

Quantitative Macroeconomics - PS II

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October 4, 2018

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:

$$\theta = \frac{CE}{GNI - PI} \quad (1)$$

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

$$LS = \frac{\theta * PI + CE}{GNI} \quad (2)$$

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 gross national income as denominator and the compensation of employees of Corporate sector as nominator:

$$LS^{cs} = \frac{CE^{cs}}{GNI} \quad (3)$$

We can also compute the labor share without taking into account the contribution of Proprietors Income. Then just as the ratio between

$$LS = \frac{CE}{GNI} \quad (4)$$

Now the same computation is repeated using the Net National income instead the Gross National Income.

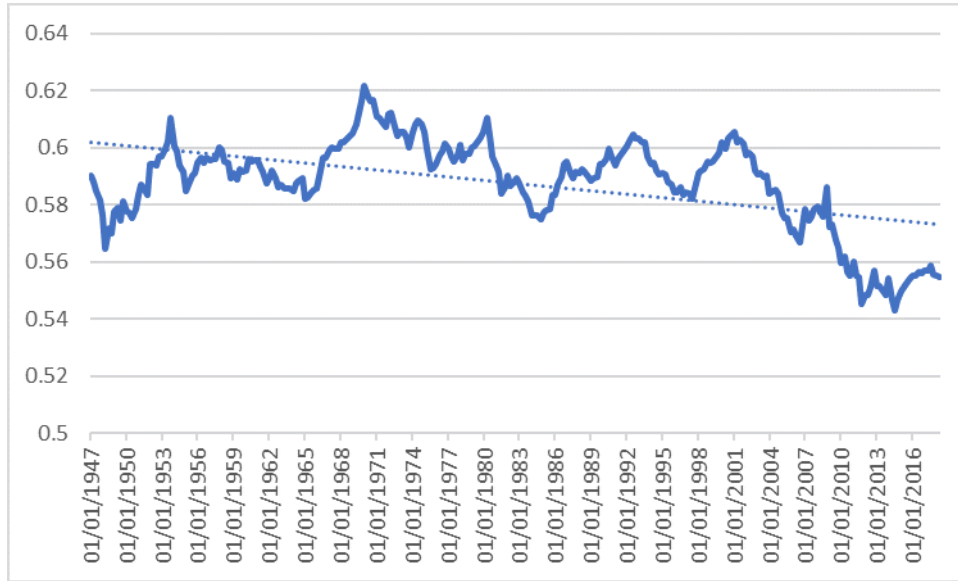


Figure 1: Labor Share U.S. 1947-2018 quarterly data. Source: NIPA - BEA

1.2 Italy

Since data about PI are not available for Italy, the LS is computed only as $LS = \frac{CE}{GNI}$. The Labor share of Corporate sector is computed as in equation 3. The Net Labor share is computed using Net Income instead of Gross National Income

