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FUNCTIONAL INCOME DISTRIBUTION, ECONOMIC GROWTH AND TRANSFORMATION IN CHINA

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Abstract

Based on the Bhaduri-Marglin model, this paper establishes an economic model concerning surplus labor supply and credit constraints in Chinese economy to analyze the relationship between the change of the functional income, the economic growth and the transformation in China. Credit constraints have a significant effect on the relationship of the functional income distribution and economic growth. When an economy grows with credit constraints, such as China, it could change from a wage-led growth regime in classical Bhaduri-Marglin models to a profit-led growth regime in our model, and vice versa. Empirical estimation shows that if labor share improves by 1 percent, private consumption will improve by 0.59 percent and it does not have negative effect on China's economic growth. As a result, if the government could control the opportunity and strength of the economic reform policies which concern functional income distribution, private consumption and investment effectively, China's economy could transfer to a consumption-led growth path smoothly.

Key words: functional income distribution, economic transformation, consumption-led growth

1. INTRODUCTION

During the past 30 years, China's economy has kept a growth rate of 9.9% annually, which creates a "China's economy miracle". However, the "Only GDP" growth mode and Heavy Industry Oriented development policy lead to the decreasing of the labor share in functional income distribution since the mid-1990s under current income distribution system. And the labor share has dropped to 47% by 2011, which is significantly lower than the average level of world major economies during the same period. The deterioration of the functional distribution would not only affect the economic growth in the long period, but also intensify the gap between the rich and poor. So it's important to explore the effect of increasing the labor share in functional income distribution on economic growth and transformation, especially for policy makers who want to lead Chinese economic growth to a consumption-led path.

Most recent research on the relation between functional income distribution and economic growth is based Bhaduri-Marglin model which is proposed in 1990. In this model the increase of labor share will expand private consumption as a result of the marginal propensity to consume of wage being higher than that of the profit, which will also has a negative effect on investment and net export demand via decreasing the international competitiveness of domestic products. As a result, the influence of the change of the labor in functional income distribution on total demand could be attributed to an empirical problem. For example, Hein & Vogel (2008), Stockhammer et al. (2009), Onaran et al. (2011), Bowles (2013) etc., have studied the economic growth mode empirically. If the increasing of labor share has a positive effect on total demand, then the economic growth is wage-led, otherwise, it's profit-led.

Based on the Bhaduri-Marglin model, this paper establishes an economic model concerning surplus labor supply and credit constraints in Chinese economy to analyze the relationship between the change of the functional income, and the economic growth and transformation in China. Our model could explain the problem of the labor share doesn't have significant effect on investment, which also enriches the connotation of the growth mode in Bhaduri-Marglin model. On this basis, we analyze how would the change of labor share affect Chinese short-term growth and transformation and offer some suggestions for building a long-term private consumption growth mechanism in China.

2. THE CHANG OF FUNCTIONAL INCOME DISTRIBUTION IN CHINA

Before analyze the relationship between functional distribution, economic growth and transformation, we summarize some facts of the change of functional income distribution in China based on perspective of sectors. Generally speaking, the income of the household sector corresponds to the wage income in the functional income distribution, the income of the business

enterprise sector corresponds to the capital income and the income of the government corresponds to the total tax.

Table 1 shows the change of household sector, business enterprise sector and government sector in functional income distribution during 1992-2011. Specifically, during 1992-2000 both the primary distribution and the redistribution are conducive to the business enterprise sector. During the nine years, the proportion of the business enterprise sector rose by 0.66-pecentage-point in the primary distribution and nearly 4-pecentage-point in redistribution. The proportion of the government sector declined by 2-pecentage-point in the redistribution while the household rose a little in the primary distribution and declined a little in the redistribution. As a result, the income distribution changed to a situation which is conducive to the business enterprise sector and is bad for the household sector.

During 2000-2008, the proportion of the business enterprise sector in the primary distribution rose by 6.89-pecentage-point again, the proportion of the household sector declined by 8.49-pecentage-point and the proportion of the government rose a little. In the redistribution, the proportion of the business enterprise sector fell by 2-pecentage-point, the proportion of the government sector rose by nearly 3-pecentage-point and the proportion of the household sector fell by 1-pecentage-point. So during this period, the income distribution changed to a situation which is conducive to the business enterprise sector and the government sector.

