# **Chapter 6** Stop Macro-Inequality, and Full-Employment in Reality: Starting with α-Neutral

#### Foreword to Chapter 6

This chapter is one of two chapters in this book and intensively presents one new fact that 'the relative share of capital,  $\alpha$ ,' (-neutral) is independent of macro-inequality, with its implications, in "Earth Endogenous System" (hereunder the *EES*). Tightly  $\alpha$ -neutral is connected with other neutralities. Thus this chapter extends  $\alpha$ -neutral to other neutralities: deficit-neutral, politics-neutral, and spirituality-neutral, deepening the essence of the EES. The other chapter was discussed at International Atlantic Economic Society Conference, Philadelphia, #244, 12 Oct 2013, and empirically presents another new fact of the real rate of return=0 (RRR=0) so that the whole story is almost integrated by the two chapters. The whole story is always 'scientific' in the EES and also in two-dimensional plane topology, simply reduced from endogenous equations. All of new discoveries/facts commonly reinforce the market principles under the price-equilibrium. Starting with  $\alpha$ -neutral, this chapter proves that a country is free from aggravating macro-inequality by person and attains full-employment under no inflation and no decreasing in This is because 'purely endogenous equations under no assumption' wages. produces marginal capital productivity=the rate of return and marginal productivity of labor=the wage rate (MPK=r and MPL=w), which is another expression of perfect competition. As a result, an exogenous Phillips curves (1958) turns to endogenous lines. And, stop-inequality and full-employment are realized, where statistics data are always in a certain range of endogenous data or the KEWT database measured by theory=practice.

#### **1. Introduction**

Does this human world progress economically towards full-employment and without decreasing the wage rate? What are relationships between capital and labor or population historically? Economic and econometrics analyses have grasped these phenomena severely and deeply over years and have presented intensive results, yet it seems it is difficult for us to get rid of vicious circles in the global economies. What are true causes of lower rates of wages by person and by group? This chapter asks these questions and answers unsolved questions by combining economic/econometric analyses using actual statistics databases with the author's endogenous the KEWT database measured in "Earth Endogenous System," (hereunder the *EES*).

This chapter compares and interprets two results investigated from two cutting-angles; 1) economic and econometric analyses based on actual statistics databases in the literature and 2) the *EES* and the KEWT database. Conclusively, those effects/results obtained in economic/econometric analyses are adverse to those obtained in the *EES* and the KEWT database. Why do the two cutting-angles fall into the adverse results in terms of causes-effects relationship? The author advocates; the adverse is traced back to the market principles. The market principles are holy, close to God, as long as human uses money as its quality=1, as tested in the other chapter, and never be managed arbitrarily. The adverse is also traced back to perfect competition, which corresponds with an ultimate situation that guarantees stop macro-inequality and full-employment, and under *RRR*=0.

In short, this chapter reaches the whole essence of the *EES*, starting with stop macro-inequality or  $\alpha$ -neutral. As the *second* half, this chapter extends  $\alpha$ -neutral to deficit-neutral, politics-neutral, and spirituality-neutral, more wholly by succeeding the *first* half that focuses on the real rate of return, *RRR*=0, under the market principles.

# **2.** Explanation and proof of $\alpha$ -neutral

Here *a*-neutral is defined such that the relative share of capital,  $\alpha = \Pi/Y$ , is independent of macro-inequality, where Y is national disposable net income,  $Y = C + S = W + \Pi$ , where, each endogenously, C is consumption, S is saving, W is wages, and  $\Pi$  is returns. Also, macro-inequality is defined such that an endogenous wage rate, w = W/L, differs by individual/person in a country and, some rich group takes a larger share of wages than those of poor and middle groups, and more enlarging differences-oriented by country, year, and over years. The author here distinguishes economic policy with social policy in terms of serious large difference of the wage rate. Enlarging differences in the wage rate within a group belong to social policy, particularly in a poor group. As a result, a-neutral means that macro-inequality is not influenced by changes in the level of the relative share of capital. This notion differs from common sense and also, is definitely against economic/econometrics analyses in the literature, where the larger the difference in the relative share of capital, the severer the macroinequality is. Then, do what influences enlarge macro-inequality?

Before starting discussion, the author first of all indicates a strange fact that the value of  $\alpha$  has not been accurately measured in the literature hitherto. What

is this reason? A system of national accounts (the SNA, 1993, 2008) has its own role of recording, while the *EES* has its own role of policy-making. The author advocates and proves in the *EES* that 1) recording and 2) policy-making are not compatible in one system. Why?

