



# Cyrenaic economic evolution during fascist period (1922-1939)

*The impact of Italian repression against Indigenous on local economy*

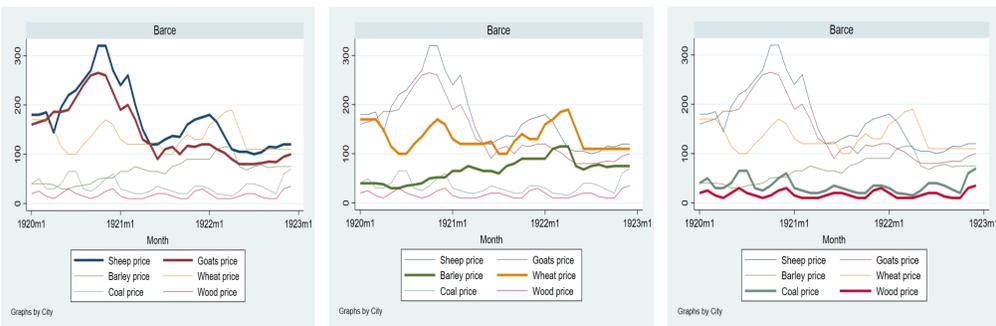
Daide Bernardi

Ph.D. Program in Economics

davide.bernardi@univr.it

## Goal of the research

This study wants investigate the impact of Italian dominion on Libyan economy during the Colonialism period between 1911 and 1940. In particular we want understand if the repression in Cyrenaica in years between 1930-33, with the creation of concentration camps, caused a deconstruction of local economy. To make this, we extracted data from a paper written in the *Giornale degli Economisti* in 1923 where data of prices of most important Indigenous products were examined in the three years between 1920 and 1922 in the town of Barce. The author of the article showed the strict correlation between products of different categories, in particular of agriculture and breeding. We took the same products but in a different period (1926-1939, so until the World War II threshold) and for three cities (the same Barce, Benghazi, Derna). Years are split in four intervals (1926-1930; 1930-1934; 1934-early 1938; 1938-June 1939). These temporal milestones derive from historical events (beginning of repression, end of repression, massive Italian colonization in 1938-1939).



Graphs 1;2;3: Nominal prices in Barce market between 1920 and 1922

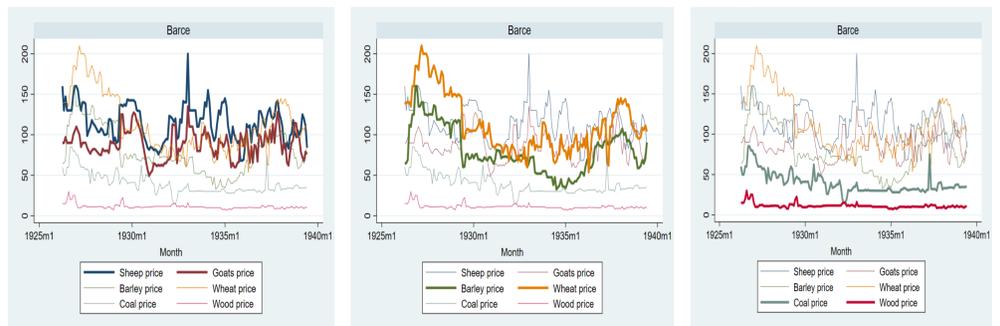
Data are in Lire for livestock head and for quintals.

## Data collection

The data scarcity is the greatest difficulty faced in the research. Unfortunately, the data sources are spread in many locations and they often differ because they were published by different political institution. However, using a slight interpolation (with an autocorrelation method) and carefully comparing data, we collected a fair number of observations and variables for the period 1926-1939. In particular we consider, over than prices, also quantities sold, climate data, wages, trading, population and monetary data.

Data were collected in reviews by Ministry of Colonies or in some official publications by Chamber of Commerce of Benghazi or by Government of Libya.

Here, we report briefly prices data of the products taken in exam, which are the core of the study, referring only to Barce in the period 1926-1939. We can notice the peak of prices of sheep and goats between 1930 and 1935. It coincides with a drop both of number of livestock and Indigenous population in the colony during the repression.



Graphs 4; 5; 6: Nominal prices in Barce market between 1926 and 1939

Data are in Lire for livestock head and for quintals.

