Journal of Business and Development Studies (ISSN: 2790-0703)
Volume: 01, Issue: 01, Web: www.isu.ac.bd/journal

RESEARCH ARTICLE

The Accelerating Announcement Effect Versus the Ratchet Effect: The Spiral Inflation in Bangladesh

S. M. Ikhtiar Alam, Ph.D [a], S. M. Naser Iqbal [b]

[a] Professor of Business and Economics, Institute of Business Administration, Jahangirnagar University, Bangladesh; E-mail: ikhtiar@jnuiv.edu

[b] Assistant Professor, Department of Business Administration, International Standard University (ISU); E-mail: naser@isu.ac.bd

ABSTRACT

In the Aggregate Demand-Aggregate Supply (**AS-AD**) framework, we determine the equilibrium real GDP (**rGDP**) or **Y** and general price level, **P**. If a sudden increase in government purchases ($\overline{\mathbf{G}}$) takes place, or the value of any other shift parameter increases, then the **IS** curve shifts upward with a higher equilibrium interest rate. As a result, the **IS-LM** pyramid becomes larger at higher price corresponding to the higher interest rate. As a result, the aggregate demand curve (**AD**) shifts upward (flying up in a parallel and diagonal direction). Thus, both the price level **P** and the real **GDP (Y)** increase. In Economics, the Ratchet Effect is the effect of **AD** curve or **AS** curve causing increases in the general price level that does not fall back to restore the original level, despite the restoration of the **AD** curve and **AS** curve in the initial level. It does imply that an increase in general price level is rigid upward in the short-run. The only way to make the price level flexible is to reduce both the fiscal expansion and money supply at their original level. At the market level, the modern cobweb model will ensure stability of the initial equilibrium price.

ARTICLE HISTORY

Received: 21 November 2021
1st Revision: 27 June 2022
2nd Revision: 17 August 2022
3rd Revision: 11 September 2022
Accepted: 02 October 2022
Published: November 2022

KEYWORDS

Ratchet Effect, Accelerating Announcement Effect, Inflation, High Heel Myopia, Cobweb Model

1. Introduction: The Modern Cobweb Model

It is important to understand the role of the modern Cobweb model in ensuring market stability and the conditions for stable market equilibrium.

Contact: S.M. Naser Iqbal, naser@isu.ac.bd, International Standard University, 69 Mohakhali C/A, Dhaka -1212, Bangladesh

At the market level, the modern cobweb model ensures the stability of the initial equilibrium price. Figure-1 briefly presents the modern Cobweb Model.

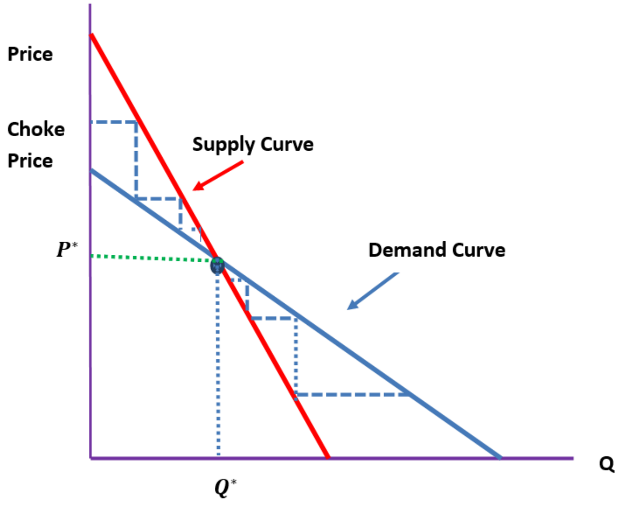

Figure-1: Modern Cobweb Model (Supply Curve Must be Steeper than the Demand Curve for Stability of Equilibrium)

2. Propellers of the Ratchet Effect

According to Adam Barone (2021), the Ratchet Effect is an economic process that is difficult to reverse once it is underway or has already occurred. A ratchet is an analogy to a mechanical ratchet, which spins one way only, but not the other, in an economic process that tends only to work one way. The results or side effects of the process may reinforce the cause by creating or altering incentives and expectations among participants. The Ratchet Effect may propel either from the demand-side shock or from the supply-side shock. These two shocks are called the propellers of the Ratchet Effect.