The author justifies the reason as follows: The SNA and its statistics including International Financial Statistics yearbook (IFSY), IMF, show final distribution of national disposable net income. Then, taxes are redistributed to households and enterprises as the final stage. As a result, government sector needs to have an assumption that the difference in cash-in and cash-out at the government sector equals the difference in the real assets at the government sector. This assumption brings about another assumption that national disposable net income equals GNP or GDP, where the difference between GDP and GNP equals net primary income from abroad. Due to these two assumptions, the relationship between consumption and saving and also the relationship between wages and returns each become in vague, or, the equal relationship of  $C + S = W + \Pi$  is broken. The spirit of the SNA stated by Meade J. E. (1962) and Meade, J. E., and Stone, J. R. N. (1969) has not been realized in calculation and statistics. Conclusively, it is impossible for policymakers to plan-do-see economic policies by using the SNA statistics data.

On the other hand, the *EES* and the KEWT database use national disposable net income just before redistribution of taxes to households and enterprises so that taxes are shown in the database. Taxes are shown not by the cash-in and cash-out side but by the real-assets side. Thus, deficit,  $\Delta D$ , is expressed in the government (G) sector and, accurately free from any assumption:  $\Delta D = S_G - I_G$ . Deficit,  $\Delta D$ , is connected with the balance of payments and, the difference between consumption and net investment in the private (PRI) sector is  $\Delta D = BOP - (S_{PRI} - I_{PRI})$ , where if  $\Delta D > 0$ , deficit turns to surplus and if  $\Delta D < 0$ , deficit remains deficit. The author indicates that even *IFSY* has to use two sides, cash flow-side and real assets-side depending on the situation by country, as determined by each circumstances.

As a result, the *EES* produces a unique logic for the size of government, size<sub>G</sub>. size<sub>G</sub> is measured using the ratio of taxes to output of the G sector: size<sub>G</sub> =  $Y_G/Y = T_{AX}/Y$ . Why are taxes (here, deduct subsidies, as minus taxes) equal to government output,  $Y_G$ ? The tax share of national disposable net income,  $T_{AX}/Y$ , is positively related to the endogenous-equilibrium by country and, directly using the speed coefficient,  $\lambda^*$ ,  $\lambda^* = (1 - \alpha)n + (1 - \delta_0)g_A^*$ , where  $\lambda^*$  is the inverse of the speed years for convergence. A purely endogenous rate of technological progress,  $g_A^*$ , is measured by  $g_A^* = i(1 - \beta^*)$ 

at convergence, using the ratio of net investment to output, i = I/Y, and the technology coefficient,  $\beta^* = \frac{\alpha^*(n(1-\alpha)+i(1+n))}{i(1-\alpha)+\alpha^* \cdot i(1+n)}$ . Note that a constant capital-output ratio is measured as follows: The initial year value 'tentatively given' (before equilibrium) immediately changes to 'endogenously measured' by the author's axiom that the capital-output ratio remains constant for the whole years and under the endogenous-equilibrium.

Then, how can we test the relative share of capital so as to be consistent with all the other parameters and variables in the *EES*? In the literature, the relative share of capital has not been measured accurately by country, due to the role of the SNA. By the above axiom, capital is measured simultaneously with the capital-output ratio. As a result,  $\alpha = \Pi/Y$  is tested by  $\alpha = \Omega \cdot r$  using the capital-output ratio and the rate of return in the endogenous-equilibrium. The other chapter discusses the rate of return intensively focusing on *RRR*=0. This chapter extended the  $\alpha$ -neutral to the capital-output ratio as above.

#### 3. How to stop enlarging macro-inequality?

The author never denies policy-makers' day and night efforts to attain stop macro-inequality by country. The author obeys the politics-neutral and the spirituality-neutral. These two neutrals mean that these are close to Nature when actual economic policies approach stop macro-inequality. And both endogenous and statistics data take care of the other or think of the other. This notion is proved by hyperbola economy that numerically harmonizes philosophy, theories, and practices or, Trinity as a whole.

If the relative share of capital does not influence enlarging macro-inequality, what aggravate the macro-inequality by person? This answer must be a highlight of this chapter. This question is replaced by another question such that what factor crucially decreases the wage rate per person at the macro level. The answer is reduces the essence of the *EES*. This is because an unbalanced economy organically recovers through the speed years for convergence.

To recover an stable and sustainable economy, the economy deletes its direct causes by numerically adjusting the speed coefficient,  $\lambda^*$ . This is called 'dynamic shock' in the endogenous-equilibrium. 'Dynamic shock' is endogenously and geometrically expressed by the coefficient of diminishing returns,  $\delta_0 = 1 + \frac{LN(\Omega^*)}{LN(B^*)}$  and  $B^* = (1 - \beta^*)/\beta^*$  (for notations hereunder, see Note 1). It implies that perfect competition recovers. The coefficient of

diminishing returns, however, is another expression of seven endogenous parameters, which wholly determine all the parameters and variables in the *EES* and the KEWT database. The author's 'discrete' Cobb-Douglas production function ever-consistently produced seven endogenous parameters.<sup>1</sup>

As a result, marginal capital productivity=the rate of return and marginal productivity of labor=the wage rate (MPK=r and MPL=w) simultaneously prevail. In short, the endogenous-system holds under perfect competition and, if the situation differs from this situation, enlarging macro-inequality immediately appears. Then leaders and policy-makers cannot stop macro-inequality. In other words, the situation is far from perfect competition. This is true under any political system by country.