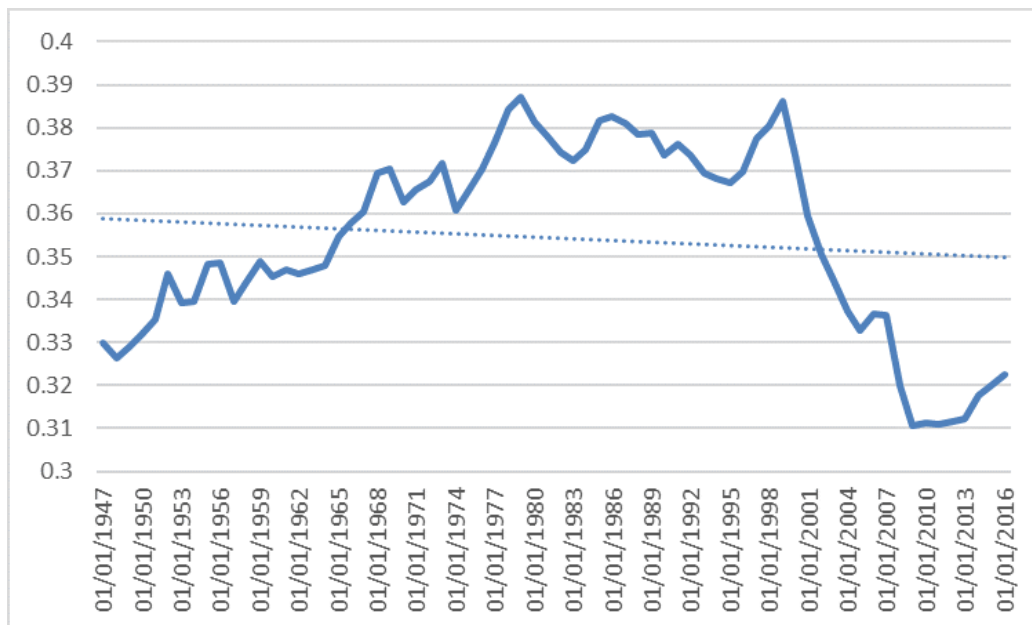


Figure 2: Labor Share for Corporate Sector U.S. 1948-2017 annual data. Source: NIPA - BEA