The Ratchet Effect that propels from the demand-side shock starts with an upward shift of the aggregate demand (AD) curve. The Ratchet Effect that propels from the demand-side shock starts with an upward shift of the aggregate demand (AD) curve, ceteris paribus. The short-run demand side shock occurs in Bangladesh for (i) Festival effect (such as Eid, Ramadan, etc.), (ii) Government's new deficit budget declarations, (iii) Undertaking very large infrastructural investment projects by the government, (iv)

"Daydream" investment by the government (daydream investment is the investment that is not necessary at this stage of development, but is political celebrity investment), and (v) Accelerating announcement effect, ceteris paribus.

3. Accelerating Announcement Effect

In many instances, the price level suddenly increased due to expectations of future hikes in prices of many home-grown or imported products. These expectations are formed from the announcements made by the government. For instance, when a commerce minister or a food minister announces that "there will be no increase in the price of the product X before two weeks", then the price of product X starts increasing instantaneously. This is an "Accelerating Announcement Effect".

The first four demand-side variables do not last long in the sense that their effects on price increase gradually fade out. For example, festival effect shifts AD curve once and price level also increases compatibly only in one push. After that, AD curves, in many cases, shifts back to its original position. But the accelerating announcement effect does not fade out soon. Price level increases spirally and incrementally almost every day. In fact, the price level starts increasing within an hour after the announcement is made. In Bangladesh, the last three announcement effects increased price levels within one hour, on average, of the announcements. The increase in price level along with remuneration rates of self-employed persons induces price level and remuneration rates to increase. This process continues until the consumers believe that in the near future there will be no price increase any more.

4. The Demand-Side Shock

As mentioned earlier, for various reasons, $\boldsymbol{AD}$ curve may shift upward, ceteris paribus, from $\boldsymbol{AD_0}$ to $\boldsymbol{AD_1}$,in Figure-2. As a result, in the short run, equilibrium will move from point $\boldsymbol{a}$ to point $\boldsymbol{b}$ and price will increase from $\boldsymbol{P_1}$ to $\boldsymbol{P_2}$ and equilibrium output will increase from $\boldsymbol{Y_2}$ to $\boldsymbol{Y_f}$.

But after the festival, for example, the $\boldsymbol{AD}$ curve goes back to its original level and the equilibrium is achieved at point $\boldsymbol{c}$ instead of point $\boldsymbol{a}$ (from point$\boldsymbol{b}$). Because suppliers cannot adjust all variables to restore the equilibrium at point $\boldsymbol{a}$. The short run $\boldsymbol{AS}$ curve will uplift its leg and the new price will be $\boldsymbol{P_2}$ and $\boldsymbol{Y}$ will decrease from $\boldsymbol{Y_f}$ **to** $\boldsymbol{Y_2}$. The 12 identified reasons for such uplift of the leg of Short-Run Aggregate Supply Curve (SRAS) are explained later briefly.