Then, what policies are required for recovering stop macro-inequality? We need to improve two factors, the capital-output ratio and the technology coefficient,  $\beta^*$ . The value of  $\beta^*$  is a key factor, since  $\beta^*$  directly improves the rate of technological progress and also, the value of  $\beta^*$ mitigates shocks occurred in the speed years for convergence, by country. The capital-output ratio remains constant so that  $\Omega = \Omega^* = \Omega_0$  holds and accordingly,  $r = r^* = r_0$ , holds, in the KEWT database, by year.

In the transitional path by year, however, the rate of net investment to output, i = I/Y, the rate of change in population,  $n_E = n$ , and the relative share of capital,  $\alpha$ , each remains unchanged, by year and under a certain level of  $\alpha = \Omega \cdot r$ . Further, in an unchanged level of  $\alpha$ , the capital-output and the rate of return each is multiplied; each changes by year/time, and before and after convergence point of time/year. Note that textbooks remain explaining the process by time/year, absolutely or imaginably, using the capital-labor ratio in the transitional path.

 $\lambda^* = (1 - \alpha)n + (1 - \delta_0)g_A^*$ , where  $g_A^* = i(1 - \beta^*)$ .

<sup>&</sup>lt;sup>1</sup> 1. Endogenous net investment to endogenous income, i = I/Y.

<sup>2.</sup> The rate of change in Population,  $n_E = n$ .

<sup>3.</sup> The relative share of capital,  $\alpha = \Pi/Y$ , where  $\alpha = \Omega^*/r^*$ .

<sup>4.</sup> The capital-output ratio,  $\Omega^* = K/Y$ .

<sup>5.</sup> The technology coefficient (or the quantitative net investment coefficient),  $\beta^*$ , (see below).

<sup>6.</sup> The diminishing returns to capital (DRC) coefficient.  $\delta_0 = 1 + LN(\Omega^*)/LN((1 - \beta^*)/\beta^*)$ .

<sup>7.</sup> The speed years for convergence in the transitional path,  $1/\lambda^*$ , where the speed coefficient,

# 4. Connected with others: Deficit-neutral, politics-neutral, and spirituality-neutral

Then, what policies are required for stabilizing and improving the technology coefficient,  $\beta^*$ ? It is deficit,  $\Delta D = S_G - I_G$ , that severely aggravates the coefficient of diminishing returns,  $\delta_0$ , as proved in the *EES* and the KEWT database. This fact produces deficit-neutral, which implies that when deficit is zero, the endogenous-equilibrium is most stable and effective. In other words, the rate of return is optimized, with returns maximum and net investment minimum, as shown in the rate of return function of net investment in hyperbola ( $r_{MAX}$  with  $i_{MIN}$ ; see the other chapter).

*RRR*=0 is tightly related to deficit-neutral. As a result,  $\alpha$ -neutral is inherently connected with deficit-neutral. Stop macro-inequality is closely related to deficit-neutral. Or, the larger the deficit the worse the macro-inequality is. Actual policies to stop macro-inequality are often adverse to those in the *EES*. Policy-makers often decrease taxes and increases subsidies, resulting in enlarged differences in the wage rate by group.

Further, running out of the endogenous-equilibrium brings unemployment. See **Figs 1** and **2**. Full-employment realizes under perfect competition, where the rate of change in population equals the growth rate of population,  $n_E = n$ . *RRR*=0 connects full-employment with A. W. Phillips's (1958) curve, and the author's application of the Phillips finding turns to *line* from *curve*. Suppose that the rate of return on the y axis and the rate of change in population,  $n_E = n$ , on the x axis. Then the external Phillips curve changes to the author's endogenous Phillips line. Later, Lucas, R. E., Jr., and Rapping, L. A. (1969), connected the Phillips curve with the market principles.

In short, stop macro-inequality and full-employment march together, never priority or alternative. Why do policy-makers fall into wrong direction?