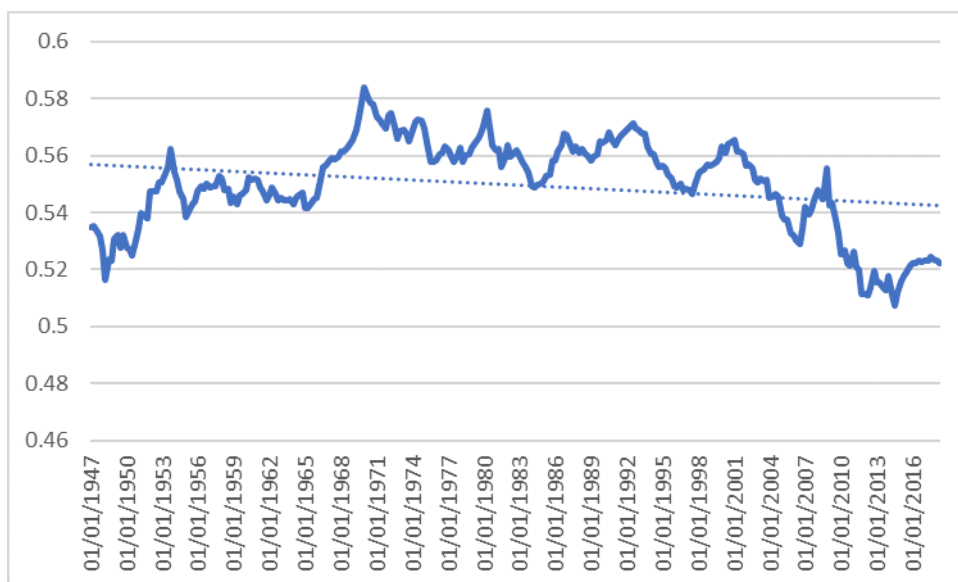


Figure 3: Naive Labor Share U.S. 1947-2018 quarterly data. Source: NIPA - BEA

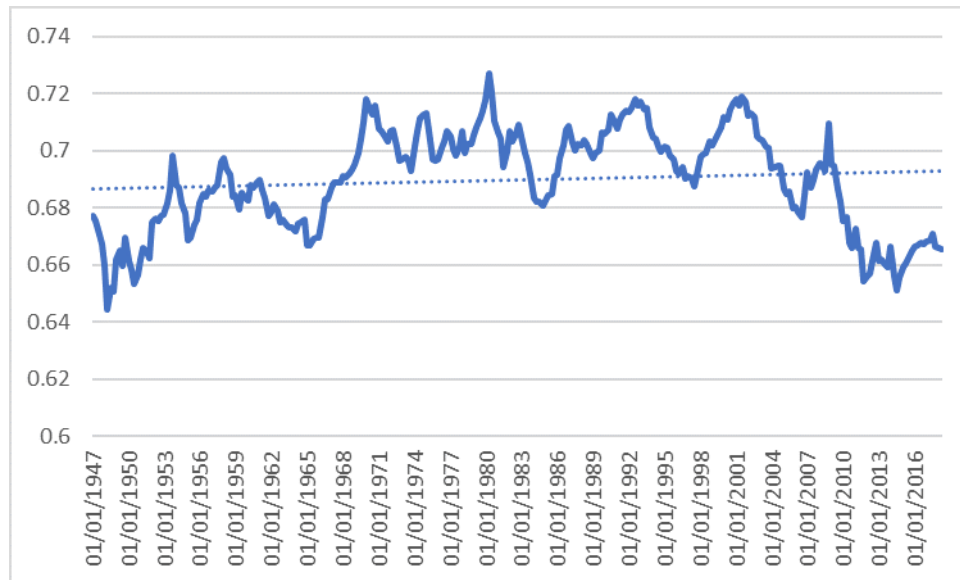


Figure 4: Net Labor Share U.S. 1947-2018 quarterly data. Source: NIPA - BEA

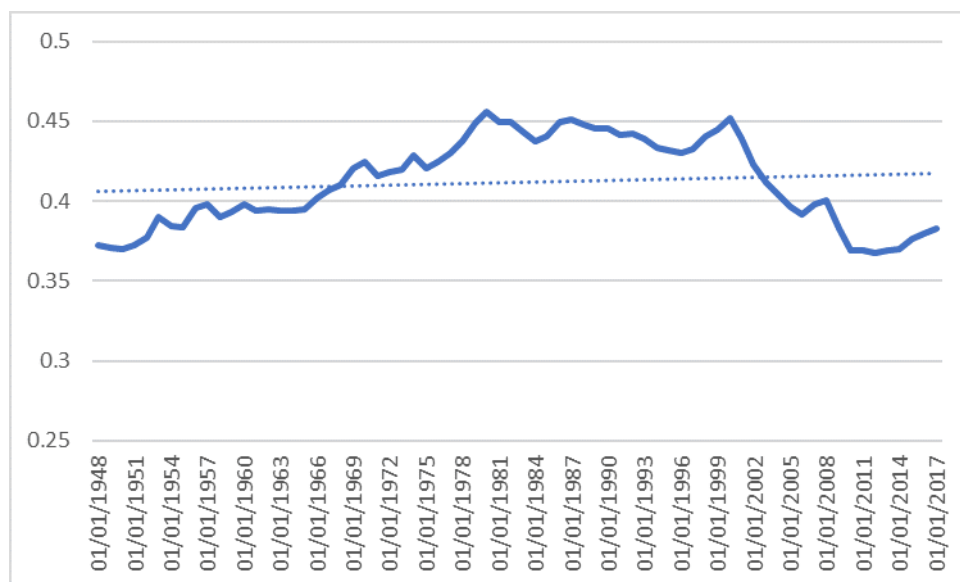


Figure 5: Net Labor Share for C.S. U.S. 1948-2017 annual data. Source: NIPA - BEA

