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THE IMPACT OF THE PRICES AND INCOMES POLICY ON THE ECONOMIC CLIMATE OF BARBADOS*

Andrew S. Downes

1 INTRODUCTION

There are a number of policy options available to a government in its macroeconomic management of an economy. These policy options relate to fiscal policy (taxation and expenditure measures), monetary policy (interest rate changes, credit control), commercial or trade policy (import duties, import licensing, export subsidies, exchange rate changes) and incomes policy (wage restraint, productivity bargaining). The choice of a particular policy option depends on the nature and extent of the economic problem, the possible conflict with alternative policy options, the likely response of the economic agents to the policy option and the social costs of the option.

This paper examines the likely impact of the recently introduced prices and incomes policy on the economic climate of Barbados. On August 24, 1993, the representatives of the workers and employers and the Government of Barbados signed a *Protocol on the implementation of a Prices and Incomes Policy in Barbados.* Although the issue of an incomes policy in Barbados has been a contentious one since the mid-1970s, the signing of the Protocol represents the first time in modern Barbadian industrial relations history that the three parties have explicitly agreed on a prices and incomes policy.[1]

The Protocol involves a number of components. First, a general freeze on increases in basic wages and salaries of workers in both the public and private sectors for a two-year period beginning April 1, 1993 and ending March 31, 1995. The freeze also applies to all forms of employment income (allowances, payment in kind, fringe

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benefits, professional fees, lump sum payments) and to both part-time and full-time workers. The only exception to the freeze relates to workers whose wages are 'deemed by the Social Partners to be substandard'. Second, any increase in wages and salaries during the two-year period would be based on profit-sharing and productivity bonus arrangements.[2] Third, a review and monitoring of pricing policies so that price increases would be limited to legitimate cost increases. Fourth, the establishment of a tax regime and a National Productivity Board by the Government to support the objectives and agreements in the Protocol. Fifth, the consideration and examination of indexing wage adjustments and tax allowances to increases in the cost of living. Finally, the process of collective bargaining will be maintained to address issues such as conditions of work and the sharing of productivity gains.

Although the Protocol refers to a prices and incomes policy, greater emphasis has been placed on the incomes policy component. The Protocol reflects the general voluntaristic approach to collective bargaining in Barbados.

The main objectives of the prices and incomes policy are:

(i) to ensure the existing parity of the Barbadian dollar with the US dollar is maintained (i.e. to avoid a devaluation)
(ii) to improve (price) competitiveness
(iii) to increase employment opportunities
(iv) to promote a national commitment to improved productivity and increased efficiency
(v) to enable workers and employers to contribute more to planning and policy making.

As Beckles (1992) notes an "incomes policy cannot be successfully implemented until there [are] fundamental changes [in the] adversarial approach to industrial relations and labour peace" (p.2). The voluntary signing of the Protocol by the Social Partners suggests that an attempt is being made to effect these 'fundamental changes'.

This paper therefore analyses the likely impact of the Protocol on the economic climate in Barbados. In the next section, the economic climate within which the Protocol was designed is briefly reviewed. This is followed by a more detailed examination of the nature of prices and incomes policies in a small, developing country

such as Barbados. The likely impact of the policy measures is analysed in the light of the workings of the Barbadian economy. Finally, an overall assessment of the policy measures is presented.

2 ECONOMIC BACKGROUND TO THE PROTOCOL

After a period of moderate economic growth in 1988 and 1989, Barbados experienced a decline in economic activity over the period 1990 to 1992 (see Table 1). A review of the economic performance since 1990 would indicate the following:

(i) a significant decline in economic production, with poor performances in the main export-oriented sectors — sugar, manufacturing and tourism;
(ii) high levels of unemployment, especially among the young. Unemployment claims increased while pressure was placed on the Severance Payments Fund;
(iii) a low rate of net capital inflows and a fall in gross capital formation;
(iv) relatively high, though declining, interest rates;
(v) substantial fiscal and BOP deficits in 1990 and early 1991 which were brought under control through an IMF stabilisation programme in late 1991 and 1992;
(vi) a rise in the average annual rate of inflation;
(vii) reduced credit to the private sector, with a build up of liquidity in the commercial banking system.

In order to combat the economic difficulties facing the country, the government adopted a macroeconomic policy framework which involves a tight monetary and fiscal policy stance using the nominal exchange rate parity with the USA as a policy anchor (i.e. Bds$2 = US$1).