Table 1

The change of income distribution in China

Period	Primary distribution			Redistribution		
	Business enterprise Sector	Government sector	Household Sectr	Business enterprise Sector	Government sector	Household Sectr
1992-2000	0.66%	-2.40%	1.74%	4.61%	-4.43%	-0.18%
2000-2008	6.89%	1.60%	-8.49%	4.81%	4.45%	-9.26%
2008-2011	-2.66%	0.65%	2.01%	-2.71%	0.21%	2.50%
Total	4.89%	-0.15%	-4.74%	6.70%	0.23%	-6.93%

Source: China Statistical Yearbook

During 2008-2011, the proportion of the business enterprise sector in the primary distribution fell a little, the household sector rose by 2-pecentage-point and the government sector rose a little. In the redistribution, the proportion of the business enterprise sector and the government sector fell a little while the

household sector rose by 0.5-pecentage-point. So during this period, the income distribution changed to a situation which is conducive to the household sector.

3. THE THEORETICAL MODEL

The total domestic demand (y) consists of private consumption (c), government consumption (g), investment (i), export (x) and imported (m),

$$y = c + g + i + (x - m) \tag{1}$$

Suppose the tax rate is τ, the labor share in functional income distribution is Ω, then private consumption could be treated as a function of wage income Ωy and profit income $(1-\Omega)y$. The marginal propensity to consume (MPC) of them are β_w and β_π, $0 < \beta_\pi < \beta_w < 1$. So the private consumption could be written as

$$c = \beta_w(1-\tau)\Omega y + \beta_\pi(1-\tau)(1-\Omega)y = [\beta_w\Omega + \beta_\pi(1-\Omega)] *(1-\tau)y \tag{2}$$

The MPC of government is β_g, so

$$g = \beta_g(1-\tau)y \tag{3}$$

Assume the import function is a linear function of total output with a marginal propensity to import ξ, so

$$m = \xi y \tag{4}$$

Put (2) (3) and (4) into (1), we can get

$$y = \frac{i + x}{1-(1-\tau)[\beta_w\Omega + \beta_\pi(1-\Omega)] - \beta_g(1-\tau) + \xi} = \frac{i+x}{u} \tag{5}$$

And $u = 1-(1-\tau)[\beta_w\Omega + \beta_\pi(1-\Omega)] - \beta_g(1-\tau) + \xi$, u^{-1} is Keynes output multiplier, which depends on tax rate, labor share and so on. Then both sides for (5) operate total differential and divide y simultaneously, and we get

$$\hat{y} = -u + \frac{i}{uy}\hat{i} + \frac{x}{uy}x = -u + \Psi_i i + \Psi_x x \tag{6}$$

Here we have $\Psi_i = i/uy$, $\Psi_x = x/uy$. They could be seen as weighted-multipliers adjusted by the proportions of investment and import demand in total demand. From (6), we can find that output growth rate is linear weighted average of investment growth rate and import growth rate. Ψ_i and Ψ_x depend on u and are endogenous variables. Next we try to get expressions of the three variables on the right of (6).

We can get growth rate of u from its expression,

$$\hat{u} = -\frac{(1-\tau)(\beta_w - \beta_\pi)\Omega}{u}\hat{\Omega} = -\frac{(1-\tau)(\beta_w - \beta_\pi)\Omega}{u}(\hat{\omega} - \hat{\lambda}) \quad (7)$$

As a result of long term surplus labor supply in China, the real wage growth is little which means $\hat{\omega} \approx 0$. While $\hat{\lambda} > 0$ in actual economy, from (7) we can conclude that $\hat{u} > 0$. It will lead to Ψ_i and Ψ_x becoming smaller.

According to Bhaduri & Marglin (1990), profit share and capacity utilization are main variables in the investment function. Just as in most current study, we assume the investment function is

$$i = ab^{\phi_0}\pi^{\phi_1}y^{\phi_2} \quad (8)$$

Here a is a positive constant and b includes all other factors affecting investment.

However, most part of investment in China is government investment which usually has a close connection with economic growth target and macroeconomic-control target made by government. It means investment function in China may be different from (8) which are applicable to developed economies. For China we should focus on credit constrains in Chinese commercial bank system and establish a new investment function which is different from that of current research (Gong & Lin, 2007).