The author, to be severe, sets up politics-neutral and spirituality-neutral. The two absolute neutralities wholly reinforce concrete neutralities such as money-neutral, consumption-neutral,  $\alpha$ -neutral. and deficit-neutral. If politics-neutral realizes, the situation right now turns back to the endogenous-equilibrium and under perfect competition. When policy-makers are interested in politics, the situation aggravates and results in enlarged difference in the wage rate and unemployment by group. Also, spirituality-neutral rejects behavioral decision-making. The author advocates, behavior introduction into the EES destroys the real-assets foundation and confuses the market principles. It is the worst for leaders and policy-makers to manage or control the market principles in economic society and globally.

## 5. How to reply to Gregory, N., Mankiw's (2013) "Defending the One Per Cent"

This chapter starts reviewing two current representative papers closely related to how to stop macro-inequality and enlarging difference in the wage rate and then, replies to these economic analyses from the viewpoint of the *EES* and using nature-neutrals. The two papers are: (1) 'The Top 1 Percent' by Facundo Alvaredo et al. and, (2) 'Defending the One Percent' by Mankiw, N. G.; each in *Journal of Economic Perspectives* (Summer 3): 3-20, 21-34. Also, the author is interested in *wage* papers presented to *International Atlantic Economic* Conference, Philadelphia, #244,<sup>2</sup> 10-13 Oct 2013.

The author recognizes: most parts of the above two papers are naturally acceptable in the micro/macro levels, when statistics data are used and analyzed. Yes, in economic/econometrics analyses, it is natural for one to fall into unsolved path. This is because the market principles vertically express results using absolute price by goods and services. It is impossible for one to aggregate absolute price level, P, as a whole by country. It is not the responsibility of economists and national systems by country. Every situation holds together with unavoidable limit of the market principles.

Under these circumstances, on the other hand, the *EES* expresses the relative price level, p, by country, sector, and year and over years, where, p = 1.0000000 is not assumed but accurately measured. As a result, the *EES* uses the same definition of the elasticity of substitutions as that in the literature,  $\sigma = \frac{-\Delta k/k}{\left(\Delta\left(\frac{r}{w}\right)\right)/\frac{r}{w}}$ , but, accurately measures its value as  $\sigma = 1.0000000$ . In the case of economic/econometrics analyses based on statistics database,  $\sigma$  is assumed or estimated as a certain value, with assumptions and other externals. Conclusively, together with p = 1.0000000 and  $\sigma = 1.0000000$ , seven endogenous parameters determine all the parameters and variables using equations with no assumption and under perfect competition.

First, back to 'The Top 1 Percent' by Facundo Alvaredo et al., let us glance at and image **Fig. 3**. The *above* graph in Fig. 3 straightforwardly expresses three country enlarging cases and the *below* graph in Fig. 3, contrastingly four

<sup>&</sup>lt;sup>2</sup> International Atlantic Economic Conference, Philadelphia, 10-13 Oct 2013 produces several interesting papers as follows: (1) Paul Hettler's "Firm Size, Wages and the Business Cycle;"
(2) Shane Dwyer and Chih Ming Tan's "Hits and Runs: Determinants if the Gross-Country Variation in the Severity of Impact from the 2008-9 Financial Crisis;" (3) Stephen Rubb's "Overeducation During the Great Recession;" (4) Bernard C. Beaudreau's "NIRA Economics and the Economics of the NIRA. (5) Aytekin Guven's "Decomposing Inter-industry Wage Inequality: the Effect of Market Structure."

country stable cases, each in the author's macro-inequality. Also glance at and image **Fig. 4**. This graph pertinently expresses the difference of macro-inequality among 18 countries.

Let the author interpret Fig. 3 and Fig. 4, from the stream of the *EES*. Figure 3 and Figure 4 each suggests 1) statistics results and limits in economic/ econometrics analyses and 2) relationships between the policies and strategies in these analyses and the policies in the *EES*.

First, let us raise questions. Why does Fig. 3 express differences between one group of three countries (the US, Australia, Canada, and the UK) and the other group of four countries (France, Germany, Japan, and Sweden)? The author's reply is the following. Statistics data and analyses contain results of statistics and endogenous results. This is because statistics data are always supported by endogenous (theoretical) data and, because statistics data are able to include policies and strategies and endogenous data only include policies but externally reinforced by strategies. Conclusively, three countries are out of perfect competition much more than four countries. Further, as shown in Fig.4, macro-inequality spreads by country yet, as a whole almost all of democratic countries suffer from difficulties to approach politics-neutral. Most of strategies processed in statistics data are often 'against politics-neutral' due to vote magic. Statistics results, however, are solely inspected and evaluated by endogenous data in the *EES* and the KEWT database.