The main economic policy and reform measures of the government are outlined in its Letter of Intent to the IMF (October 1991) and the Financial Statements and Budgetary Proposals (April 2, 1991, September 16, 1992, March 31, 1992 and March 15, 1993). The stated objectives of the government's economic programme have been to:

(i) cure the shortage of foreign exchange;
(ii) improve external competitiveness by removing the disincentive to export

TABLE 1: SELECTED ECONOMIC INDICATORS 1988-1992

INDICATOR	1988	1989	1990	1991	1992
1. Real GDP ($m)	877.5	909.1	879.2	843.8	798.9
2. Growth Rate of Real GDP (%)	3.5	3.6	-3.3	-4.0	-5.3
3. Average Annual Unemployment Rate (%)	17.4	15.3	15.0	17.1	23.0
(a) Male	12.3	11.1	10.1	13.2	20.5
(b) Female	22.9	19.8	20.3	21.4	25.7
4. Inflation Rate (%)					
(a) Average Annual	4.8	6.2	3.1	6.3	6.1
(b) December to December	4.4	6.6	3.4	8.1	3.3
5. Wage Rate Increases (%)	4.0	4.1	5.0	3.0	0.0
6. Government Finances (Bds $m)					
(a) Current Revenue	818.9	1013.7	941.5	1027.9	996.8
(b) Current Expenditure	757.0	873.1	948.4	934.7	924.2
(c) Current Account Balance (Surplus '+'; Deficit '-')	61.9	140.6	-6.9	93.2	72.6
(d) Capital Expenditure and Net Lending	208.2	180.3	237.5	162.7	97.5
(e) Overall Balance (Surplus '+'; Deficit '-')	-146.3	-39.7	-244.4	-69.5	-24.9

TABLE 1 (Cont'd): SELECTED ECONOMIC INDICATORS 1988-1992

INDICATOR	1988	1989	1990	1991	1992
7. Balance of Payments (Bds $m)					
(a) Current Account Balance	39.2	38.1	-34.5	-59.7	275.7
(b) Domestic Exports	248.0	250.4	244.8	241.2	275.2
(c) Retained Imports	1057.7	1230.2	1231.3	1225.8	938.8
(d) Capital Account Balance	85.1	23.4	91.9	-2.3	-203.6
(e) Balance for Official Financing	71.7	-71.5	-93.3	-118.5	63.7
(f) Change in Reserves[1]	-49.2	85.0	90.8	95.9	-140.8
(Increase '-'; Decrease '+')	n.a.	86.2	78.9	80.4	-58.2
(g) Level of International Reserves (Total Foreign Assets)	350.8	268.2	166.2	70.4	239.4

Notes: (1) The first row represents a change in foreign reserves, while the second row is the change in net international reserves of the Central Bank defined as Foreign Reserves less IMF resources and net foreign assets of commercial banks.

(n.a.) not available.

Sources: Central Bank of Barbados: *Balance of Payments of Barbados* (1993)
Central Bank of Barbados: *Annual Reports* 1989, 1990, 1991, 1992, 1993
Barbados Ministry of Finance and Economic Affairs: *Economic Report*, 1992

(iii) encourage the efficient allocation and use of resources
(iv) restore financial stability
(v) improve the conditions for the resumption of sustainable economic growth

In order to achieve these objectives in the medium term (3-5 years), the government has outlined a policy reform package which includes trade and tariff reform, administrative reform, direct and indirect tax reform, a privatisation programme, financial reform, a social benefits policy, a credit and monetary policy and an incomes policy (see Downes, 1993).

An agreement with the IMF in 1991 for a standby loan of US$28.4m and funds from the Compensatory and Contingency Financing Facility to the tune of US$29.7m forced the government to adopt a number of policy measures in the September 1991 budget. These included a reduction in government expenditure, increased taxation, the removal of concessions coupled with increases in user charges and a tight monetary policy stance. In its March 1993 Budget, the government announced an incomes policy which called for a freeze on 'basic' wages and salaries for two years in both the public and private sectors. Provisions have been made for workers to receive productivity bonuses and also share in company profits.