Suppose the total amount of loans that can be obtained by government and enterprises are ΔM which is supposed to be exogenous for simplicity. All investment projects may face credit constrains no matter it belongs to government or enterprises while some of them may get rid of credit constrains as a result of their smaller scale. Suppose there are N projects which are arranged in a particular order to make the first n projects are restricted by credit constrains and the last N-n projects are not. As a result, the actual investment of the first n projects is $\Delta M_i (i = 1, 2, ..., n)$ which is equal to the upper limit of credit constrains they face; the actual investment of the last N-n projects is $\Delta M_i^* (i = n, n+1, ..., N)$ which is the optimal investment without credit constrains. The optimal investment depends on market principle and could be

seen as a function of profit share and total demand written as $f(\pi, y)$. In summary, the investment function we used here could be written as

$$i = \sum_{i=1}^{n} \Delta M_i + \sum_{i=n+1}^{N} \Delta M_i^{*} = \Delta M^{'} + f(\pi, y) \tag{9}$$

Here $\Delta M^{'} = \sum_{i=1}^{n} \Delta M_i$, $f(\pi, y) = ab^{\phi_0} \pi^{\phi_1} y^{\phi_2}$. So the growth rate of investment could be written as

$$\hat{i} = \Delta \hat{M}^{'} + \phi_0 \hat{\hat{b}} + \phi_1 \hat{\hat{\pi}} + \phi_2 y = \Delta \hat{M}^{'} + \phi_0 b \phi_1 - (\Omega/\pi)\phi_1(\hat{\omega} - \hat{\lambda}) + \phi_2 \hat{y} \tag{10}$$

Suppose the export demand is a decreasing function of unit labor cost which is equal to labor share Ω and an increasing function of total external demand D_f. Then the export function could be written as

$$x = a_e D_f^{\varepsilon_0} \left(\frac{\Omega}{\Omega_f}\right)^{-\varepsilon_1} \tag{11}$$

For simplicity, we assume $\varepsilon_0 = 1$ and $\Omega_f = 1$ just as Naastepad (2006) and the export function could be written as

$$\hat{x} = \hat{\hat{D_f}} - \varepsilon_1 \Omega = D_f - \varepsilon_1(\hat{\omega} - \hat{\lambda}) \tag{12}$$

Put (7) (10) (12) into (6), we can get the growth rate of the total output

$$\hat{y} = \frac{\Psi_i \phi_0 \hat{b} + \Psi_x \hat{D}_f}{1 - \Psi_i \phi_2} + \frac{(1-\tau)(\beta_w - \beta_\pi)\Omega u^{-1} - \Psi_x \varepsilon_1 - \frac{\Omega}{1-\Omega}\Psi_i \phi_1}{1 - \Psi_i \phi_2}(\hat{\omega} - \hat{\lambda}) + \frac{\Delta \hat{M}_i^{'}}{1 - \Psi_i \phi_2} \tag{13}$$

From (13) we can find there are three factors affecting economic growth in our theoretical framework. The first one is the nature growth rate of investment and external demand ($\hat{b}$ and $\hat{D}_f$). According to classical economic theory, they have a positive connection, which means $1 - \Psi_i \phi_2 > 0$. The second one is the relative growth rate of real wages and labor productivity which decides whether the change of labor share is positive or negative. The third one is the growth rate of total constrained investment operated by government and entrepreneur. If the

economic growth is overheating and the government want it to slow down, then the constrained investment increases, which means $\Delta\hat{M}_i^{'} < 0$; if the economic growth slows down fast (much lower than the target made by the government) and the government want to stimulus the economic growth, then the constrained investment decreases, which means $\Delta\hat{M}_i^{'} > 0$. Suppose $\hat{\omega} - \hat{\lambda} > 0$, if $\Delta\hat{M}_i^{'} > 0$ and

$$(1-\tau)(\beta_w - \beta_\pi)\Omega u^{-1} - \psi_x \varepsilon_1 - \frac{\Omega}{1-\Omega}\psi_i \phi_1 > 0 \qquad (14)$$

