# Quantitative Macroeconomics - PS II

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## 1 Secular behavior of Labor Share

#### 1.1 US

Given the amount of data available, the Labor Share of US is derived as follows: first of all I computed the fraction of PI (Proprietors' income) which can be considered as capital, as:

$$\theta = \frac{CE}{Y - PI} \tag{1}$$

where CE is the compensation of employees and Y the national income and then I computed the labor share as:

$$LS = \frac{\theta * PI + CE}{Y} \tag{2}$$

The evolution of LS in U.S. is reported in figure 1.

In order to derive the LS for the corporate sector (cs) I took the national income as denominator and the compensation of employees of Corporate sector as nominator:

$$LS^{cs} = \frac{CE^{cs}}{Y} \tag{3}$$

## 1.2 Italy

Since data about PI are not available for Italy, the LS is computed only as  $LS = \frac{CE}{Y}$  and the result is in figure 3. The Labor share of Corporate sector (figure 4) is computed as in equation 3.

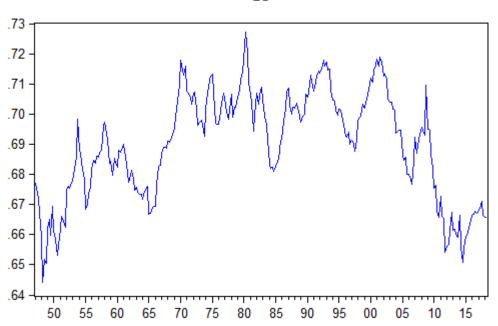


Figure 1: Labor Share U.S. 1947-2018 quarterly data. Source: NIPA - BEA

#### 1.3 Comments

Given the differences in the datasets considered, the comments are only about the dynamic of the series and not about their levels.

- Labor share of US and Italy have decreased during the Great recession;
- The peak in the LS was during end of 70s and begin of 80s for both Italy and U.S;
- In both countries we observe a sort of inverted U path of the labor share from the 60s;
- The dynamic of LS for Italy and in particular the rising that we observe during 2000s is consistent with other findings;<sup>1</sup>;
- Same path can be observed for Labor Share of C.S. for both countriess: pick during 80s, decreasing trend until 2000 and then increase;

<sup>&</sup>lt;sup>1</sup>Roberto Torrini, 2016. "Labour, profit and housing rent shares in Italian GDP: long-run trends and recent patterns", Bank of Italy Working Paper

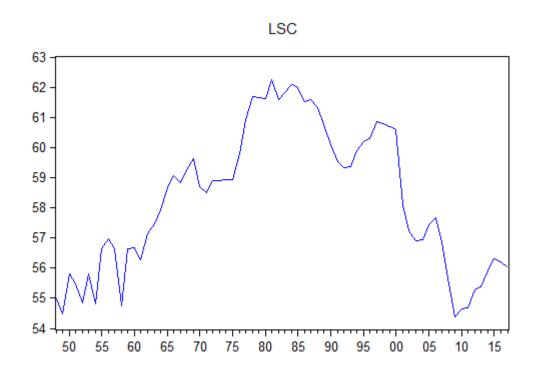


Figure 2: Labor Share for Corporate Sector U.S. 1948-2017 annual data. Source: NIPA - BEA

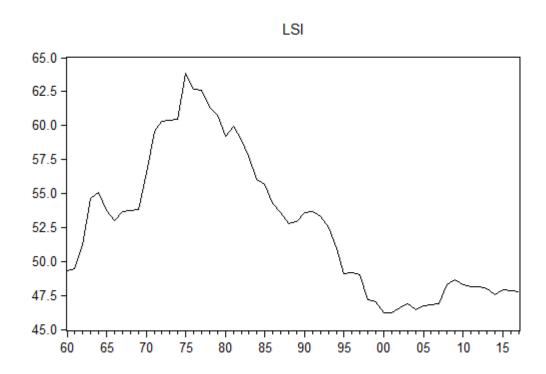


Figure 3: Labor share for Italy 1960-2017 annual data. Source: Eurostat

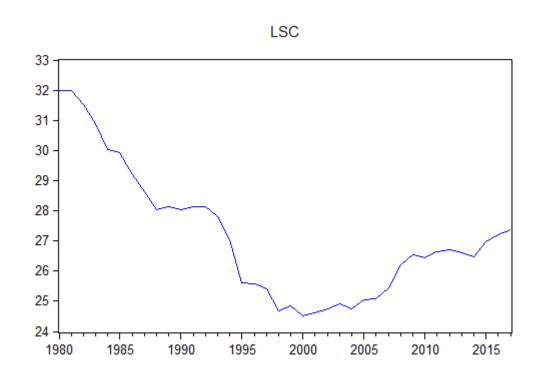


Figure 4: Labor share for Corporate sector Italy 1980-2017 annual data. Source: Ameco  $\,$