables empstat;
where YEAR = 1979;
run;
proc sort data=WORK.IMPORT3 out=Work.SortTempTableSorted;
       by HISPAN;
run;
```

```
proc freq data=Work.SortTempTableSorted;
       tables EMPSTAT;
       by HISPAN;
       WHERE YEAR=1979;
run;
Case 2-
TITLE "LOG WAGES OF NON CUBANS IN MIAMI BY QUARTILE,1979-1985";
data work.import1;
set import;
lwage= log(INCWAGE);
proc means data=work.import1 q1 median q3;
var lwage;
by year;
run;
Case 3-
**Regression Model-**
data work.import;
set import;
lwage= log(INCWAGE);
run;
**FOR CUBANS LIVING IN MIAMI**
proc surveyreg data=work.import;
class EDUCNEW MARITALSTATUS EMPSTATUS SEXNEW;
model lwage= EDUCNEW MARITALSTATUS EMPSTATUS SEXNEW / solution;
where YEAR=1979;
run;
proc surveyreg data=work.import;
class EDUCNEW MARITALSTATUS EMPSTATUS SEXNEW;
model lwage= EDUCNEW MARITALSTATUS EMPSTATUS SEXNEW / solution;
```

```
where YEAR=1985;
run;
**FOR CUBANS LIVING IN REST OF USA**
proc surveyreg data=work.import4;
class EDUCNEW MARITALSTATUS EMPSTATUS SEXNEW;
model lwage= EDUCNEW MARITALSTATUS EMPSTATUS SEXNEW / solution;
where YEAR=1979;
run;
proc surveyreg data=work.import4;
class EDUCNEW MARITALSTATUS EMPSTATUS SEXNEW;
model lwage= EDUCNEW MARITALSTATUS EMPSTATUS SEXNEW / solution;
where YEAR=1985;
run;
Case 4-
**calculate the laborforce**;
title "MIAMI LABOR FORCE FOR THE YEAR 1979";
proc freq data=work.import5;
tables labforce;
where YEAR = 1979;
run;
title "MIAMI LABOR FORCE FOR THE YEAR 1980";
proc freq data=work.import5;
tables labforce;
where YEAR = 1980;
run;
```

References-

Castro announces Mariel Boatlift. (n.d.). Retrieved April 16, 2018, from https://www.history.com/this-day-in-history/castro-announces-mariel-boatlift

Card, D. (1989). The Impact of the Mariel Boatlift on the Miami Labor Market. doi:10.3386/w3069