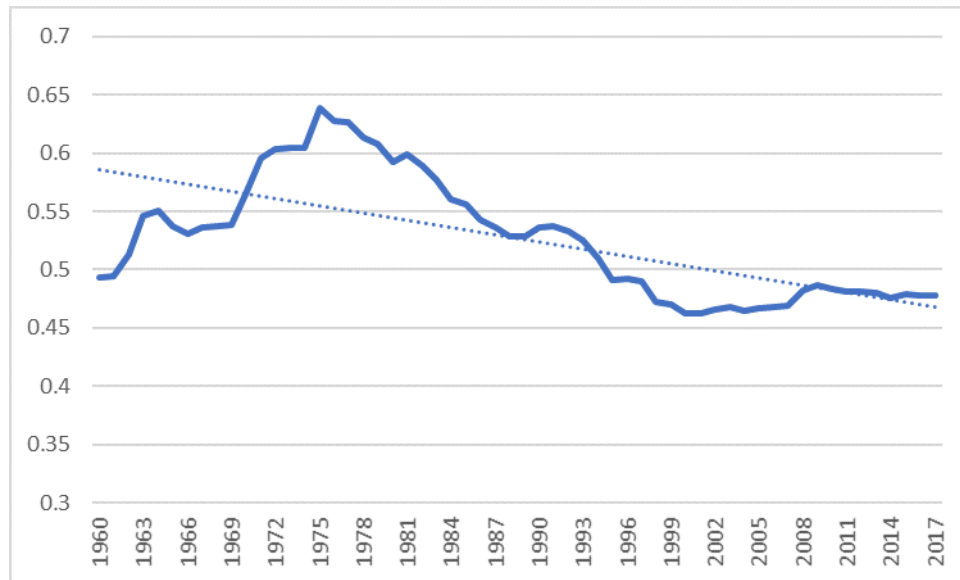


Figure 6: Labor share for Italy 1960-2017 annual data. Source: Eurostat

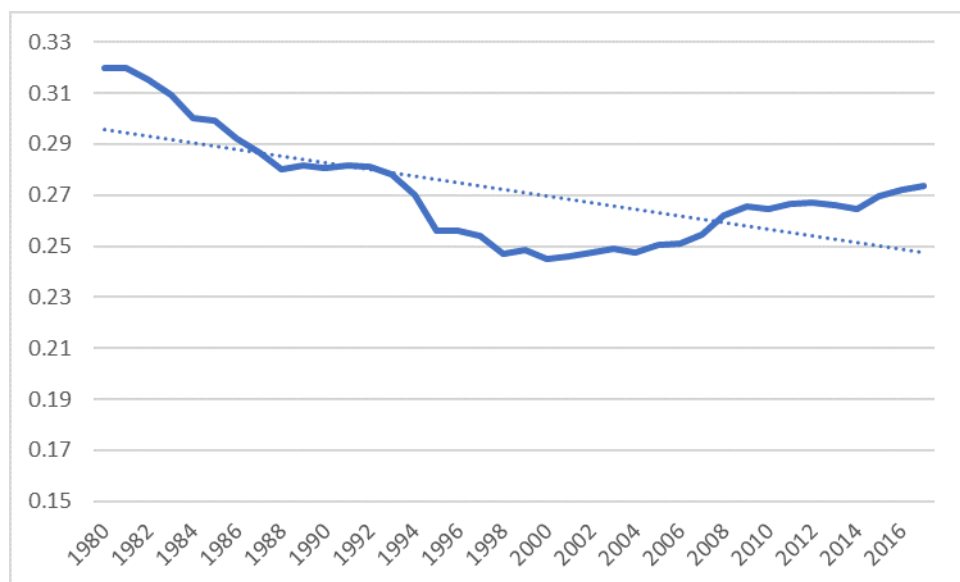


Figure 7: Labor share for Corporate sector Italy 1980-2017 annual data. Source: Ameco