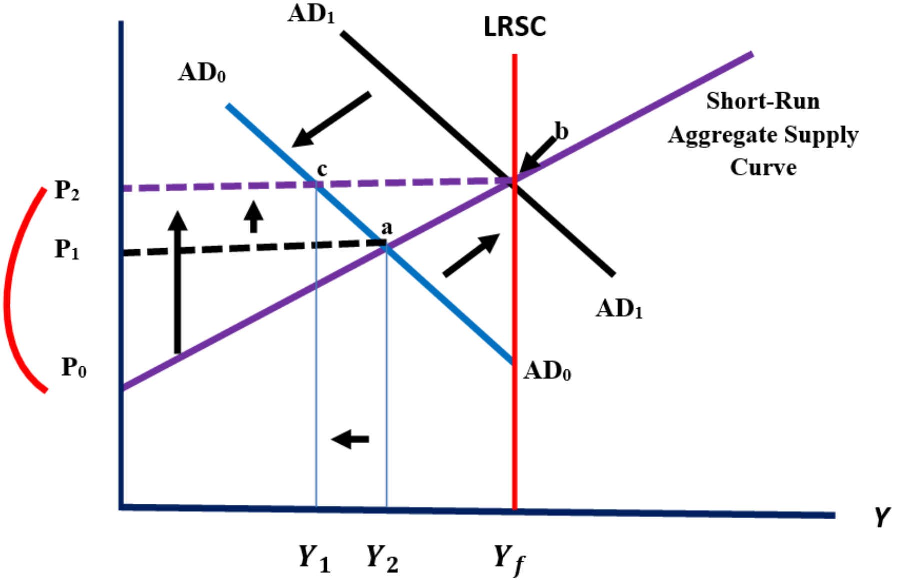

Figure-2: Ratchet Effect Propelled by Demand-Side Shock

5. The Supply-Side Shock

If we look at the Ratchet Effect from a broader perspective, we can include the effects of fiscal and monetary policy in our analysis. The ratchet effect also occurs due to supply shock in the short run. Like the demand-side shock, it also happens mainly due to the accelerating announcement effect. Just as the aggregate demand, within one hour, the supply of the products in question declines (or the products disappear from the market). Because, right after the announcement, the sellers expect that price will increase in the near future as per the announcement. As a result, sellers try their best to hoard the products already in the marketing channels, and at the same time, the producers slow down their production channels, and at the same time, the producers slow down their production. Thus, the SRAS curve shifts upward. The new price will be $\boldsymbol{P_1}$ and $\boldsymbol{Y}$ will decrease to $\boldsymbol{Y_1}$. Consumers take care of two things: the decrease in $\boldsymbol{Y}$ and the increase in price. These two market effects increase the demand of the products amid increasing price. Consumption expenditure will augment significantly and the $\boldsymbol{AD}$ curve will shift diagonally upward. Price will increase further to $\boldsymbol{P_2}$, and $\boldsymbol{Y}$ goes back to $\boldsymbol{Y_f}$ (Long-Run Supply Curve (LRSC).

This process will continue for indefinite time unless and until hoarding by sellers becomes less attractive than selling more at a higher price. Hoarding will disappear but price will not come down. Rather, price will continue to increase since the market is accommodating the higher price.

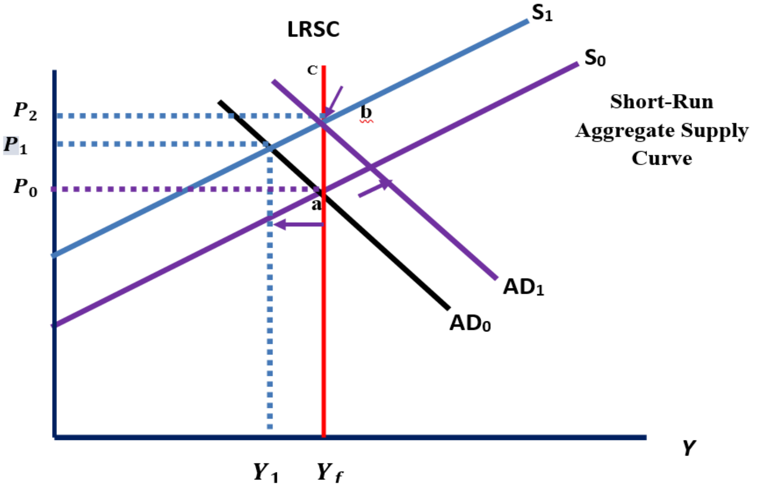

Figure-3: Ratchet Effect Propelled by Supply-Side Shock

6. The High-Heel Myopia

The aggregate demand curve of a country is down sloping and it flies diagonally from left to right for various shocks. It may flip as well, but does not change the size. It may have a **high heel** in some cases. This high-heel is nothing but the $\boldsymbol{i-y}$curve. What we derive is a curve with a part of the corresponding $\boldsymbol{i-y}$ curve. If for any reason, the short-run $\boldsymbol{AS}$ curve cuts the high-heel instead of the curve, the market mechanism collapses and there is no such regulatory tool to bring the market to a stable condition. The price level not only increases, but also shows abnormal and inconsistent upward movements.

Alam (2021) showed this situation in his $\boldsymbol{IS-LM}$ pyramid. To isolate the high-heel from the $\boldsymbol{AD}$ curve, we need to start with the $\boldsymbol{IS}$ curves, $\boldsymbol{LM}$ curves, and the $\boldsymbol{IS-LM}$ pyramid. These three things are required to derive the $\boldsymbol{AD}$ curve properly. Let us reproduce the $\boldsymbol{IS-LM}$ pyramid here in Figure-4.

