Notes on
Monetarism & The Cost of Living
provide an extended explanation
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The framework, instruments, business rules & management of a Real Incomes Policy

Summary

Introduction

Real Incomes Policy (RIP)[1] is a policy based on a demonstrably transparent and distinct macroeconomic theory, and which can eliminate inflation, raise productivity and achieve a sustained growth in real wages.

Note 5 "[Sustaining growth in real wages by investing in results](#)" provided a bare bones description of RIP does, avoiding theory and implementation details, simply to get the message across. This somewhat simplistic exposition did not refer to some essential operational details on how to get this to work. This Note provides additional details of the RIP framework in terms of objectives, the policy instruments and the business rules to be applied by companies to benefit from the policy.

Again, this Note is intended to provide a short focussed sequel to Note 5 and readers are encouraged to seek further details to be found in the Special Edition of the BSR with subtitle "[Monetarism & The Cost of Living](#)".

The policy framework

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[1] RIP-Real Incomes Policy was developed in 1976 specifically to control stagflation in the 1970s following the OPEC international price sanctions on petroleum importing countries. RIP is based on the Production, Accessibility and Consumption theory of the economy as opposed to the Aggregate Demand theory which dominates all current theory and policies.

A policy framework provides a profile of the policy objective, who it is supposed to affect, and how the policy approach relates to constitutional provisions concerning the general interests of the national constituency.

RIP has a single objective of sustaining or increasing the real incomes of all constituents.

Real incomes are a measure of the ability of people to secure desired goods and services and they are defined by nominal income measured in currency units and the relative prices of goods and services. Therefore, nominal wages paid and the prices established by companies producing goods and services determine real incomes.

It is therefore evident that a policy aiming to sustain or raise real incomes needs to make use of policy instruments that can influence nominal wages as well as the process of corporate price-setting. Wage settlements and the establishment of unit output prices are matters decided within companies and therefore the challenge facing a real incomes policy is to make real incomes policy something that benefits company margins as well as the realization of mutually satisfactory wage settlements.

Therefore, in constitutional terms there is a need to accomplish policy traction or maintaining a drive to constant improvement in the real incomes of workforces, company owners, shareholders and consumers in general. Consumers being, of course, members of workforces, company owners and shareholders.

A reality facing a policy of this sort is that it cannot operate on the basis of centralized interventions in markets such as money interest rates, or monetary injections because the needs of each company and the conditions facing workforces are quite unique to each company. The conditions referred to here can include such factors as the technologies deployed, current wages, the size of the order book, the competence of the workforce, ownership and management, cash flow and other variables. Conventional policies, that make use of centralized interventions typically create winners, losers and some who remain in a policy neutral impact state.

Therefore, a real incomes policy can only work for each company and its workforce by placing the decisions and processes of sustaining or increasing real incomes in their hands so as to enable them to manage their affairs according to their specific conditions.

The underlying philosophy of such an approach is that of a positive systemic consistency, which signifies that everyone should benefit from the policy although degrees of benefit will vary. What is to be avoided is a zero-sum game approach where the benefits of some are measured by an equivalent cost to others. The record of monetarism, for example, is one where those who earn their income from holding and trading assets have tended to benefit while a considerable proportion of wage-earners have been prejudiced, see Note 6 , "*The constitutional crisis created by monetary policy*".

Prices

As mentioned, an important determinant of real incomes is the relative prices of goods and services. Development work on the real incomes approach determined that most rises in prices are the result of rises in the prices of production inputs, raising costs. To maintain an acceptable margin the natural response is for companies to raise their output prices. This is the elemental cause of inflation. Such price rises, for people on fixed wages, represent a fall in real incomes because less can be purchased using their disposable income.

On the other hand, if somehow a company can absorb the levels of inflation in input costs by lowering margins or through technical means maintaining or even lowering their unit costs through input substitution or raising efficiency the lowering of unit prices can be feasible. Two things will generally result. The company will sell more and those purchasing these products or services will experience a rise in their real incomes.