That means $\beta_w - \beta_\pi > \frac{1}{1-\tau}(\frac{x\varepsilon_1}{\Omega y} + \frac{i\phi_1}{(1-\Omega)y})$, and then the increase of the labor share could improve the economic growth rate. If $\Delta\hat{M}_i^{'} < 0$ and $\beta_w - \beta_\pi < \frac{1}{1-\tau}(\frac{x\varepsilon_1}{\Omega y} + \frac{i\phi_1}{(1-\Omega)y})$, the increase of the labor share would have a negative effect on economic growth. It's not sure how the change of the labor share would affect the economic growth under other circumstances. The conclusion is different from current research when considering credit constrains in commercial bank system of China, which indicates that a wage-led growth economy could behave like a profit-led one, and vice versa. Table 2 shows the details of our conclusion.

Table 2

Judgement on economic growth mode

Judgement Condition	$\Delta\hat{M}_i^{'} > 0$	$\Delta\hat{M}_i^{'} < 0$
$\beta_w - \beta_\pi > \frac{1}{1-\tau}(\frac{x\varepsilon_1}{\Omega y} + \frac{i\phi_1}{(1-\Omega)y})$	Wage-led Growth	Can't Judge
$\beta_w - \beta_\pi < \frac{1}{1-\tau}(\frac{x\varepsilon_1}{\Omega y} + \frac{i\phi_1}{(1-\Omega)y})$	Can't Judge	Profit-led Growth

The enormous credit target made by the government has a significant effect on the relationship between labor share and economic growth in an economy like China whose investment is mainly decided by the government plan. As a result, compared with developed market economies, we could not only depend on empirical evidence, but also the government's administrative instructions when we judge whether Chinese economic growth is wage-led or

profit-led. Our model could explain why the wage share changes in totally different directions in different periods since 1992, but the Chinese economy still grows in a high rate. With the implementation of market-oriented reform policies in different areas, the effect of $\Delta\hat{M}_i^{'} < 0$ on the investment would decrease gradually, and the "real characteristic" of the growth mode of Chinese economy would be revealed at the same time. While it's noteworthy that, the growth mode of an economy is not unchanged even omit the credit constrains in investment field. From (13) we can find that the relative change of marginal propensity to consume of the wage income and the profit income, the change of tax rate, the proportion of import to wage income and the proportion of investment to profit income could all cause the change of the economy growth mode.

4. EMPIRICAL RESULTS

Next we use single equation estimation method to estimate how the change of labor share would affect Chinese economic growth and transformation. All data come from China Statistical Yearbook. Variables are all deflated by GDP deflator and come into estimation equation by log-form. Considering the time series data is too short for unit root test and China's economy has changed profoundly during this period, we use ADL models in differential form.

4.1. Consumption

We estimate consumption function using the following forms,

$$\ln c = 1.235^{***} + 0.691^{***} \ln W^A + 0.072 \ln \pi + 0.332^{**} L2.\ln c$$
$$-0.219^{**} L3.\ln c \qquad \text{(I)}$$
$$(R^2 = 0.999, D.W. = 1.507)$$

$$D.\ln c = -0.0314^{**} + 0.800^{***} D.\ln W^A + 0.200^{*} D.\ln \pi$$
$$+0.145^{*} LD.\ln c \qquad \text{(II)}$$
$$(R^2 = 0.933, D.W. = 1.945)$$

$$D.\ln c = -0.033^{***} + 0.776^{***} D.\ln W^A + 0.197^{*} D.\ln \pi$$
$$+0.180^{**} LD.\ln c \qquad \text{(III)}$$
$$(R^2 = 0.957, D.W. = 1.704)$$

Estimation (I) is OLS in log form adding lagged dependent variables to eliminate autocorrelation in the residuals. Estimation (II) adopts first order difference of variables to eliminate nonstationary and multicollinearity.

Estimation (III) uses the same form with (II) but takes PW-FGLS estimation. The profit income doesn't have a significant effect on consumption in estimation (I). Maybe it's because the existing of multicollinearity. Considering estimation result of (II) and (III) are similar and the DW statistic of (II) is superior to that of (III), so we adopt the result of estimation (II).