The government has therefore used a range of policy instruments with the exception of the exchange rate in order to achieve macroeconomic stability and economic growth. The nominal exchange rate has been used as a policy anchor which means that more extensive use has been made of monetary, fiscal and incomes policies.

3 THE NATURE OF A PRICES AND INCOMES POLICY

An incomes policy refers to a set of principles laid down by the government to govern the rate of increase of earnings of the recipients of income and hence the relative distribution of the earnings of these recipients (Brewster, 1973). If there is no laid-down incomes policy, then it is assumed that the rate of increase in earnings and the relative shares of income are determined by the relative strength of participants (unions and employers) within a morass of taxation, labour legislation and other measures. Where the bargaining power of workers is strong or greater than that of employers, then they can receive

higher earnings. Employers, on the other hand, can increase prices or profit margins to maintain their relative income share (see Appendix 1).

An incomes policy can take on various forms (see Blackman, 1991, Mascoll, 1991). These include a wage cut or voluntary give-back; a wage freeze accompanied by price control; wage restraint where increases are related to productivity gains; changes in the statutory minimum wage; differential wage increases where more productive workers are better compensated; flexible wage guidelines with no fixed union agreements; tax-based or incentive-based incomes policy; a trade-off between wage increases and other benefits; employee share ownership plans (ESOPS); retraining programmes and employment/training subsidies to companies. Incomes policies can be either **equity-based** where everyone is treated equally or **efficiency-based** where the objective is to improve productivity which in turn determines pay increases.

A properly designed incomes policy should incorporate not only wages and salaries but also professional fees, self-employment income, dividends, interest payments and other forms of income from property. The Protocol seeks to incorporate all forms of income.

In practice, the focus is placed on wages and salaries since these can be more easily monitored and, in some cases, contribute a relatively high proportion of total production costs. This does not mean that other sources of income cannot be easily controlled. For example, disputes on rent increases can be settled in court and hence rents can be restricted if a rent control Act is on the statute books; dividends paid by (public) companies are usually publicised and interest rates can be controlled by the government's monetary agencies.

An incomes policy based on employment income does not restrain a firm's total profit and therefore a policy for restraining incomes is likely to be accompanied by the use of a prices or tax policy. Since the firm can increase prices to maintain profit level or income share, an incomes policy in the form of wage restraint can result in a decline in real wages and hence the economic welfare of workers. While an incomes policy focusses on the factor market, a prices policy relates to the commodity market.

A prices and incomes policy usually has the following objectives:

(i) to curb domestic inflation
(ii) to control government expenditure
(iii) to enhance price competitiveness
(iv) to restrain imports
(v) to promote employment
(vi) to modify price expectations
(vii) to change the distribution of income.

To the extent that labour costs (wages, salaries and other benefits) form a high proportion of production costs, then increases in labour costs not matched by increases in productivity can lead to price increases, depending on the mark-up policy of firms and the price elasticity of demand (see Appendix 2). Such an analysis applies to a closed economy where the direction of causality runs from wages to prices (see Codrington, 1978).

Research work on the 'causes' of inflation in Barbados indicates that:

(i) import price increases provide the main stimulus to domestic commodity inflation
(ii) increases in labour productivity have a negative impact on domestic inflation
(iii) although wage increases have a positive impact on domestic inflation, it tends to occur with a lag.

(see Downes, 1985; Downes, Holder and Leon, 1990, 1991; Downes, Worrell and Maynard, 1993; Holder and Worrell, 1985).

Furthermore, research findings by Craigwell (1991) suggest a unidirectional causal relationship from prices to wages in the case of Barbados. These findings lend support to the 'catch-up' hypothesis associated with collective bargaining in Barbados. An incomes policy would therefore have little impact on current domestic inflation.

The strong influence of import prices on domestic inflation suggests that the simple wage-price productivity relation needs to be modified (see Brewster 1965, chap. 5). The Protocol provides for the increase in prices where there are 'legitimate' cost increases such as increases in import prices. In such a case, real wages would be reduced unless there are gains in labour productivity which result in an increase in nominal wages.

Where the public sector is a major employer of labour and a wage leader/setter, then a system of 'wage imitation' or 'pattern bargaining' means that an incomes policy in the public sector has important implications for:

(i) controlling government expenditure
(ii) the growth of the private sector, as excessive wage and salary increases can result in a reduction of private sector employment.