Notice that while nominal income or the number of currency units paid in wages might remain the same, falls in price still raises purchasing power of that fixed nominal income and therefore real incomes are raised.

Wages

The real value of wages is determined by the prices of goods and services as described above. Naturally, real wages will increase if nominal wages are increased. After a prolonged period of price inflation nominal wages would need to rise accompanying the inflation rate simply to maintain the current purchasing power or real income. There is, therefore, a direct relationship between inflation and what might be considered to be acceptable wage settlements.

Policy instruments

With the principal cause of inflation being the response of companies to inflationary input costs, it is apparent that inflation is a cost-push phenomenon[2]. The main reason conventional policy instruments[3] cannot control inflation without depressing the economy is that the underlying assumption of aggregate demand theory is that inflation is demand pull.

The proposed policy instruments under RIP are quite different and are designed to help companies handle cost push inflation applying a beneficial strategy.

The policy instruments are divided into a company performance indicator and a levy that uses the indicator value to estimate the levy paid. As described in Note 5, the more successful companies are in reducing prices the less levy is paid.

The performance indicator

The performance indicator measures the response of unit output prices to change in input costs. This indicator is the Price Performance Ratio (PPR) [4] which measures the percentage change in unit prices in response to a percentage change in aggregate unit costs, thus:

$$PPR = dP/dC \quad .... \quad (i)$$

Where dP is the change in unit output price; dC is the change in aggregate unit costs.

The PPR values indicate the type of contribution a company's response makes to inflation as indicated in the table below.

PPR value	Contribution to inflation	Contribution to real incomes
> 1.00	Augments inflation	Depresses real incomes
= 1.00	Passed on an input rate	Maintain decline at current rate
< 1.00	Reduces inflation	Increases real incomes

Under inflationary conditions, the cost of living rises and this affects lowest income constituents first in that a point can be reached where they are unable to purchase basic essentials. Therefore, under all inflationary circumstances time is of the essence.

Conventional policies have no impact on cost push inflation and as a result they have no traction and much time is lost as the economy enters a form of depression.

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[2] Since 1975, analytical work setting out the foundations of the real incomes approach has established that most inflation if cost-push and hyperinflation is another cause unrelated to demand pull. Hyperinflation is a topic of another Note.
[3] The main conventional policy instruments include base interest rate setting, money injection based on debt, taxation, government borrowing and expenditure.
[4] McNeill, H. W., "*The Real Incomes Approach*", Intercomex, Rio de Janeiro, 1976.

Under RIP the PPR is used to effect immediate price reductions to set the economy back onto a real growth path and immediate alleviation of the situation facing low income constituents.

This is achieved through the levy applied according to corporate PPRs.

Since the levy is paid in response to the PPR it is referred to as the Price Performance Levy [5] which is applied according to a choice of formulae, all of which contain PPR as a variable.

Various formulae can be used but the operational basis is that there are two components.

- A basic levy - BL
- A weighting of the basic levy according to the PPR value -PPR

Some examples of PPLs

Power functions

When policy makers wish to change the intensity of size of the incentive to lower PPRs a power function can be used to calculate the PPL coefficient. Thus, the table below shows the effect of different PPR power functions on the size of the Levy to be applied to operational margins with a basic levy (BL) of 20%. The BL is multiplied by the PPR power function to calculate the actual PPL paid. Table 1 shows possible outcomes.

Table 1: Some PPL power functions applied to a basic levy of 20%.