We can find that when wages and profits increase by 1%, private consumption will increase by 0.80% and 0.20% respectively, and the total effect is approximately equal to 1%. As the MPC of wages is significantly higher than that of profits, when wages increase private will also increase. In order to calculate the direct partial effects of a change in the labor share on the GDP growth contribution of consumption, the elasticities estimated above are converted using average values over the whole period and the value in 2011 for c/W and c/π respectively. It shows that a one-percentage-point rise in the labor share, according to our results, increases private consumption by 0.57% during the whole period and by 0.59% at the end of the period. It indicates improving the labor share could release private consumption effectively and provide a stable domestic demand for economic transformation.

4.2. Investment

We still use the traditional form as Bhaduri & Marglin (1990) to estimate the investment function which takes it as a function output and profits. Considering the interest rate r may influence the investment, so it's also taken into the estimation. All estimations show that neither the government investment nor the private investment has a significant connection with the change of profits. So we take money and quasi money supply (M2) by the central bank into estimation which represents the government's intent on economic control. And the GDP deflator reflecting the degree of inflation is also considered. The detailed estimation results are showed as follows

$$D.\ln i = 0.156^{***} - 0.376LD.\ln \pi + 0.458^{*}LD.\ln y + 0.432^{***}LD.\ln r \quad \text{(I)}$$
$$(R^2 = 0.750, D.W. = 1.684)$$

$$D.\ln i = -0.042 - 0.232LD.\ln \pi + 0.958^{*}D.\ln y + 0.286D.\ln r - 1.259^{*}D.\ln def + 0.891D.\ln M2, \quad \text{(II)}$$
$$(R^2 = 0.698, D.W. = 1.792)$$

$$D.\ln i = -0.068 + 0.412 * D.\ln y + 0.319^{***} D.\ln r$$
$$-1.034^{*} D.\ln def + 1.235^{***} \quad \text{(III)}$$
$$D.\ln M2, (R^2 = 0.730, D.W. = 1.916)$$

$$D.\ln i = -0.067 + 0.407 D.\ln y + 0.312^{**} D.\ln r$$
$$-1.017^{*} D.\ln def + 1.234^{***} \quad \text{(IV)}$$
$$D.\ln M2, (R^2 = 0.725, D.W. = 1.984)$$

Estimation (I) (II) and (III) adopt OLS and (IV) adopts PW-FGLS. Specifically, the coefficients of profits in (I) and (II) are not significant and are negative which is contradictory with theoretical expectation. We drop profits in (III) and (IV), as a result, all coefficients become statistically significant. We adopt (IV) to analyze where GDP and M2 all have positive effect on investment and deflation has a negative effect, which is consistent with theoretical expectation. The negative coefficient of interest rate may be related with the uncompleted market-oriented interest rate in China. The interest rate may reflect government's intent more than market price. Higher interest rate means strong investment demand with overheating economic growth and it will make the government raise the interest rate in order to reduce the investment demand. However there is a time lag in the macroeconomic control and the investment demand is insensitive to the change of interest rate, so the investment demand and the interest rate change in the same direction. As a result, we can conclude that the change of profit share doesn't have a significant effect on investment in China.

4.3. Net Exports

The growth rate of net export is much higher than that of GDP, which lead to the estimation for net export function being very sensitive to the empirical form we adopt. Current research usually adopts two ways to estimate the coefficient for the net export. The first is to take the net export as a function of domestic demand y, external demand y^f, exchange rate E and labor share, which means $NX = f(y, y^f, E, \Omega)$. The second is a two-step estimation. At first it takes the domestic price as a function of unit labor cost (related to the wage share) and the price level of import product. Then it takes the import and export demand as a function of domestic price level.

Considering the availability of the related data and the data period is too short for a two-step estimation which will cause larger estimation errors, we adopt the first way to estimate. There is no much difference between the last two

estimation methods in fact according to current research. We used the GDP of the 40 main economies as the proxy variable of y^f . The details show as follows

$$\begin{aligned} &D.\ln nx = -3.084^{***} + 37.800^{***} LD.\ln y + 7.273^{**} D.\ln y^f \\ &+5.943^{*} D.\ln W^A - 8.440^{**} LD.\ln W^A - 4.742^{*} L2D.\ln W^A \\ &+4.855^{**} L3D.\ln W^A + 19.163^{***} D.\ln E \\ &R^2 = 0.919, D.W. = 1.907 \end{aligned} \quad \text{(I)}$$