The share of wages and salaries in total government current expenditure increased from 42.9 percent in 1982 to 49.2 percent in 1987 (see Table 2). There was however a general decline between 1987 and 1992. The decline in the percent of wages and salaries has been due to the wages and salaries cut by 8 percent in 1991 and the lay-off of a number of casual and temporary public sector workers.

TABLE 2: WAGES AND SALARIES AS A PERCENTAGE OF TOTAL GOVERNMENT CURRENT EXPENDITURE 1982-1992

Year	Total Current Expenditure (TCE) ($M)	Wages and Salaries ($M)	Wages and Salaries as a % of TCE
1982	461.5	198.3	42.9
1983	486.2	225.9	46.5
1984	532.6	239.4	44.9
1985	609.5	278.4	45.7
1986	641.4	307.3	47.9
1987	701.3	345.0	49.2
1988	757.0	353.6	46.7
1989	873.1	409.2	46.9
1990	948.4	446.4	47.1
1991	934.7	430.3	46.0
1992	924.2	397.1	43.0

Source: Central Bank of Barbados: Annual Reports

If government is unable to finance its fiscal deficit through further taxation, domestic and foreign borrowing or tighter fiscal administration, then it has to control its expenditure. To the extent that the wages and salaries bill constitutes a significant proportion of

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Source: Central Bank of Barbados: Annual Reports

If government is unable to finance its fiscal deficit through further taxation, domestic and foreign borrowing or tighter fiscal administration, then it has to control its expenditure. To the extent that the wages and salaries bill constitutes a significant proportion of

(v) the development of the human resource base of the country: health and education of the workforce, the extent of labour mobility and flexibility, the incentives structure, the motivation and attitude to work in the work place

(vi) firm level elements such as productivity, creative spirit, search for and commercialising of technology, emphasis on product quality and after sales service, delivery schedules, customer relationships, etc.

Research work by Vernon-Wortzel et al (1988) indicates that US buyers and importers consider non-price factors as being more important than price factors in deciding whether to purchase goods and services from developing countries. These non-price factors include the delivery of goods by the date promised, whether the product is marketable in the USA, the ability of the producer to meet product workmanship standards, the reliability of shipping and the extent to which the product meets product styling specifications. To the extent that international competitiveness refers to the ability of producers to design, produce and market commodities better than rivals in the domestic and international market, then the adoption of an incomes policy to keep real unit labour costs relatively low is but a very small component of the multi-dimensional concept of international competitiveness.

Since disposable income is a key variable in the determination of import demand, it is argued that an incomes policy restrains the growth of aggregate demand (expenditure) and restricts the growth of imports, hence containing the deficit in the balance of payments (BOP) in the face of poor export performance and low capital inflows. While an incomes policy in the form of the wages and salaries freeze might contain the growth of imports (e.g., consumer goods), it also adversely affects the growth of domestic demand and thus jeopardizes the employment of persons.

To the extent that the demand for labour (employment) depends inversely on relative factor prices, that is, the wage rate relative to the user cost of capital, a restraint on wage increases can increase the demand for labour. Preliminary empirical research on the determinants of employment in Barbados suggests that output (sales) and adjustment costs (cost of hiring and firing labour) are more important factors than relative factor prices.[3] The net effect of an incomes policy on employment growth (i.e., relative price and output effects) is largely negative in an economy such as Barbados.

If wage inflation is fed by price expectations, then a price and incomes policy can control these expectations. Where import inflation is the main factor in the domestic inflation process, a wages and salaries freeze has little impact on price expectations.

A prices and incomes policy can also change the distribution between earned and unearned income after taxation between sectors, industries and occupations.

The central purpose of a prices and incomes policy is to establish guidelines, ceilings or a floor to achieve clearly defined and agreed economic objectives - economic growth, price stability, BOP equilibrium, fiscal balance and international price competitiveness. A prices and incomes policy is not a continuing programme but a **temporary** or **short term** policy programme. It should not be a separate programme but part of a policy package. In this way its effectiveness is enhanced.

In Barbados, the main objectives of an explicit prices and incomes policy have been to contain government expenditure, to reduce the impact of increased expenditure on the BOP and to enhance international price competitiveness. The government has legislated wages and salaries increases in the public sector in 1976, 1980, 1982 and 1988, reduced wages and salaries by 8 percent in 1991, and imposed price controls on selected consumer goods since the mid-1970s.