Some PPL power functions applied to a basic levy of 20%
The percentages indicate the levy to be paid according to the respective PPR
For comparison a conventional tax or flat tax can be assumed to be 20%

| | PPR power function | | | | | |
| | PPR^1 | | PPR^2 | | PPR^3 | |
PPR	PPL%	net aY%	PPL%	net aY%	PPL%	net aY%
0.00	0.00%	100.00%	0.00%	100.00	0.00%	100.00%
0.25	5.00%	95.00%	1.25%	98.75%	0.31%	99.69%
0.50	10.00%	90.00%	5.00%	95.00%	2.50%	97.50%
0.75	15.00%	85.00%	11.25%	88.75%	8.44%	91.56%
1.00	20.00%	80.00%	20.00%	80.00%	20.00%	80.00%
1.25	25.00%	75.00%	31.25%	68.75%	39.06%	60.94%

| Key: | Benefit | | Flat tax | | Prejudice | |

Notice that a company with a PPR of 0.25 ends up with highly reduced PPLs ending up with very high net margins columns (net aY%). A PPR of 0.50 ends up with correspondingly lower but generous margins. A company that has not managed to reduce inflation with a PPR of 1.00 ends up paying the BL of 20%. On the other hand, a company with a PPR of 1.25 end up paying a surcharge that exceeds the BL.

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[5] McNeill, H. W., "*The Real Incomes Approach*", Intercomex, Rio de Janeiro, 1976

A graphic representation of these relationships is provided in Figure 2.

Figure 2: Some PPL power functions applied to a basic levy of 20%

Price Performance Levies based on PPR power functions & net incomes
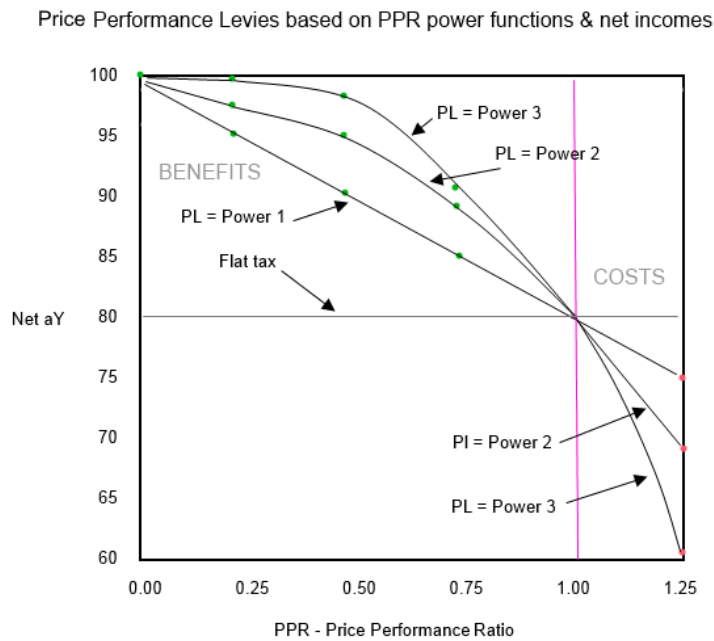
Slide functions

Slide functions simply add or deduct from the basic levy value in proportion to the PPR achieved.

Table 2 shows the margins net of Price Performance Levies based on a basic levy of 20% with PPRs being weighted up or down by 0.25 to generate the PPL value.

Table 2: Net margins with price performance levies based on slide functions

Some i-d functions applied to a basic levy of 20%
The percentages indicate the levy to be paid according to the respective PPR
For comparison a conventional tax or flat tax can be assumed to be 20%

PPR	PPR i-c function					
	PPR+0.25		PPR		PPR-0.25	
PPR	PPL%	net aY%	PPL%	net aY%	PPL%	net aY%
0.00	5.00%	95.00%	0.00%	100.00%	0.00%	100.00%
0.25	10.00%	90.00%	5.00%	95.00%	0.00%	100.00%
0.50	15.00%	85.00%	5.00%	95.00%	5.00%	95.00%
0.75	20.00%	80.00%	15.00%	85.00%	10.00%	90.00%
1.00	25.00%	75.00%	20.00%	80.00%	15.00%	85.00%
1.25	30.00%	70.00%	25.00%	75.00%	20.00%	80.00%

| Key: | Benefit | | Flat tax | | Prejudice | |

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The corresponding graphic representation of Table 2 is shown in Figure 2.