This is because such window-dressing as often occurred in the doublebookkeeping system does not function in the *EES*. In other words, the *EES* is endowed with spirituality-neutral, where truth is evaluated regardless of whether or not policy-makers intend to delete some of wrong data. Of course, endogenous data reflect the spirit of decision-makers matching the level of the endogenous-equilibrium but, this dressing is organically erased by shocks in the speed coefficient,  $\lambda^* = (1 - \alpha)n + (1 - \delta_0)g_A^*$ , or the speed years for convergence. Through long experiences of the KEWT database, the author approves this fact as axiom of no window-dressing, which lies behind six nature-neutrals.

Six nature-neutral numerically expresses the essence of the *EES*. This is because in the KEWT database the correlation coefficient among all the parameters and variables reduces to  $R^2 = R = 1.0000000$ . This fact matches an ultimate case as described by David F. Hendry and Bent Nielsen's (347-369, 2010) 'A Modern Approach to Teaching Econometrics.'

Let us further deepen real background of the differences of macro-inequality by country. Compared with worldwide actual average, the US rate of unemployment remains lower 7% with twins deficits, and the Japan rate of unemployment lowest 4%, with serious deficit accumulation. What justifies these apparent contradictions? There exist two wonderful strategies; one is structural reform or regulation release and the other is technological practice. Yes, to some extent structural reform explains adverse movements between full-employment and stop macro-inequality. Yet, the author's question is: By releasing all the regulations and conquering interest-group resistance, is it possible for leaders to get rid of low growth and returns?

The answer is No. The author here recalls consumption-neutral (see a separate chapter for this neutrality). National taste (preferences, culture, and history) is free from growth and returns and, technology advances with peculiar technological practice-power by country. Practice-power may abstractly belong to strategies by country. However, the author advocates that manufacturing techniques must be always preserved by country. Look at Smithsonian Museum. Pioneers has empowered by hands and manufacturing parts in new machines. World widely, technological practice-power is required and remains vital common requisite and strategy. Japan has been versed in hand and precise manufacturing techniques. Practice-power as a saver. This is a robust strategy to oppress immoderate behavior to manage the market principles. Tenyear debt yield is honest so that audiences now carefully watch competition between ten year debt yield and precise technological practice-power in Japan.

In short, the *EES* remains a receptacle/container to methodology for economic society for people. The two papers in this chapter presented invaluable blessing to us. We need both statistics data and endogenous data and each policies and strategies, although both have respective roles and cannot be directly united. The more cooperative the more effective and efficient an economy/society is peacefully by people and by country.

## 6. Break-even point (BEP) by sector: Empirical proof in the KEWT database

The author (350, 1965) expressed the formula of break-even point (BEP), X = F/(1 - v), by a hyperbola, 1 = f/(1 - v), where v = V/X and f = 1 - v. Since 1965, the author has used this hyperbola identity for 50 years or more. This chapter, for the first time, presents time-series results and implications by country and by sector, applying the KEWT database to BEP analysis. Sector is expressed by three sectors; total economy, the government sector (the G sector), and then private sector (the PRI sector).<sup>3</sup>

BEP of returns/profits, good and bad, is calculated by  $f \neq 1 - v$ . Macro and micro BEP each needs f < 1 - v since returns and profits are commonly shown by  $\Pi = Y - F - V$  or P = X - F - V, where external expenses is E = X - Y. What is the difference between macro and micro? Yes, definite difference exists between macro and micro. Conclusively, macro is apt to fall into minus returns over years, particularly in the G sector while micro cannot fall into minus profits over years under the profit maximization principle. Why does the G sector in macro fall into minus returns? This is due to selfish votes guaranteed by democracy and human decision-making to politics. The results are far for politics-neutral, as shown by the KEWT database.

Look at **Figs. 5-1**, **5-2**, and **5-3** for fifteen countries, 1990-2010, where by nature country characteristics remain unchanged over years. These compare BEP of returns with the relative share of capital, by sector. Common phenomena are the following:

- 1. Significant differences appear among countries. Particularly, among the G sector. The total economy and the PRI sector each show similar results since the size of the G sector lies between 10 to 25% of the total economy.
- 2. Interestingly, the relative share of capital,  $\alpha = \Pi/Y$ , and BEP of returns, BEP = f/(1 v), show reversed movements over years. It implies that the higher the BEP of G returns, the lower or the more minus the G relative share of capital,  $\alpha_G = \Pi_G/Y_G$ .
- 3. The size of the G sector measures and proves that endogenous taxes equal the G output/income, size of  $G = Y_G/Y = T_{AX}/Y$ . Nevertheless, the size of G definitely determines the total economy and the base of robustness in returns and growth rates of an economy over years.
- 4. Unique justification to support democracy is the improvement in the technological coefficients,  $\beta$ ,  $\beta_G$ , and  $\beta_{PRI}$ . This is because the rate of technological progress is shown by  $g_A = i(1 \beta)$  by sector, as shown in this chapter.
- 5. Each country has its own economic policies by year and over years, reinforcing national taste (i.e., preferences, culture, and history), which is independent of technological progress (consumption-neutral).

