

# Communism, Value Neutrality and Monetary Neutrality

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# **Communism, Value Neutrality and Monetary Neutrality**

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### Abstract

One of the most puzzling aspects about the functioning of the floating exchange rate regime of the 1980s has been that huge swings in exchange rate have had only muted effects on anything real. To understand this phenomenon, we study the relationship between communism and value neutrality and monetary neutrality. We find that the symmetry of communism is bound to lead to value neutrality. In the case of value neutrality, the economic man will certainly accept monetary neutrality. If money is neutral in the long run then even if purchasing power parity (PPP) is not valid in the short-run it will valid over the long run. However, without considering the time factor, communism is a kind of symmetry that is almost impossible to achieve. While considering the time factor, the symmetry of communism can be achieved in theory!

**Keywords**: communism, symmetry, value neutrality, monetary neutrality, purchasing power parity

**JEL:** A13, D24, D3, E5, F3

### 1. Introduction

One of the most puzzling aspects about the functioning of the floating exchange rate regime of the 1980s has been that huge swings in exchange rate have had only muted effects on anything real (Krugman, 1993).

To understand this phenomenon, we study the relationship between communism and value neutrality and monetary neutrality.

We find that the symmetry of communism is bound to lead to value neutrality. In the

case of value neutrality, the economic man will certainly accept monetary neutrality. If money is neutral in the long run then even if purchasing power parity (PPP) is not valid in the short-run it will valid over the long run.

However, without considering the time factor, communism is a kind of symmetry that is almost impossible to achieve. While considering the time factor, the symmetry of communism can be achieved in theory!

After the collapse of the Bretton Woods system, the evidence on long-run PPP is still a matter of debate.

The difficulties of the problem are the possible nonstationarity of relative price indices and nominal exchange rates. The traditional ways to deal with nonstationarity such as unit root model and cointegration have some problems. To deal with nonstationarity, we apply the Hodrick — Prescott(HP) trend-cycle filter in real business cycle literature which can give a nonlinear smooth-trend, and we find that after the 1970s float, the monthly HP trends of US dollar/UK sterling and Deutsche marks/US dollar have certain relevance with their corresponding HP trends of relative consumer price indices. This result indicates that there is no strong evidence to directly deny that the PPP is valid in the long run. In this sense, it is not reliable to directly deny the belief of monetary neutrality(Luo, 2016)!

# 2. Without considering the time factor, communism is a kind of symmetry that is almost impossible to achieve

How to understand communism? Some people think that communism is the ideal that can never be realized. We think it involves people's morals and some mysterious things that are not well defined! Therefore, we should look at communism from the perspective of reality. From the objective point of view, communism requires symmetry in the process of social production and distribution!

In the following, we point out that the symmetry required by communism is almost impossible to achieve without considering the time factor !

Since the process of social production and distribution is closely related to resources, we can look at the problem from the perspective of resources!

We can assume that the resources are completely distributed in a straight line, the total resource is B and the total population is M.

Real numbers can be thought of as points on an infinitely long line called the number line or real line.

In basic mathematics, a number line is a picture of a graduated straight line that serves as abstraction for real numbers. Every point of a number line is assumed to correspond to a real number, and every real number to a point.

In advanced mathematics, the expressions real number line, or real line are typically used to indicate the above-mentioned concept that every point on a straight line corresponds to a single real number, and vice versa.

The real numbers include all the rational numbers, such as the integer -5 and the fraction 4/3, and all the irrational numbers, such as  $\sqrt{2}$  (1.41421356..., the square root of 2) and  $\pi$  (3.14159265...), the ratio of the circumference of any circle to its diameter.

In mathematics, a rational number is any number that can be expressed as the quotient or fraction p/q of two integers, a numerator p and a non-zero denominator q. Since q may be equal to 1, every integer is a rational number.

The decimal expansion of a rational number always either terminates after a finite number of digits or begins to repeat the same finite sequence of digits over and over. Moreover, any repeating or terminating decimal represents a rational number. These statements hold true not just for base 10, but also for any other integer base (e.g. binary, hexadecimal).

Any number that cannot be expressed as a ratio of two integers is said to be irrational. Their decimal representation neither terminates nor infinitely repeats but extends forever without regular repetition.