4 THE LIKELY IMPACT OF THE PRICES AND INCOMES POLICY

As outlined in the previous section, a prices and incomes policy can "serve many purposes some of which may be contradictory" (Stone, 1993, p.33). Little analysis of prices and incomes policies has been undertaken in the Caribbean primarily due to the lack of detailed data on wages and profits. In this section, a discussion of the likely impact of the prices and incomes policy on the economic climate in Barbados is presented.

First, the policy is set within the context of a nominal anchor approach to exchange rate policy. This is a version of monetarism known as 'international monetarism' (Corden, 1990). The commit-

ment to a fixed nominal exchange rate (Bds $2 to US$1) sends out clear and credible signals to the private sector (firms and households) regarding the future path of inflation, which is linked to the inflation rate of the main trading partner countries. The adoption of a nominal exchange rate anchor therefore requires the government to adopt a fiscal policy stance which keeps the fiscal deficit under control and avoids borrowing from the Central Bank. In addition, the Central Bank "buys and sells foreign exchange at a predetermined price and thus loses control over the NFA [net foreign assets] in its balance sheet. . . . in this case, transactions in domestic assets, which affect domestic interest rates, must be conducted in a manner that supports the exchange rate and sustains a reasonable level of NFA" (Bruno, 1993, p. 29).

The adoption of a nominal exchange policy anchor means that the international price competitiveness of a country, defined by the real exchange rate, would have to be achieved via the control of domestic wage rates and increased productivity (see Appendix 3).

Secondly, the policy should lead to the development of a productivity consciousness in both the private and public sectors. The challenge to both employers and trade unions is the design and implementation of alternative compensation schemes such as productivity bonus and profit sharing schemes. There has been little experience with these schemes in Barbados. Since profitability is the sum of productivity and price recovery, where it is difficult to measure productivity objectively, then profit sharing arrangements can be developed.

Thirdly, since information sharing and communication are key ingredients for the successful implementation of productivity bonus and profit sharing schemes, the Protocol should provide the basis of a different approach to collective bargaining. Although employers and trade unions have engaged in productivity bargaining on various occasions, the Protocol gives these parties the opportunity to broaden and deepen the collective bargaining process. A productivity-based incomes policy should also result in changes in work organisation as workers' representatives seek to ensure that workers have a voice in the development of productivity improvement schemes.

Fourthly, there is the possibility of widening wage and salary differentials due to differential productivity growth by department, company, industry and sector. It is important to monitor these differentials in order to reduce any adverse change in the distribution of income. If comparability is used in wage negotiations, attempts may be made to increase wages in low productivity sectors beyond the necessary performance level.

Fifthly, there will be a need to monitor the overall agreement in order to avoid any abuse. In order to avoid demotivation in the work place, some employers may attempt to grant wage increases based on bogus productivity claims. The incomes policy is based on the direction of causality running from productivity to wage increases. There is, however, a school of thought on wage determination, namely, the efficiency wage thesis, which indicates that increases in wage rates lead to increases in productivity. It may be profitable for employers to pay higher wages to ensure that workers provide more effort as they do not want to lose their high-paying jobs or to discourage workers from shirking on the job. The available evidence for Barbados suggests that the causality runs unidirectionally from productivity to wages and reflects a sequential bargaining process which sets productivity 'targets' and then incorporates the realised values in the wage determination process (see Downes and Leon, 1993).

Sixthly, since increases in productivity depend on a range of factors such as

- (i) the use of modern technology
- (ii) labour quality improvements or human capital investment (training and skills acquisition)
- (iii) improvements in managerial and organisational techniques
- (iv) flexitime work arrangements
- (v) changes in plant-lay
- (vi) increasing specialisation due to a widening of market opportunities

then the distribution of the productivity gains can be a source of contention at the bargaining table. The design of productivity gainsharing schemes would therefore become a priority issue in the collective bargaining process.

Seventh, although price increases would be limited to 'legitimate cost increases', there can be instances of 'side market' activity

as shortages can develop for some commodities at agreed price controls. The monitoring of price increases is a substantial information gathering exercise and the discussion of 'legitimate cost increases' can be a time consuming process. The bargaining process would be extended to price increases in addition to wage and salary increases and conditions of service.