<sup>&</sup>lt;sup>3</sup> The author intends to publish another paper in the near future, comparing Asian, Euro, Non-Euro and East Europe, Latin America, and Near East, and Africa, by country, classifying hundreds tables and figures.

The above proofs are wholly connected with other findings in this chapter. In short, the G sector works for the PRI sector or vice versa. The size of government is small but, the G sector is a key for solving economic robustness of an economy/sector and a country. Thus, stop-inequality and full-employment wholly change by the qualitative level.

## 7. Conclusions

Is 'stop macro-inequality' a dream or in reality? Yes, it is in reality and always holds in endogenous data. And, statistics data are actually and separately connected with endogenous data. Stop macro-inequality is concretely expressed by full-employment under no inflation/deflation. The lighthouse for right direction is six nature-neutrals: money-, consumption-,  $\alpha$ -, deficit-, and politics- and spirituality- neutral.

This chapter focuses on the relative share of capital-neutral ( $\alpha$ -neutral). The other chapter focused on *RRR*=0 wholly supported by money-neutral and with its tests using three external ratios in *IFSY*, IMF. Both chapters are here integrated, as in this chapter. It is apparently difficult for economic/econometrics analyses to catch up true causes and effects. This is naturally traced back to the market principles. Effects are tightly connected with true simultaneous causes=results in the *EES* and the KEWT database.

Endogenous data in the *EES* are precisely expressed with six nature-neutrals. Statistics data, partially with some of externals, are expressed together with combinations of policies and strategies. Due to the market principles, however, the whole aggregation, integration, and unification are far from reality.

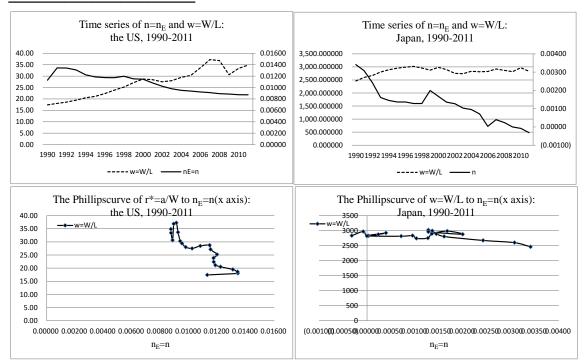
Economic/econometrics analyses have historically accumulated invaluable experiences and experiments under the current circumstances, where actual data change minute by minute and never show the same results, in cope with changing combinations of policies and strategies. Nevertheless, these analyses have found memorial laws, rules and stylized facts. The *EES*, reviews and supplements these findings, and theoretically and empirically proves Yes or No by finding, towards everlasting foundations and helped by real-assets statistics data of *IFSY*, IMF. The author empirically proves that two different databases (actual/statistics and endogenous), differ by role and yet find the same results, even if purely endogenous causes are seemingly adverse to those causes in economic and econometric analyses in the literature.

Extreme negative is close to extreme positive, following the author's hyperbolic equations and its inherent philosophy based on vertical and horizontal asymptotes. Moderation is expressed by the origin of two-dimension. New

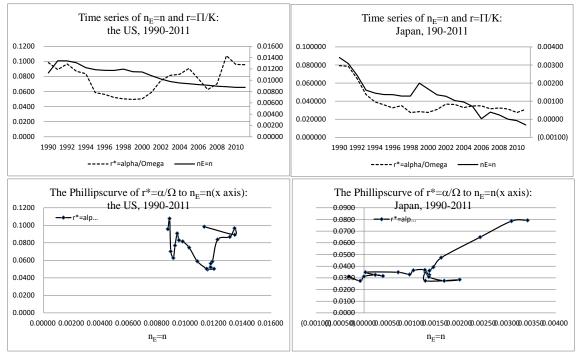
findings processed in this chapter might be a concrete and definite reply to Robert, E. Lucas's (1976) critique. Each side has its own but differently expresses the same from its own situation.