Figure 2: Graph of performance levies based on slide function

Price Performance Levies based on i-d functions & net incomes
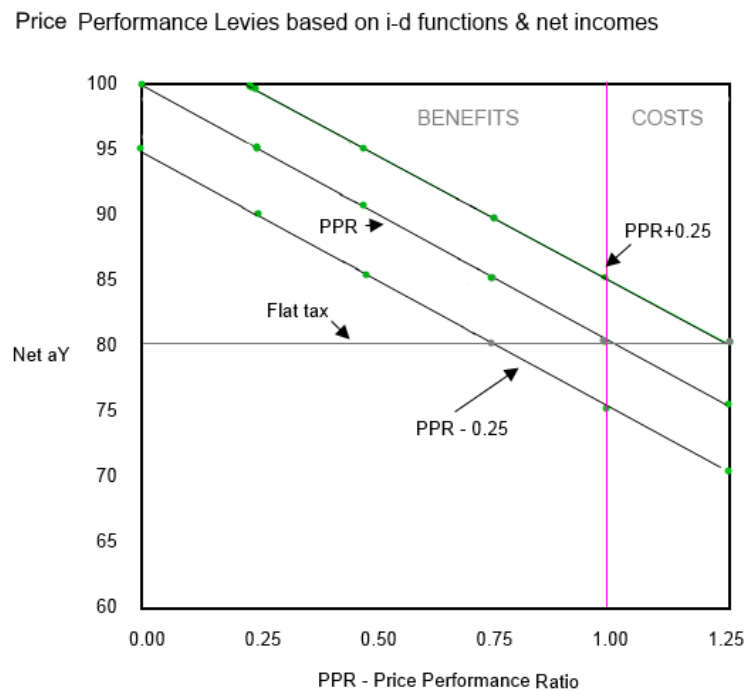
The setting of basic levy values and Price Performance Levy formulae is a matter of choice guided by consultation with industrial and manufacturing entities to identify feasible values.

It is suggested that PPL formulae should be constructed so as to provide for situations where outstanding gains in performance can be rewarded in real time by a zero PPL. This would ensure the system contains a particularly strong incentive for high performance.

In such discussions which would be very much in the domain of technology and operations management there is a need to explain the principles of corporate decision analysis under a RIP framework. This needs to refer explicitly to the business rules companies would need apply in order for the policy to represent a mutually beneficial operation.

Business Rules

In reality, faced with such a policy framework, most managers and workforces would be in a position to align their operations with the policy objectives as long as these are recognised to be beneficial and better than any other policy options.

Any business decision, no matter how the likely benefits are calculated, is associated with risk.

A happy combination would be, of course, to take decisions designed to increase margins and real incomes under circumstances where risks are demonstrably reduced.

RIP can achieve this but this depends upon transparent and effective business rules.

In this case business rules are divided into two components.

- The objective

- Quantitative calculations to support decision analysis options

Under RIP the objective is to sustain or increase the real incomes of the workforce, company owners, shareholders and as a generalise category, consumers, in short the national constituency.

Accepting this objective there are some quantitative calculation that can help manage production so as to maximise the trade-off between the degree of relative price reductions and net margins resulting from PPL payments.

Price setting rather than marginal price theory

The main difference between setting prices under RIP and normal frameworks is that there is less reference to average market prices because the exercise involves the setting of competitive prices. In other words, rather than setting prices based on marginal cost calculations each company establishes its own competitive price according to their own specific conditions. This requires a build up of information related to the price elasticity of consumption or demand which under inflationary conditions tend to be higher than under stable price conditions. Thus, the rise in consumption associated with a reduction in unit prices under inflationary conditions is higher. It is the degree of this affect which is used to calculate rises in numbers of products sold against the calculated margin net of the Price Performance Levy.

PPR Management

Since the value of the PPR lies entirely in the control of the company it is possible for the company to manage its operations management so as to optimise the PPR so as to maximise in any particular period, their net margins and the product of net margins and additional volumes sold, as revenue.

In the unit costs calculations marginal investment costs can be added which has the effect of lowering the PPR but naturally this needs to be accompanied by feasible price reduction moves.