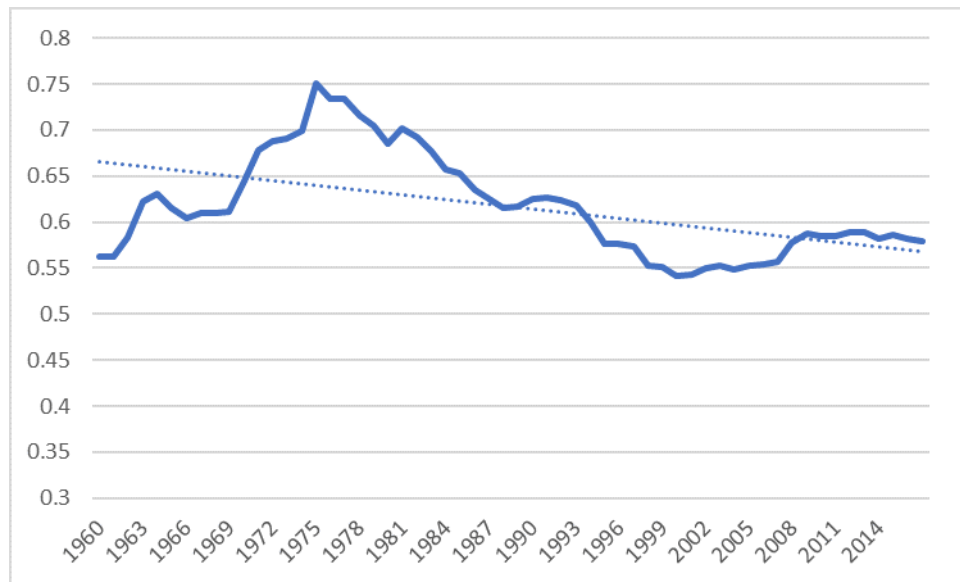


Figure 8: Net Labor share for Italy 1960-2017 annual data. Source: Ameco

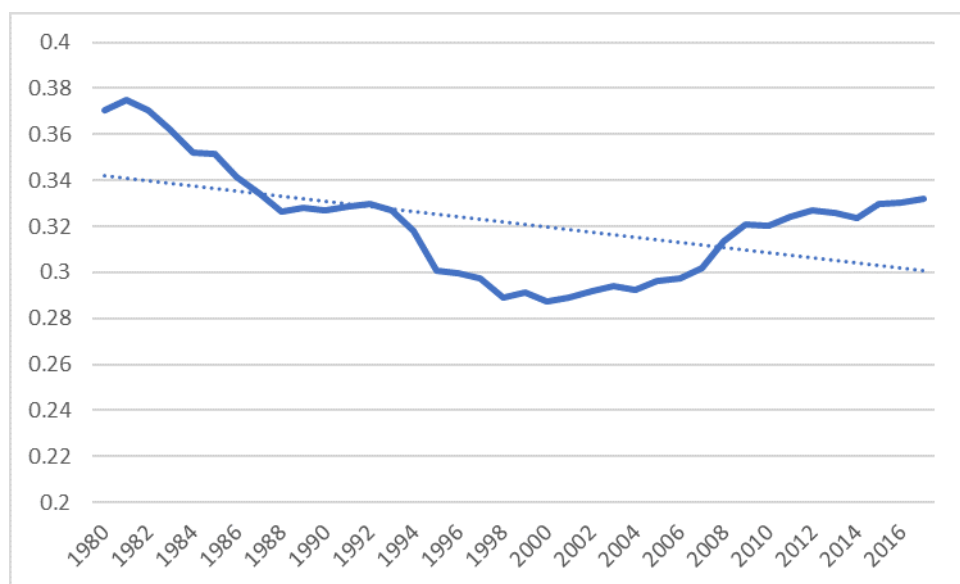


Figure 9: Net Labor share for C.S. Italy 1980-2017 annual data. Source: Ameco

2 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 a negative trend;
- The peak in the LS was during 70s 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;¹;
- Same path can be observed for Labor Share of C.S. for both countries: pick during 80s, decreasing trend until 2000 and then slow recover, this evidence is consistent with the literature²;
- Net LS looks less variable in U.S. than in Italy and it has a little increasing trend. Some authors argue that divergent evolution of Gross LS and Net LS can be explained by a decline in real interest rate ³;

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

²Karabarbounis and Neiman (2013) and Koh, Santaeul'alia-Llopis and Zheng (2015)

³Karabarbounis and Neiman (2014)