## References

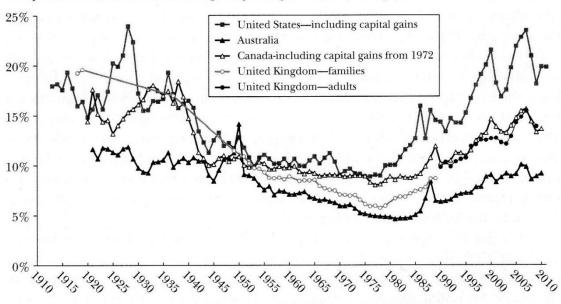
- Alvaredo, Facundo; Atkinson, Anthony, B.; Piketty, Thomas; and Saez, Emmanuel. (2013). The Top 1 Percent in International and Historical Perspective. *Journal of Economic Perspectives* 27 (Summer, 3): 3-20.
- 2. Hendry, David F., and Bent, Nielsen. (2010). A Modern Approach to Teaching Econometrics. *European Journal of Pure and Applied Mathematics* 3 (3): 347-369.
- Kamiryo, Hideyuki. (the 1<sup>st</sup> Ed., 2013; the 2<sup>nd</sup> Ed., 2014). *Earth Endogenous System: To Answer the Current Unsolved Economic Problems*. Toronto: Better Advances Press. lxviii+568 p., 2013 and lxiv+570 p., 2014.
- 4. Kamiryo, Hideyuki. (2013a). Consumption-Neutral to Growth and Technology: Actual versus Endogenous. (AEJ-D-13-00049R1).
- 5. Kamiryo, Hideyuki. (2013b). Royal roads to utopia economy, wholly under the endogenous-equilibrium=the price-equilibrium (Rejected, in Dec 2013).
- 6. Lucas, R. E., Jr., and Rapping, L. A. (1969). Price Expectations and the Phillips Curve. *American Economic Review* 59 (Dec, 5): 342-350.
- Lucas Robert, E. (1976). Economic Policy Evaluation: A Critique', pp.19-46. In: Brunner Karl, and Allan H., Meltzer, *The Phillips Curve and Labor Market*, North-Holland.
- 8. Mankiw, Gregory, N. (2013). Defending the One Per Cent. *Journal of Economic Perspectives* (Summer 2013): 21-34.
- 9. Meade, J. E. (1962, Revised). *A Neo-Classical Theory of Economic Growth*. London: Unwind University Books. 185p. (1<sup>st</sup> Ed., 1960,146p.).
- Meade, J. E., and J. R. N., Stone. (1969). The Construction of Tables of National Income, Expenditures, Savings and Investment, 320-346. In: Parker, R. H. and Harcourt, G. C. (Eds.), *Readings in the Concept and Measurement of Income*. Cambridge: Cambridge at the University Press.
- Phillips, A. W. (1958). The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957. *Econometrica* (Nov): 283-299.
- 12. Samuelson, P. A. (1965). Review of J. E. Meade. Efficiency, Equality and the Ownership of Property, 1964. *Economic Journal* 75 (Dec): 804-806.



**Data source**: KEWT 7.13 database, whose original data, from *IFSY*, IMF, by year. **Fig. 1** Wage rate, the rate of change in population, and endogenous Phillips curve

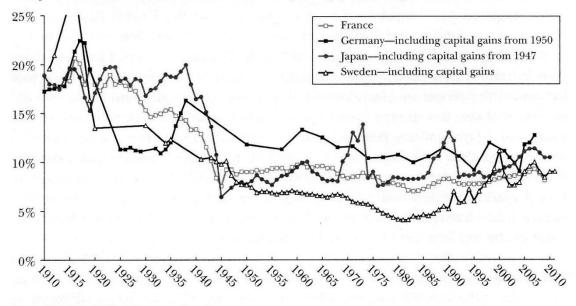


**Data source**: KEWT 7.13 database, whose original data, from *IFSY*, IMF, by year. **Fig. 2** Wage rate, the rate of change in population,  $n_E = n$ 



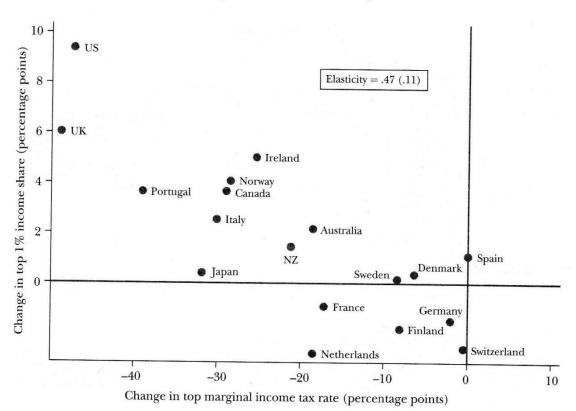
A: Top 1 Percent Income Shares in English-speaking Countries (U-Shape)

B: Top 1 Percent Income Shares in Continental Europe and Japan (L-Shape)