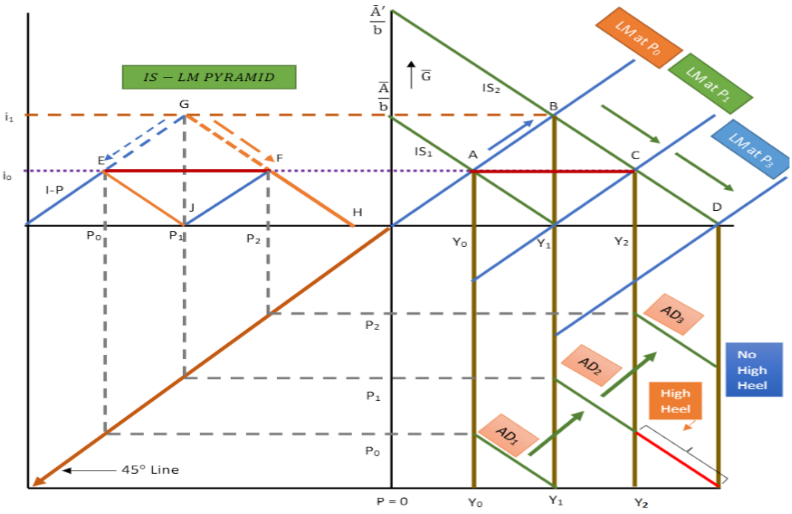

Figure-4: The IS-LM Pyramid and shifts in AD Curves Along with High-Heels

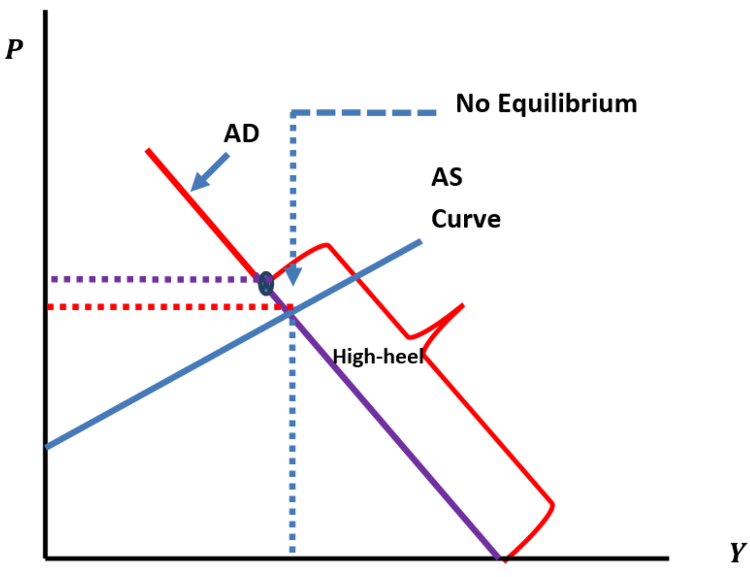

Figure-5: AD Curve with High-Heel and the Missed Equilibrium

From the diagram, it is clear that the $\boldsymbol{AD_2}$ curve has a very big high-heel. Let us take this $\boldsymbol{AD_2}$ along with its high-heel in Figure-5.

Thus, we find that if for some reason, the policy makers fail to isolate **the** $\boldsymbol{AD}$ from the **High-Heel** and the short run $\boldsymbol{AS}$ curve cuts the high-heel, there will be no equilibrium in the economy. The market structure will break down and price level will increase spirally out of this chaotic situation.

7. Overall Impact and Reasons for the Ratchet Effect

If government increases $\overline{\boldsymbol{G}}$, for instance, $\boldsymbol{AD_0}$ will shift to $\boldsymbol{AD_1}$ along with a diagonally upward Rail Track. As a result, both the price level and the equilibrium real GDP, $\boldsymbol{Y}$ will increase. $\boldsymbol{P_1}$ will increase to $\boldsymbol{P_2}$ and $\boldsymbol{Y_1}$ will increase to $\boldsymbol{Y_f}$ (the full-employment level of output). We will find a movement of the economy from point *a* to point ***b*.**Now, again for some reason, $\boldsymbol{AD_1}$ falls down to $\boldsymbol{AD_0}$, but the economy will not turn back from point *b* to the point *a* and price level will not decrease