Some of the key quantitative calculations involved in managing a corporate response under RIP are provided in Annex 1.

Policy management

The effective management of a policy such as RIP can only work on the basis of standardized and comparable data sets as well as contending with very different internal controls within each company. In 1981 McNeill[6] circulated a monograph[7] on the policy to all main political parties and some leading academics. At the time a manager of KPMG during a meeting arranged by Conservative Party advisers commented that the policy could work but at that time the data required was not commonly collected by companies. Richard Wainright, the economic spokesman for the Liberal Party, was also supportive but was of the opinion that it would involve a considerable amount of effort to set it up. Robin Matthews, Professor of Economics at Cambridge University noted that at that time RIP only referred to inflationary conditions and in order to test the model it would be beneficial to introduce a PPR able to handle falling costs or deflationary conditions. McNeill added the PPR structure for deflationary conditions after the meeting with Matthews. It is not altogether clear if Matthews comments relate to his seminal study published in 1968 on why the British economy had full employment between 1945 and 1965. During this period there was unprecedented growth, a decline in income disparity, a rise in real incomes and productivity. During this period the main conventional policies, including Keynesianism were hardly applied simply because there was full employment. On the other hand, Matthews observed that if anything policy was deflationary. McNeill's own opinion is that this

[6] McNeill, H. W., "*Botequim - Next steps.*." Real Incomes ,*March 26th, 2020*

[7] McNeill, H. W., "*Inflation control through a price performance policy*", Charter House Essays in Political Economy, HPC, 1981.

successful period relied on the very same devices as RIP so that rising investment and productivity helped moderate prices, help raise real incomes and income distribution.

Standardisation

To ensure a fair application of the policy and to avoid erroneous and dishonest reporting the most effective way is to make use of the impressive advances in information technology since 1981 in the form of database technologies and programming capabilities and the Internet. Using these resources, it would be possible to create a standardized online software-as-a-service (RIP-SaaS) for RIP participants and used to record transactions, purchases and sales, data on operations (see Annex 1 under Unit Costs) and inventories and payroll. In this way the calculation of PPRs and PPLs can be real time so that companies can adjust their operations and resources allocations in a smooth fashion when market conditions change.

To avoid transfer pricing all transactions would take place on a "trading floor" assigned virtually to each company. All data on closed sales for inputs or outputs would be recoded in an Accumulog[8] a blockchain type immutable database to prevent later modifications in recorded transactions. Any subsequent "updates" would be subject to audit and validation.

Such calculations would be ongoing but be recorded at set established periods, yet to be defined in a way similar to VAT.

The same RIP-SaaS service can calculate for each company the observed price elasticities of sales to price changes to build up a useful knowledge base for each company helping provide information to support steps to refine price setting.

Through RIP-SaaS the overall management of the policy would be facilitated through observation of performance in different industries and manufacturing sectors enabling the government to tweak basic levies or PPL formulae with sector approval, more-for-less in real time.

Sustainability

The nature of the learning curve and innovation provides a foundation for a sustainable development policy which uses beneficial incentives to also gain a sustainable policy traction.

The overall productivity result, inherent in corporate response to RIP, is a continual improvement in the more-for-less ratio which is the essential condition for the preservation of essential natural resources and sustainable growth in the context of planetary carrying capacity and climate action. This topic is the subject of another Note in this series.

General reactions to RIP

With close to 45 years of development there has been time to assess the opinions on RIP with a wide range of people. Most SME personnel have a positive view on this policy. In general engineers comprehend the approach more readily than economists steeped in the monetarist and aggregate demand approach. Monetarists are somewhat resistant, many still believing that goods and services inflation is a purely monetary phenomenon even although McNeill's work on the Real Money Theory (RMT) (See: "*Why the Bank of England cannot solve the cost of living crisis*"*)* explains why the Quantity Theory of Money is flawed. There are repetitive attempts to solve the Cost of Living Crisis through conventional monetary and fiscal schemes which proved to be useless over the period 1973 through 1995.