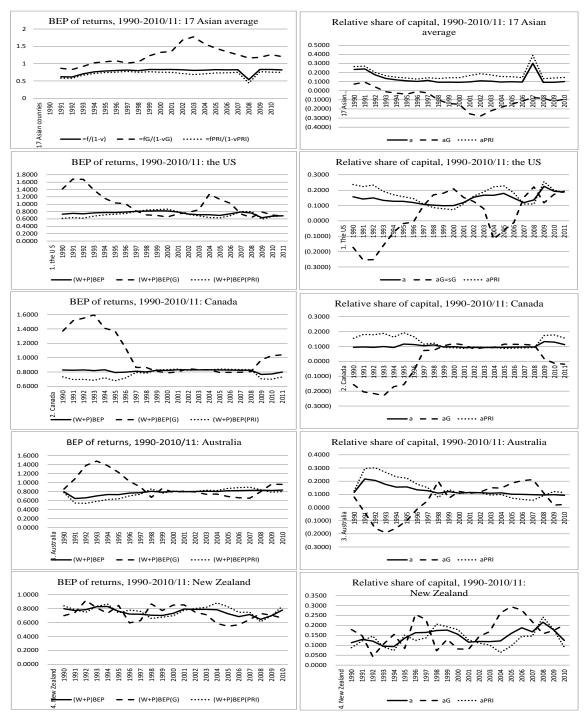
Source: The World Top Incomes Database.

Fig. 3 Citation of Figure 2 of Alvaredo, et al. (JEP, Summer 2013, p.6)



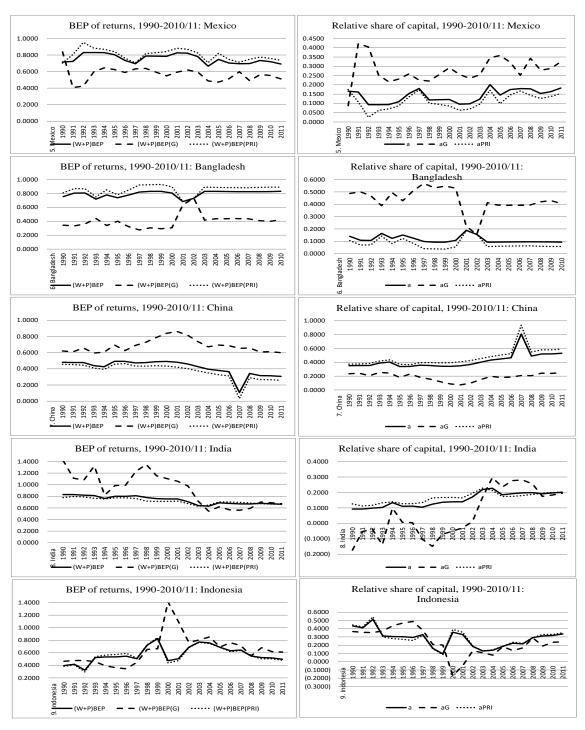
Changes in Top Income Shares and Top Marginal Income Tax Rates since 1960 (combining both central and local government income taxes)

Fig. 4 Citation of Figure 4 of Alvaredo, et al. (JEP, Summer 2013, p.8)



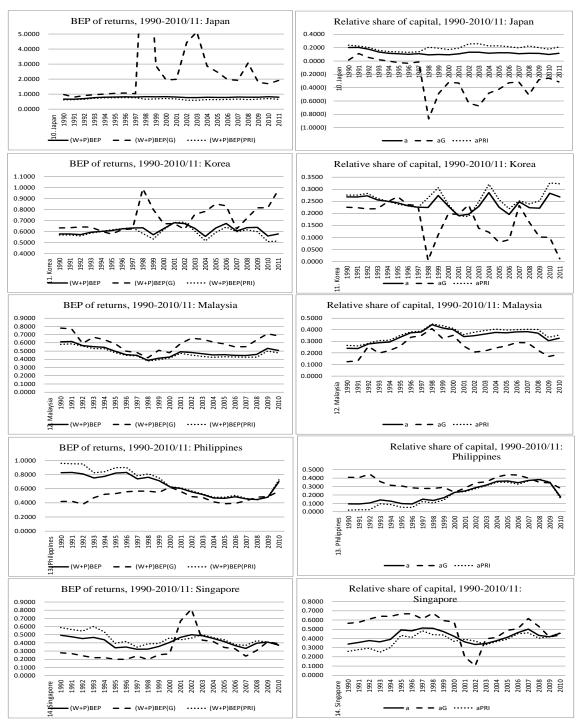
**Data sources**: KEWT 6.12/7.13, 1990-2010/11, whose original data taken from International Financial Statistics Yearbook, IMF.

Fig. 5-1 Break-even point of the KEWT database by country: 17 Asian countries



**Data sources**: KEWT 6.12/7.13, 1990-2010/11, whose original data taken from International Financial Statistics Yearbook, IMF.

Fig. 5-2 Break-even point of the KEWT database by country: 17 Asian countries



**Data sources**: KEWT 6.12/7.13, 1990-2010/11, whose original data taken from International Financial Statistics Yearbook, IMF.

Fig. 5-3 Break-even point of the KEWT database by country: 17 Asian countries