from $\boldsymbol{P_2}$ to $\boldsymbol{P_1}$. Rather, for many reasons, short-run aggregate supply curve will have a "leg-up" from $\boldsymbol{P_0}$ to $\boldsymbol{P_2}$. The economy will move from point ***b*** to the point ***c*** which will result in a much lower output ($\boldsymbol{Y_2}$) than the initial level. The purchasing power of the wage earners and other fixed income people will lose their purchasing power due to two effects. On the one hand, unemployment will make the life of some people vulnerable, and on the other hand, all these people will face a very high price level that implies a direct decline of the purchasing power. However, rich producers will make more profit margins as well as total profits. But, income inequality in the economy will increase and the economy will become very unstable. Thus, we see that once the general price level increases for a demand-side pull, price will never fall to its initial position if aggregate demand falls to its original position. Here we are not talking about an obsolete or out-of fashion product, the price of which declines gradually over time. Here we are talking about the aggregate demand. This phenomenon of upward biased price level is known as the Ratchet Effect (Gordon, 2021). This effect is some additional butter for the rich and the politicians. But for the poor, it is simply one more drop of potassium cyanide.Thus, whenever government undertakes various ill-planned development projects such as flyovers, military warheads, underground railways, etc., these government undertakings create the Ratchet Effect.These developmental undertakings are good for political popularities but are not good for the development of the economy or the per capita income adjusted by GINI-Coefficient. (GINI Coefficient is a statistical measure of the degree of variation represented in a set of values, used especially in analyzing income inequality: An increase in the GINI coefficient suggests that income is becoming more unevenly distributed). We have to remember that the ratchet effect is not a static effect on an economy—it is rather viral and spiral as well as dynamic. We will now discuss the reasons behind the ratchet effect.

In elementary macroeconomics textbooks, there are six common reasons for the Ratchet Effects: The Monopoly Power, Morale and Productivity, Hoarding, Training Investments, Wage Contract, and Minimum Wages (see for example, Macroeconomics, Chap. 7, University of Colorado, Boulder 2020). However, these are less important factors than the other six missing factors.There are, in fact, twelve identified reasons for Ratchet Effect in an economy. These are described below in brief:

I. The Monopoly Power: In many industries and the Agri-product sector, sellers have sufficient monopolistic power to resist price cuts.

II. Illegal Syndication: In many instances sellers form illegal syndications known as Cartels in Economics. They form three types of Cartels— Centralized Cartels to sell products at unfair prices (also known as Price Cartels when price is the only thing to decide on), Serial Cartels (selling product serially to create monopoly), and Market Sharing Cartel.

III. Hoarding: Many sellers hoard products to create artificial shortage of supply. ***AS*** curve shifts upward and price goes up.

IV. Parasites: There are many parasites in the distribution processes. Police, political cadres, and many others take tolls from the sellers that increase price and shift AS curve upward.

V. Marketing Channel Breakdown: Parasites, in many cases, also break down the smooth distribution channels of products by restricting the supply of goods in the marketplace. The supply of consumer goods, for example, in most cases, is controlled by some parasites that create an artificial supply shortage in our country.

VI. Morale and Productivity: Wage inflexibility is reinforced because employers may not want to reduce wage rates for two reasons: i) employee productivity is directly related to wage and ii) if wage is reduced, purchasing power comes down and thus organizational citizenship does not hold. So, the company will have resource wastage.

VII. Training Investments: Investment made to train labor force and managers has to be realized over time. If wage is reduced and employees leave the company, the company will not be able to recover its investment in human skill development.

VIII. Wage Contract: Wage is set on the basis of an employment contract. Thus, when $\boldsymbol{AD}$ curve shifts back, price cannot be reduced, since wage cannot be reduced along with the price movement.

IX. Minimum Wages: In some sectors, there are minimum wages below which employers cannot recruit employees. In addition, there must be some minimum wage to attract employees to work in a particular sector, such as the RMG sector in Bangladesh. Govt. has set a minimum wage, but that is actually the basic minimum beyond which the RMG sector will not get required employees.

X. Lack of Business Ethics: In many countries, sellers are prone to make quick profit by cheating and/or unethical practices. This behavior resists price cuts when demand is low.

Many political economists hypothesize the following two additional reasons for Ratchet Effect:

XI. Accelerating Announcement Effect: In many instances, price level suddenly increased due to expectations of future hikes in prices of many home-grown or imported products. These expectations are formed from the announcements made by the government. For instance, when a powerful minister announces that "there will be no increase in price of the product X before two weeks", then the price of product X starts increasing instantaneously. This effect of such announcement can be called the "Accelerating Announcement Effect".