Since increases in productivity and profit result in increases in wages and salaries, then the structure of the tax regime can be a disincentive to increased work effort. The government would therefore have to design a tax regime that is not a disincentive to productivity growth.

It has been argued that by restraining labour income, companies can reap higher profits thus leading to increased investment (capital formation). However, private investment depends on a range of factors other than profit, namely, the extent of macroeconomic uncertainty, the cost of capital relative to the expected rate of return, the growth of the economy and the extent of public sector investment. The trend in many of these variables has not been conducive to capital formation in Barbados. An incomes policy to increase investment therefore needs the necessary pre-requisites to be in place.

Several arguments have been raised both for and against a prices and incomes policy (see Table 3). It must be realised that such a policy is a temporary or short term one so that its impact must be measured by what it can achieve in the time period specified and the implications for the medium and long term. The historical success record of incomes policies has been mixed but generally disappointing. For example, in Jamaica, the wage guidelines adopted by the government were largely breached and later abandoned. In Guyana, extensive use was made of non-financial benefits (e.g. housing, utilities, medical care) to circumvent wage and salary regulation (see Thomas, 1993). The essential question remains as to whether a prices and incomes policy (which can result in further market distortion) is the most effective policy for achieving such objectives as international competitiveness and employment creation in small developing economies. Since these are long term objectives, an incomes policy is largely ineffective. A prices and incomes policy as expected is more appropriate in controlling nominal wage growth, inflation and government

TABLE 3: ARGUMENTS AGAINST AND FOR INCOMES POLICIES

A ARGUMENTS AGAINST INCOMES POLICIES

1. By restricting wage and price changes, controls prevent relative wages and prices from performing their allocative function by preventing their increase in excess demand markets thus leading to shortages, rationing and side markets.
2. Incomes policies are difficult to sustain for any long period. Controls have temporary effects. They break down when employers need to increase wages and salaries to attract the right kind of labour and/or when trade unions seek to maintain or regain their relative position with respect to the distribution of income.
3. The 'pop-up' or 'jump effect' in wages and prices after controls tends to erase earlier gains. Market distortions and shortages arising from the controls make the price level higher than it would have been with no programme at all. The long term trend in an open economy is dominated by the trend in import prices.
4. The interference with individual freedom creates inequalities in the distribution of income.
5. They create efficiency losses in the economy due to the commodity and factor market distortions. These losses occur because rapidly expanding sectors of the economy that face manpower shortages are prevented from bidding up wages/salaries to attract labour.
6. There are high administrative costs associated with the enforcement of wage and salary contracts and monitoring and measuring prices for several varied products.
7. Wage drift (the excess of actual earnings over negotiated growth of wage rates) can undermine the policy. Wage drift can occur by the lapse in the monitoring mechanism, reducing the standard work week so that overtime comes into force sooner enabling earnings to increase for fixed hours of work, or job reclassification so that a worker gets more for doing the same kind of work.

B ARGUMENTS FOR INCOMES POLICIES

1. Incentive-based incomes policies can moderate wage and price increases without unduly affecting the free inter-play of market forces. For example, tax-based incomes policies provide incentives for wage and price restraint by using the tax-subsidy mechanisms. The tax-based policies can apply to firms in relation to their wage payments and to individuals with respect to the effect of inflation.
2. They can temper inflationary expectation, especially if accompanied by appropriate monetary and fiscal policies.
3. They prevent trade unions from exploiting their monopoly power and hence keep negotiated wages near market-clearing levels.
4. They are useful as a short-term measure to meet a specific crisis in the labour market.

expenditure, but there are 'side effects' associated with such a measure.

5 CONCLUSION

An overall assessment of the prices and incomes policy adopted by the government of Barbados would indicate that it will contain the growth of government expenditure (especially the wages and salaries bill) and also reduce the impact of increased expenditure on the BOP in the short run. In so far as the policy leads to a productivity consciousness in the public and private sectors, then it will have some impact on real unit labour costs and hence international price competitiveness in labour-intensive activities.

The main challenges facing the parties to the voluntary agreement are monitoring the provisions in the Protocol to avoid abuses and widening wage differentials, designing profit-sharing and productivity-bonus schemes to avoid demotivation and alienation in the work place especially in the services sector; ensuring that as many workers and employers are covered by the voluntary provisions so that the Protocol would not be undermined.[4]

The Protocol is a test of the tripartite mechanism for resolving economic problems in Barbados. If the provisions of the Protocol can be fulfilled at the end of the two-year period, then it can provide a watershed for industrial relations and the institutional approach to policy making in Barbados.