## Data analysis

Being our research still in development, we now expose a basic data analysis, the core of whole study. Our first steps focused on the relationship between two primary Indigenous goods: barley and sheep. The article by Pompeo Gorini of 1923 had already investigated this correlation. As already told, we made the same thing for a different period (1926-1939), which is split in other four intervals. In the last version of the work, we will add also other variables to have a clearer picture of the evolution of the Cyrenaic Indigenous economy. The formula of our robust OLS regression is:

$$\log \text{Barleyprice} = \beta_0 + \beta_1 \log \text{Sheepprice} + \mu$$

### OLS OF LOG BARLEY PRICE

|                | (1)<br>Base model 1   | (2)<br>Base model 2  |
|----------------|-----------------------|----------------------|
| logSheepprice  | -0.561****<br>(0.113) | 0.150<br>(0.140)     |
| _cons          | 6.994****<br>(0.561)  | 3.613****<br>(0.658) |
| N              | 36                    | 159                  |
| R <sup>2</sup> | 0.265                 | 0.007                |

Standard errors in parentheses

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01, \*\*\*\* p < 0.001

Table 1: OLS regression with barley price and sheep price in Barce

Column 1: 01/1920-12/1922. Column 2: 04/1926-06/1939.

We decided to use the natural logarithm of nominal prices to have an indication about the elasticity relationship between the two variables.

In the first case (Table 1) we considered data of Barce town in the period 1920-1922 and 1926-1939. As we can see, in the first case there was a negative strong significant correlation between prices of the two products, with an R<sup>2</sup> of 0.265. In the following interval, the correlation became positive non significant with an R<sup>2</sup> of only 0.007.

### OLS OF LOG BARLEY PRICE

|                | (1)<br>Base model 3  | (2)<br>Base model 4  | (3)<br>Base model 5 | (4)<br>Base model 6  |
|----------------|----------------------|----------------------|---------------------|----------------------|
| logSheepprice  | -0.571**<br>(0.231)  | -0.277**<br>(0.111)  | 0.266<br>(0.285)    | -0.796***<br>(0.224) |
| _cons          | 7.387****<br>(1.083) | 5.439****<br>(0.523) | 2.929**<br>(1.317)  | 7.995****<br>(1.027) |
| N              | 50                   | 51                   | 44                  | 14                   |
| R <sup>2</sup> | 0.109                | 0.075                | 0.019               | 0.335                |

Standard errors in parentheses

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01, \*\*\*\* p < 0.001

Table 2: OLS regression with barley price and sheep price in Barce

Column 1: 04/1926-06/1930. Column 2: 06/1930-09/1934.

Column 3: 09/1934-05/1938. Column 4: 05/1938-06/1939.

In Table 2 we can see the results of the same regression in the four intervals. Until 1934 the correlation was still positive and significant at 5%. However between 1930 and 1934 this negative correlation started to decrease and after 1934 became positive and non-significant. Finally, in last year analysed, it became again negative. If we don't include the last regression, which has a little number of observations, we can see that the highest R<sup>2</sup> is in the first model although we find the lowest standard error in the second model.

## Discussion

These first regressions gave us some material to think with.

- We did still not know if it is the most important cause, but we certainly can say that the dynamics of local economy, which showed a strict negative correlation between agriculture products and breeding products before the Fascist Regime, and which are represented by the town of Barce in the Cyrenaic hinterland, were changed in the period between 1920-22 and 1926-39. All the four considered dates result to be significant. Doing a Wald test we refuse the null hypothesis of no structural break at 0.1% level in June 1930, at 5% level in September 1934 and finally at 0.1% in May 1938.
- The lack, until now, of data about prices after June 1939 limits for now the possibility of understanding if in last months of Italian dominion there was a return, as it seems, to normality in the relationship between local breeding and agriculture products. Moreover, there are also products, like coal and wood, to observe. First analysis show that also their prices trends were radically modified during Italian presence, as a probable symptom of a urbanization phenomenon.

In next steps we will try to understand which were the most important factors which influenced the prices trend and how much of these are linked with the Italian presence in the Colony, starting with climate, international trade and transports.

## References

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## Take Home Message

Investigate the evolution of Libyan economy during the fascist period and the impact of the Italian domination can be very useful also to start to understand Libyan society and economy after WWII. Libya is crucial country in the Mediterranean region and we cannot ignore its history.