

Comments on "Has the Labour Share Declined? It Depends"

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Background: Discussion on the declining labor share

- Backgrounds of the recent interest in labor share (LS).
 - ① Growing income inequality among individuals.
 - 2 Co-existence of high profits (and savings) in the corporate sector and sluggish growth of wages.
- Recent researches generally indicate declining labor share in major advanced countries during the last two decades and investigate the causes of the decline (e.g., Elsby *et al.*, 2010; Karabarbounis and Neiman, 2014).
- Potential causes of the declining LS suggested by recent researches.
 - ① <u>Changing industrial structure</u> (compositional effects)
 - 2 <u>Biased technical progress</u>
 - 3 <u>Globalization</u> (e.g., international trade, foreign ownership)
 - ④ <u>Strengthened market competition</u> (e.g., deregulation, privatization)
 - <u>Changes in labor market institutions</u> (e.g., employment protection, non-regular workers, labor union)

Focus of this study

- Past studies generally employ production-based LS measure and find declining trend of labor share. However, this study casts doubt on the declining trend itself by <u>distinguishing the production-based and</u> <u>income-based LS measures</u>.
- This study, using Korean data, explicitly analyze the effects of income from <u>owner-occupied housing</u> (imputed rents) and <u>land</u>.
 ⇒Relevant to this workshop

Data: aggregated National Accounts (NA) data: ①22 (23, 24) OECD countries (1995-2014), ②Korean data (1970-2015, including B/S).

Production- and income-based labor shares

1 Production-based LS (LS_P)

 $LS_{P} = [wL \cdot (1 + \tau_{P})] / (GVA - \frac{GOS_{OOH}}{OOH})$

- ✓ Imputed service of owner-occupied dwellings (GOS_{OOH}) is not included in the denominator.
- ✓ τ_P (= $T_{PRN}/(GVA-GOS_{OOH} T_{PRN})$): adjustment of "other net taxes on production."

2Income-based LS (LS_D)

- $LS_{D} = (wL)/(GVA + T_{PR} D)$
- \checkmark Depreciation (D) is excluded from the denominator.
- ✓ Net taxes on product (T_{PR}) is included in the denominator.

Major findings

- Production-based LS has declined slightly in the last two decades (on average, ▲1% point). Income-based LS has essentially unchanged in the same period. The finding is different from a common belief.
- 2. The main cause of the different trends between production-based and incomebased LS is the <u>inclusion/exclusion of depreciation</u>. In addition, the inclusion/exclusion of <u>imputed service of owner-occupied dwellings</u> has nonnegligible impact in some countries.
- 3. According to the analysis for Korea, changes in land price significantly affect the cyclical fluctuations of the LS.
- When <u>land (Z)</u> is explicitly introduced in production function, 1) <u>declining</u> price of investment goods and 2) <u>the elasticity of substitution (σ) between</u> labor (L) and capital (K) below unity are compatible with the declining labor share.
- 5. The allocation of income of the self-employed between labor and capital affects the measured LS, although this is a well-known fact (e.g., Krueger, 1999).
- 6. It is interesting to see that <u>Japan's LS is relatively high</u> among OECD countries (5th in production-based LS and 2nd highest in income-based LS).

- This paper conceptually and empirically makes clear that it is misleading to discuss the relationship between production-based LS measure and income inequality (or economic welfare). In this context, use of income-based LS measure is preferable.
- The latter half of this paper implicitly supports the argument of declining price of investment goods as a major cause of the declining (production-based) LS.
- (Not necessarily from this study) Non-economists sometimes argue the stagnant wage growth to be a cause of the declining labor share. This argument is inaccurate. The effect of wages on labor share depends on the elasticity of substitution between labor and capital (standard microeconomics).

- 1. The results of this study are very interesting.
- 2. The empirical analysis in the former half of the paper indicates that the LS in OECD countries has not substantially declined. On the other hand, the theoretical analysis on the elasticity of substitution between L and K in the latter half of the paper is based on the "stylized facts" (declining labor share). These two analyses in a single paper seem to be rather puzzling. If I were the author, I will write two separate papers.
- 3. Some very minor comments
 - ✓ (p. 8, p. 29) The authors should refer to the empirical literature indicating the elasticity to be below unity (e.g., Chirinko, 2008).
 - ✓ "23 countries" (p. 15) ⇒There are 24 countries in Figure 2.
 - ✓ Notations should be clearly explained in the text (e.g., ρ (p.22), m (p.25)).

Issues not covered in this study

- Potential impacts of unmeasured components in the current National Accounts on the labor share.
 - ✓ Introduction of the 08SNA (e.g., R&D investments).
 - \checkmark Intangible assets other than R&D.
 - ✓ Household production.
 - Impacts of compositional changes on the labor share.
 - \checkmark Change in industrial structure.
 - \checkmark Reallocation of firms within industries. (micro-level LS)

Some findings from Japanese firm-level data (Distribution of Labor Share)



Labor Share Change at the Firm-level

• Movements of the firm-level labor share is different by industry.



Labor Share and Firm Growth

• High LS firms grow faster than low LS firms in Japan, suggesting that compositional change has not contributed to lowering the LS.