$$\begin{aligned} &D.\ln nx = -3.103^{***} + 38.442^{***} LD.\ln y + 7.448^{**} D.\ln y^f \\ &+5.522^{*} D.\ln W^A - 8.803^{**} LD.\ln W^A - 4.850^{*} L2D.\ln W^A \\ &+5.169^{**} L3D.\ln W^A + 18.884^{***} D.\ln E \\ &R^2 = 0.912, D.W. = 1.899 \end{aligned} \quad \text{(II)}$$

$$\begin{aligned} &D.\ln nx = -2.527^{***} + 30.214^{***} LD.\ln y + 9.016^{**} D.\ln y^f \\ &+6.468^{*} D.\ln W^A - 8.205^{**} LD.\ln W^A + 16.037^{***} D.\ln E \\ &R^2 = 0.792, D.W. = 2.469 \end{aligned} \quad \text{(III)}$$

$$\begin{aligned} &D.\ln nx = -2.744^{***} + 35.551^{***} LD.\ln y + 5.500^{*} D.\ln y^f \\ &+8.796^{***} D.\ln W^A - 11.947^{**} LD.\ln W^A + 20.350^{***} D.\ln E \\ &R^2 = 0.919, D.W. = 2.379 \end{aligned} \quad \text{(IV)}$$

Estimation (I) (III) adopt OLS and (II) (IV) adopt PW-FGLS. We adopt the estimation of (I) which shows that if the labor increase by 1%, the net export will decrease by 2.38% (=5.94%-8.44%-4.74%+4.86%). Then convert it to direct partial effects which show a one-percentage-point rise in the labor share decreases net export by 0.21% during the whole period and by 0.13% at the end of the period. The marginal effect of the change of the wage share on net export has a positive relationship with the net export share in GDP. Influenced by the financial crisis since 2008, the economy recovery trend of all main economies is not steady, which leads to the sharply decrease in net export share in GDP. Although it is bad for Chinese economy growth, it creates a better external environment for economy to transform into consumption-led growth path promoted by the increase of wage share. Under this circumstance, the increase of the labor share would not cause severe fluctuations, though it would decrease the net export demand to some extent.

4.4. Total Effect

When add up all effect of compositions of total demand, we can get the effect of the change of labor share on economy, which is shown in (15),

$$\frac{dy/y}{d\Omega} = \frac{dc/y}{d\Omega} + \frac{di/y}{d\Omega} + \frac{dnx/y}{d\Omega} \tag{15}$$

To make the conclusion more intuitive, the change of GDP compositions (consumption, investment and net export) is converted to the relative change with respect to GDP. Considering the wage share has insigficant effect on private investment demand, we will approximate $\frac{di/y}{d\Omega}$ to zero. As we know, the transformation from elasticities to marginal effects is decidied by the convert-time point, so we figure out how would the private consumption, net export and GDP growth rate change if the wage share increased by 1-point-percentage during 1992 to 2011 (see Figure 1).

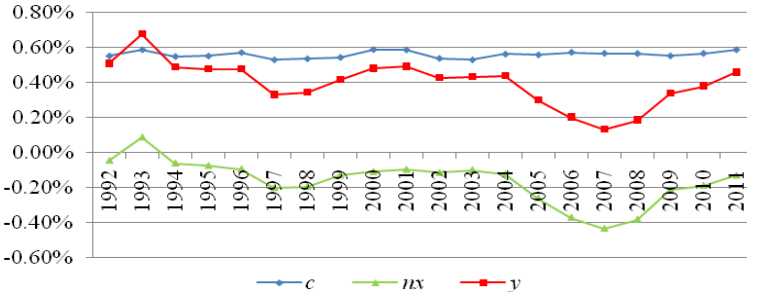

Figure 1 The Change of GDP Compositions

The computation in Figure 1 shows that the wage share has a steady effect on private consumption. But the private consumption is sensitive to the change of net export demand. Since the financial crisis in 2008, the effect of the increase of the labor share on the net export demand has weakened to a lower level by 2011. At this time, if the wage share increased, its negative effect on net export would be totally offset by the positive effect on private consumption and would make the total demand increase by 0.46%. Both the wage share and the proportion of the private consumption in GDP decrease for Chinese economy at present time, which is not helpful to foster endogenous drivers of economic transformation. In 2011, according to our estimation, a 7- percentage-point rise in the labor share (the highest point during the last 20 years) increases private

consumption by 4% and decreases net export by 0.13%. As a result, the total output increases by 0.46% assuming the investment is not influenced by it.