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[8] Accumulogs were first proposed by Hector McNeill in 1986 a decade before blockchains emerged.

There has remained a resistance within academia to even refer to the real incomes approach or review RIP even although the Real Incomes Approach to Economics website has been functioning for 25 years and contains over 200 articles. The Charter House Essays in Political Economy has been publishing papers on the approach for over 40 years on an occasional basis.

The paradoxical fact is that RIP was conceived following a review of lessons learned from policy failures in attempting to tackle the 1970-1990 stagflation crisis which is very similar to the current circumstances. However, the policy domains continue to discuss the cost of living crisis in the same terms as the 1970s and by advocating the same policies.

It is apparent to some that RIP is for entrepreneurs and companies and workforces prepared to pioneer price setting and raising productivity in the knowledge that this is the only way to tackle inflation and achieve real sustainable economic growth. RIP is designed to lower risks of those prepared to take advantage of the policy associated with the setting of competitive prices and achieving corporate growth while serving the interests of all constituents by raising real incomes.

Introducing RIP

The best laid plans come awry because of unexpected effects either on the companies involved or consumers and it is therefore advisable to introduce RIP on a pilot basis in companies whose products constituents are hard pressed to secure and which they consider to be essential. Obvious examples energy companies, agriculture and food suppliers and housing development groups, public and commercial transport companies, including trains, and public services.

In terms of public services, such as the NHS, there is no reason why this should not remain under public management/ownership but be subject to the same RIP policy conditions in order to help adjust the current disparity between rises in medical staff pay and recent inflation rates. Certainly, the performance of companies providing essential products under RIP should result in more accessible prices so as to alleviate issues associated with the cost of living.

Confidentiality issues

One issue arising from using a standardized RIP-SaaS software can be corporations becoming concerned about confidentiality of corporate financial affairs. McNeill in addressing this question has commented that beyond own investment net margins should all be allocated to the incomes of workers, owners and shareholder returns. The main tax burden could therefore be transferred to personal income tax and away from companies.

Subsidies?

Recently the question of whether the British government should subsidise the steel industry was cast into the context of being an ethical question against international free trade agreements. According to McNeill the evolution of free trade undertakings starting out under the United Nations Conference of Trade and Development (UNCTAD) in the 1960s, the General Agreement on Tariffs & Trade (GATT), the Lomé Convention and finally the World Trade Organization have resulted in Britain depleting its industrial and manufacturing capabilities and ending up with the second lowest balance of payments in the world. Nicholas Kaldor, Professor of Economics at Cambridge University , set out in his 1966 inaugural lecture why Britain needed to expand its manufacturing sectors to secure real growth which services alone cannot achieve. He predicted the subsequent decline in industry, de-skilling of the work force, rising income disparity and poverty . Kaldor and many other development economists accepted the fact that to assist any activity attain the level of productivity required to survive internationally, the "infant industry" domain, protection and subsidy are essential.

In the case of Britain that has lost most of its industry and manufacturing, an integral part of tackling inflation and ensuring productivity in industry and manufacturing is sustained, will also require a subsidy of sorts. This is because international competitors are way down the learning curve and have become very competitive. However, money spent on these products is partially invested in these offshore plants while British manufacturing has an investment deficit. Joseph Schumpeter considered margins or profits to be the guarantor of future activities and employment. RIP goes a long way to support this principle as well as help recover real growth by accelerating the process of unit price reduction and growth in real incomes. The reality is that most "infant industry" subsidies might achieve this but they do so in a very inefficient way.

If RIP is subjected to criticism in terms of it being characterised as a subsidy scheme then there is a need for a far wider honest discussion on the type of development economics required for this country. Conventional macroeconomics has no economic development components, the critical development initiatives are relegated to "the market". Development economics includes considerations of human and social development and the elimination of poverty as fundamental objectives which do not feature in conventional macroeconomic economic theory and its derived policies. In reflecting on the devastating impacts that the conventional alternatives have had on this country it is more than apparent that a development economics approach is required. In this context, Note 6, "*The constitutional crisis created by monetary policy*" provides an example of a situation created by conventional policies that has undermined basic democratic imperative of policy neutrality by favouring the interests of small groups of constituents over the interests of the majority. The avoidance of such a state of affairs is something that should be a priority as an economic development priority.