Any real number can be approximated to any desired degree of accuracy by rational numbers with finite decimal representations.

As a consequence of Cantor's proof that the real numbers are uncountable and the rational numbers are countable, it follows that almost all real numbers are irrational (Cantor, (1955) [1915]).

Therefore, the measure of the set of rational numbers is 0.

Because of the infinite state involved, repeating decimals and irrational numbers do not have practical separability without considering the time factor.

At this time, the symmetry of communism necessarily requires B/M to be a terminating decimal, for only in this way can there be practical separability!

It is shown that B/M as a terminating decimal is an event with zero probability.

Therefore, without considering the time factor, communism is a kind of symmetry that is almost impossible to achieve.

However, from the perspective of modern mathematics, since terminating decimals with practical separability do exist, theoretically communism has its existence! This may be the rationality of communism.

### 3. Why communism can be achieved

In this section we'll examine the practical separability from the perspective of time.

Space is not necessarily continuous, but the human perception of time is continuous. Thus, people can not only feel the time expressed in a terminating decimal, but also feel the time represented by a repeating decimal or an irrational number. It can be seen that we do not have to distinguish the time expressed in a repeating decimal or an irrational number from the time expressed in a terminating decimal.

So, assuming that T is a certain time point within the bounded range, of course T is greater than zero, then -1/(t-T) reaches infinity when the time t is less than T but tends to T, that is, when t is equal to T, that is to say infinity is achieved at bounded time T.

It can be seen that if the total resource is B and the total population is M, when B/M is a terminating decimal, of course, it has practical separability. When B/M is a repeating decimal or an irrational number, we can achieve B/M by -1/ (t-T) at bounded time T.

Therefore, in theory, communism can be achieved.

## 4. Communism, value neutrality and monetary neutrality

Economic output is the most important measure of the economic process, and the cost-adjusted economic output is an important criterion for measuring the efficiency of the economic process and constitutes the most important measure of economic value.

The process of economic output is realized by the economic organization, and the economic output of course requires the input of resources. If the same resource inputs have the same economic output and economic value, then the value is neutral.

From the perspective of resources, the symmetry of communism necessarily requires

symmetry in the process of social production and distribution.

In the process of realizing the economic output, the economic man will inevitably lead to the result that the same resource inputs have the same economic output and economic value in the case of the realization of the symmetry of communism, that is, the symmetry of communism will inevitably lead to value neutrality.

Monetary neutrality refers that money only affects the price of economic output without affecting economic output. In the case of value neutrality, the economic man will certainly accept monetary neutrality.

In the above analysis, we can find that the symmetry of communism is almost impossible to achieve without considering the time factor, while considering the time factor, the symmetry of communism can be achieved in theory!

In addition, if money is neutral in the long run then even if purchasing power parity (PPP) is not valid in the short-run it will valid over the long run.

After the collapse of the Bretton Woods system, the excessive volatility of nominal exchange rates and the relatively smooth macroeconomic variables in the short run rejects PPP as a hypothesis about the short run relationship between nominal exchange rates and relative price indices. The evidence on long-run PPP is still a matter of debate.

The difficulties of the problem are the possible nonstationarity of relative price indices and nominal exchange rates. The traditional ways to deal with nonstationarity such as unit root model and cointegration have some problems. To deal with nonstationarity, we apply the Hodrick — Prescott(HP) trend-cycle filter in real business cycle literature which can give a nonlinear smooth-trend, and we find that after the 1970s float, the monthly HP trends of US dollar/UK sterling and Deutsche marks/US dollar have certain relevance with their corresponding HP trends of relative consumer price indices. This result indicates that there is no strong evidence to directly deny that the PPP is valid in the long run. In this sense, it is not reliable to directly deny the belief of monetary neutrality (Luo, 2016)!

## 5. Conclusion

In this paper, we study communism from the realistic and objective point of view. We point out that the symmetry of communism is almost impossible to achieve without considering the time factor!

Then we point out that the symmetry of communism is bound to lead to value neutrality. In the case of value neutrality, the economic man will certainly accept

monetary neutrality. If money is neutral in the long run then even if purchasing power parity (PPP) is not valid in the short-run it will valid over the long run.

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Therefore, we examine communism from the perspective of time. We point out that the symmetry of communism can be achieved in theory!

Believe it or not, that is your choice!

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