It is noteworthy that the computation results shown in Figure 1 are only suitable for describing the short-term effect in the current context. This is because, firstly, the effect of government's administrative intervention in Chinese economy will gradually weaken accompanied with the implementation of market-oriented economic transformation policies which will make the market principle play a much more important role in Chinese economic activities. It means the effect of the change of the wage share on investment would also become significant gradually; secondly, with the recovery of global economy growth, the net export share in GDP will increase and the effect of the change of the wage share on the net export will also get larger. All of this will lead to the effect of the wage share increase on total demand being lower than what is shown in Figure 1. The circumstance may be totally different, which depends on the growth rate of the private consumption.

In addition, the wage share value and the sensitive of compositions of total demand to the change of the wage share, from multinational studies (Onaran & Galanis, 2013), do not have identified relationship for different economies. However, for one economy, the change amount of private consumption is usually more than that of the investment when the wage share increases or decreases. For Chinese economy, the sensitivity to wage share change is higher for private consumption, lower for investment and net export and moderate for total demand compared to economies which have the approximately same wage share. Under the circumstance that the external demand increases slowly with lots of uncertainty, even the sensitivity to wage share change for investment increases to the level of developed economies, it would still not have negative effect on economic growth. The Chinese economy could build a consumption-led growth momentum and transform from investment-led growth path to consumption-led growth path by increasing the wage share in functional income distribution and making the market principle play a decisive role in economic activities.

5. CONCLUSIONS

On conclusion, according to our research, the increase of the labor share in China could increase total output effectively. As a result of the existing credit constrain, the effect of the wage share change on investment is not sigficant. With the shrinking of external demand, the marginal change of the net export demand is much lower than the change of wage share.

Although Chinese government has a significant and powerful effect on investment and the net export decrease sharply since 2008 for China, both of them provide a suitable external environment for Chinese economy to transform into a consumption-led growth path. With the implementation of market-oriented reformation policies and the recovery of world economy, the negative effect of

the rising of the wage share on the total demand will gradually expand. If China could take full advantage of this Golden Period of economic transformation, it would find an equilibrium point between economic growth and transformation based on releasing of private consumption which are two main topics for China in the next 10 years.

First of all, the Chinese government should try to build a long-term mechanism to motivate the increase of private consumption. It should improve the wage income to increase the labor share in the functioanl income distribution. The low income-groups should be paid more attention and they should also get more opporunities to gain the dividend of the fast economy growth. The household management system should be reformed to give peasant-workers the same social welfare as the local residents and let them get more income. And the confirmation of rural land property rights should be implemented gradually to increase the rural residents' income. What's more, the government should complete the social security system and improve the quality of private consumption products to optimize people's consumption expectation and increase the marginal propensity to consume for all kinds of incomes.

Secondly, the government should reduce its control on economic activities, especially in the credit market, to make market mechanism play a decisive role in economic activities. The private investment should be led into the areas related to the improvement of private consumption under the premise of respecting the market mechanism. Local government should change the GDP-oriented development goal and pay more attention to the fields of public goods, such as education, health and social securities to build a positive feedback between private investment, government investment and private consumption. As a result, the short-term economic growth momentum and the solid and economic transformation foundation would be built at the same time. It is noteworthy that it would be helpful to reduce the negative effect of the rising of the wage share when the private investment demand is activated by economic reform policies in China.

Thirdly, the government should co-ordinate the economic reform policies in different areas. The economic transformation is usually accompanied by the slow down of economic growth. However, our research find that Chinese economy should find a transformation path by inproving the wage share which is not at the cost of the slow down of the economic growth. When the reform policies in both private consumption and investment areas are controlled reasonably, the private consumption growth and the steady economy gorwth could be achieved at the same time, which demand the government take full consideration of the potential risks during the process of economic transformation when pushing on reform policies in different fields. The government should enhancing the top design of the new economic reformation at present and match the timing and the the degree of the effect of diffenent policies resonably to make the economy get more benefit than risk during the process of the reform in case that the severe economic fluctuations happens.

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