There is a need, in the context of British economic development, for a new category of supply side policy[9] initiatives which respond to the reality facing an increasing portion of our constituents in the form of income disparity and poverty. This being a condition affecting around 25% of the constituents there should be no entertainment of complaints that as a result of international undertakings concerning subsidies, that we should not respond the needs of our constituents first.

RIP, in the context of Britain's needs is, in reality, an "economic recovery" policy as much addressing inflation and real incomes as it is addressing levelling up and a host of other situations currently handled by ad hoc initiatives that collectively have no impact of inflation, sustained real economic growth or income disparity and poverty.

As things stand, policies adhere to flawed theories and derived policies which have resulted in this country declining to a lamentable state of affairs. Only a fundamental change in theory and policy can help extricate this country from this situation. RIP is one option which is offered for consideration by whoever wants to review possible ways forward.

Annex 1 Quantitative calculations

Price elasticity of consumption

The response to price reduction can be measured by the rise in physical quantities sold or the price elasticity of consumption (pEc)[10]. Formally the elasticity of consumption is the percentage rise in consumption in a period associated with a percentage reduction in price in that same period.

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[9] Supply Side Economics is not in reality a supply side policy. It is a marginal taxation scheme which resulted in rising income disparity and a massive national deficit and inflation was tackled by depressing the economy. RIP is a supply side economics paradigm controlled by the supply side which creates a sustainable real incomes growth path.

[10] This is the same coefficient as the price elasticity of demand pEd.

pEc = percentage change in consumption/percentage change in unit price

$$pEc = \frac{[(Q_1 - Q_0) / (Q_1 + Q_0)]}{[(P_1 - P_0)/(P_1 + P_0)]} \quad \dots \quad (ii)$$

Where: Q_0 *is* the consumption at the beginning of the period; Q_1 is the consumption at the end of the period; P_0 is the previous price; P_1 is the new price .

In the decision analysis to decide on a relative price reduction in comparison with an inflationary market two factors are of importance:

- The pEc is higher for small companies;
- The pEc is accentuated or raised under conditions of inflation.

In order to assess the net result for a company reducing relative prices there is a need to calculate the unit costs and margins associated with the relative price reduction in terms of aggregate income and aggregate margins.

Unit costs

Unit costs are calculated by dividing total costs by physical output.

Physical output O can be represented by the simple equation:

$$O = Cap. \, Cu. \, Ta. \, Y \quad \dots \quad (iii)$$

Where: Cap is the maximum equipment capacity (attainable in a full operational day); Cu is the capacity utilization (decimal percentage, linked to operational settings such as aped of operation); Ta is the time assigned to operations each day (decimal percentage of maxCap time); Y is the yield of saleable products (decimal percentage).

Unit costs are estimated by dividing the total operational costs by the output to obtain the cost per unit.

$$Unit \, costs = \frac{([I_1.P_1] + [I_2.P_2] + \dots + [I_n.P_n])}{(Cap.Cu.Ta.Y)} \quad \dots \quad (iv)$$

Where: I_n = Input quantity; P_n is input unit price

The effect of the learning curve is to augment yield (Y) or the percentage of output that is saleable by meeting specific standards of quality as a result of less mistakes, breakages, losses and waste combined with an upward adjustment in Cu and Ta over time as a result of increased sales.

Margins

Margins are measured by deducting the unit costs from the unit price thus:

$$M = P - \frac{([I_1.P_1] + [I_2.P_2] + \dots + [I_n.P_n])}{(Cap.Cu.Ta.Y)} \quad \dots \quad (v)$$

Where: M is the margin.

A reduction in unit prices will result in an initial reduction in the Margin because unit costs would remain the same. Rises in margins can only occur as a result to re-establishing the previous price or by lowering unit costs.

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