XII. Inappropriate mechanism of Market Monitoring: When the regulatory authority adopts inappropriate mechanism, it always becomes boomerang for the regulator. For example, imposing monetary fine on local retail stores is not an effective market monitoring tool. The regulator needs to (a) monitor the entire marketing channel or entire value chain, and (b) in many cases, the regulator needs to procure goods itself and then sell it to consumers directly. This is extremely important for the agricultural products.

8. Conclusion

In the current context of Bangladesh, the Accelerating Announcement Effect is the most powerful reason for sudden increase in general price level that may start with the price of a particular product mentioned in the announcement. When the price of one product increases, the prices of all other products start increasing. Edible oil, sugar, onion, etc. are the burning examples. On the other hand, for lack of fair-trade policy or business ethics, primary members of marketing channel at different levels (wholesalers to dealers to retailers) try their best to hoard the products to create artificial shortages in supply. In addition, manufacturers slow down production and thereby the supply of goods in the marketing channels. They are not very prone to produce more and hoard, since hoarding is illegal and thus, somewhat risky. But, they, of course, do hoard limited quantities.

Another important point is illegal syndication. Forming any kind of syndicate (central cartel, market sharing cartel, or serial cartel) is illegal in Bangladesh as it is in other countries (Alam, 2022). But it is always difficult to detect and deter syndicates. They operate at different levels of marketing channels and make it difficult to control prices by the regulators. In Law, fine is not a punishment, it is a fee. You pay fine and continue until you get caught. Again, you pay and continue. An administrator will visit a store and fine it. After paying fine, it will continue its business again. Since the probability of being caught and punished is very low in Bangladesh (Alam, 2004) and thus, hoarding continues.

The last point to mention here is that whether the mechanism of market monitoring adopted by the authority is appropriate or not. In Economics, the argument is that it is needed to directly hit the problem. Here the problem is the price. To directly hit the price, government must take over the entire marketing channel and become the wholesaler, the dealer, as well as the retailer. No ration card like that of 1973-74 is required. Rationing increases price and encourages corruptions. Government must sell products in the open market (and not only through TCB at fair price) through the existing channels (members can be changed) after taking it over. The existing marketing channel members can be recruited to perform their functions to produce service outputs, but all of them will get their share as per marketing channel efficiency template: More you add, more you get, less you add, less you get (Alam, 2010).

References

Alam, S.M. Ikhtiar. (2022). *Laws Relating to Marketing Channel in Bangladesh.* Available At: Laws Relating to Marketing Channel in Bangladesh (researchgate.net).

Alam, S. M. Ikhtiar. (2021). *The Hidden Economics: The IS-LM Pyramid and the Monetary Policy Range.* Journal of Economic Studies and Financial Research. 2/2. 8-18. Available at: The Hidden Economics: The IS-LM Pyramid and the Monetary Policy Range.

Alam, S.M. Ikhtiar. (2010). *Marketing Channel Service Output Gap Model.*

Journal of Marketing Research, 12/1, 23-44. Available At: Marketing Channel Service Output Gap Model

Alam, S.M. Ikhtiar. (2004). *Economics of Bribery in Government Sector: The Control Mechanism.*TheJahangirnagar Economic Review, 14-15/1. 1-8. RF: Economics of Bribery in Government Sector: The Control Mechanism on March 21, 2022.

Barone, Adam. (2021). *Ratchet Effect*. *CF:* Ratchet Effect Definition (investopedia.com)

Gordon, Jason. (2021). *Economic Analysis & Monetary Policy. Available* at: Ratchet Effect - Explained - The Business Professor, LLC.

University of Colorado at Boulder. (2020). Macroeconomics. Available at: Aggregate Supply / Aggregate Demand Model (harpercollege.edu), Chapter 7.

Declaration of Interests

We, the authors of this research manuscript, declare that we have no financial interest. We have provided written consent to publish the paper in this journal.

To cite this article: Alam, S.M. Ikhtiar and Iqbal, S. M. Naser (2022). The Accelerating Announcement Effect Versus the Ratchet Effect: The Spiral Inflation in Bangladesh. Journal of Business and Development Studies, vol: 01, issue: 01, page: 73:83, ISUCRDP, Dhaka