NOTES

1. Various attempts have been made in other Caribbean countries to reach such formal agreement. For example in Guyana in the late 1970s the government and the trade union congress sought to set wage increases for a three-year period, but the government reneged on the agreement. Barbados seems to be the first success case of a tripartite agreement on prices and incomes at the macro level.
2. This reflects the current emphasis in the compensation literature on performance-based pay and gainsharing.
3. Based on research being undertaken by the author.
4. This problem would occur with those in the non-unionised and informal sectors.

APPENDIX 1

Let total income ($Y = p.q$) be distributed between workers and employers, then we have

$$p.q = wL + rK \tag{1.1}$$

where

p	—	price of output
q	—	total output sold
w	—	nominal wage rate (average wage rate)
L	—	number of persons employed
r	—	rate of return on capital (user cost of capital)
K	—	capital employed

Dividing by p.q, we have a factor share equation given as:

$$1 = S_L + S_K \tag{1.2}$$

where

$$S_L = \text{workers' income share} = \frac{wL}{p.q}$$

$$S_K = \text{employers' income share} = \frac{r.K}{p.q}$$

Taking

$$S_L = \frac{w.L}{p.q} \tag{1.3}$$

for a given level of output (q) and employment (L), an increase in w increases S_L and hence reduces $S_K = 1 - S_L$. By also increasing p, S_L can remain constant, thus keeping S_K constant.

APPENDIX 2

Let the real unit labour cost (workers' income share) be defined as:

$$S_L = \frac{wL}{p \cdot q} \qquad (2.1)$$

where the variables are defined in Appendix 1.

Rewriting 2.1, we have:

$$S_L = \frac{w/p}{Pr} \qquad (2.2)$$

where Pr is labour productivity.

Taking natural logs and differentiating with respect to time yields

$$g_{S_L} \text{-} g_w \text{-} g_p \text{-} g_{pr} \qquad (2.3)$$

where g indicates growth rate.

Assuming that g_{SL} = the growth in labour's income share = 0, then we have

$$g_p = (g_w - g_{pr}) \qquad (2.4)$$

If g_w is greater than g_{pr}, then prices increase and if g_w is equal to g_{pr}, then prices remain constant ($g_p = 0$).

Brewster (1969) indicates that at a microeconomic level, the unit commodity price, p, is given by

$$p = \left[(m_f+k_f) + (m_d+k_d) + v + w\left(\frac{L}{q}\right)\right] \qquad (2.5)$$

where

m_f, m_d — foreign and domestic unit price of raw materials respectively

k_f, k_d — foreign and domestic 'price' or 'user cost' of capital respectively

v — domestic administrative costs — unit tariffs, insurance, taxes etc.

w(L/q) — unit labour cost

Hence

$$p - w\left(\frac{L}{q}\right) = [(m_f+k_f)+(m_d+K_d)+v) \qquad (2.6)$$

that is, the differential between the price of output and unit labour costs depends on foreign and domestic unit cost of raw materials and capital and administrative costs.

APPENDIX 3

One definition of the Real Exchange Rate is given by

$$E_R = \frac{E_n.Pw}{W_d} = \frac{\text{Price of Tradeables}}{\text{Domestic Costs}} \qquad (3.1)$$

where

E_n = the nominal exchange rate expressed in units of domestic currency per US dollar (e.g. Bds\$2:US\$1)

P_w = the appropriate price deflater for US dollars (e.g. wholesale price index, wage index etc. for US)

W_d = the domestic wage rate index

Taking natural logs of 3.1 and differentiating with respect to time yields:

$$g_{ER} = (g_{E_n} + g_{P_w} - g_{W_d}) \qquad (3.2)$$

Assuming that $g_{En} = 0$, that is, a nominal exchange rate anchor, then changes in the real exchange rate, which is a measure of international *price competitiveness*, depend on the growth of domestic wages relative to the growth of the price deflator for US dollars (i.e. the US wholesale price index or wage rate index). A reduction in the growth of domestic wages relative to the growth of US wholesale prices or wages increases international price competitiveness. The formulation can be extended to incorporate other trading partners.

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