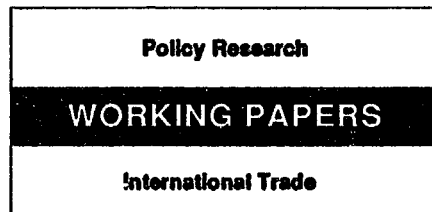


WPS-0958



International Economics Department  
The World Bank  
August 1992  
WPS 958

# EC Bananarama 1992

## The Sequel

### The EC Commission Proposal

Brent Borrell  
and  
Maw-Cheng Yang

**The Commission's proposal for unification of the banana market would impose big costs on EC consumers and banana producers in a number of developing countries. Alternative options exist that would allow the Community and suppliers in all developing countries to benefit from unification. Vested interests in marketing are blocking consideration of sensible policies.**

Policy Research Working Papers disseminate the findings of work in progress and encourage the exchange of ideas among Bank staff and all others interested in development issues. These papers, distributed by the Research Advisory Staff, carry the names of the authors, reflect only their views, and should be used and cited accordingly. The findings, interpretations, and conclusions are the authors' own. They should not be attributed to the World Bank, its Board of Directors, its management, or any of its member countries.

Policy Research
<b>WORKING PAPERS</b>
International Trade

WPS 958

This paper — a product of the International Trade Division, International Economics Department — is part of a larger effort in the department to understand the implications for developing countries of changes in the industrial countries' trade policies. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Audrey Kitson-Walters, room S7-053, extension 33712 (August 1992, 22 pages).

Some EC countries give preferred market access and high prices to bananas from selected developing countries or EC regional suppliers. This preferential status is regarded as a form of aid to these countries, most of which are developing small island economies. EC marketers of bananas from these preferred suppliers also benefit because of the high retail prices. Nonpreferred suppliers — mainly developing countries of Latin America — are hurt by the policies because access is denied or restricted and the lower demand depresses the world price for bananas.

The Community's commitment to establish a single unified EC banana market on December 31, 1992 provides a timely opportunity to reform existing distortionary trade policies. The recently announced proposal of the Commission of European Communities to regulate banana trade within a unified market relies on quotas to control imports. The proposal is extremely complicated. It is designed to severely restrict competition and to maintain the advantages of selected groups.

Borrell and Yang update their earlier analysis of world banana trade to reflect the market in 1993. They evaluate the implications of the Commission's proposal alongside existing and alternative policies. They find that current policies cost EC consumers about \$1.6 billion annually to transfer a net benefit of \$0.3 billion a year to preferred suppliers. So, it costs EC consumers about \$5.30 to transfer \$1.00 of aid to select developing countries or regions. Additionally, every dollar of aid reaching preferred suppliers costs other developing country suppliers \$0.32. EC marketers are the main beneficiaries. Of the \$5.30 cost to EC consumers, over \$3.00 is collected as excessive marketing margins by protected importers and wholesalers. About \$1.00 is lost in outright waste.

Several plausible versions of the Commission's proposal are modelled. At best they are found to be slightly less costly than existing policies and at worst, considerably more costly. A 3.5 percent reduction in the quota allocation is estimated to lead to a 30 percent increase in the cost of the proposal.

Borrell and Yang conclude that the Commission's proposal for a unified EC banana policy appears to be little more than a way of replacing existing distortionary national policies with an almost equally distortionary single policy and market. The only difference: the costs would be borne by consumers in all EC countries rather than consumers in only some countries. Worse still, costs could increase. Markets that now gain the benefits of mostly open and competitive marketing such as Germany would face closed and uncompetitive conditions.

For developing countries exporting bananas, the proposal offers little. At best conditions may be no worse than they are now. At worst the policy could hurt Latin American suppliers even more than current policies and introduce considerable confusion about the level of support to preferred suppliers. Under the Commission's proposed quota system aid will not be well targeted. A more efficient way of achieving the EC's aid commitment is through a small tariff of about 17 percent, used to fund a system of well-targeted deficiency payments or direct aid.

The only reason for choosing the Commission's proposal over simpler, tariff-based options seems to be to maintain the vested interests of protected EC marketers. But this is contrary to the objectives of unification, which are to seek gains from increased competition and trade.

The Policy Research Working Paper Series disseminates the findings of work under way in the Bank. An objective of the series is to get these findings out quickly, even if presentations are less than fully polished. The findings, interpretations, and conclusions in these papers do not necessarily represent official Bank policy.

---

## CONTENTS

1	BANANAS: THE ONLY PRODUCT STILL WITHOUT AN APPROVED PLAN FOR EC MARKET UNIFICATION	1
2	HOW THE EC PROPOSAL WOULD WORK	3
3	MEASURING THE ECONOMIC AND WELFARE EFFECTS OF THE EC PROPOSAL	7
	The point of reference: inefficiencies of existing policies	8
	How the proposal measures up	10
4	A BETTER PROPOSAL WOULD SEEK GENUINE REFORM AND GAINS FROM UNIFICATION	18
	APPENDIX: NOTES ON DATA	21
	REFERENCES	22
<b>FIGURES</b>		
3.1	National policies of EC countries influence world banana trade	8
3.2	Existing national banana policies of EC countries are costly	9
3.3	Existing policies discourage consumption and impose big costs on consumers	9
3.4	Like existing policies the EC proposal looks costly	12
3.5	Managing the quota would be difficult	13
3.6	Self-financing tariff options would be much less costly than quotas	17
3.7	Self-financing tariff options are best for banana supplying regions too	17
<b>BOXES</b>		
2.1	Preferred and non-preferred suppliers of EC banana imports	3
2.2	The mechanics of the Commission's proposal	5
3.1	This model compared with earlier versions: retail margins	7
3.2	Versions of the proposal modelled in this study	11

---

---

## 1. BANANAS: THE ONLY PRODUCT STILL WITHOUT AN APPROVED PLAN FOR EC MARKET UNIFICATION

A unified internal European Community (EC) market holds the promise of big gains in economic efficiency arising from increased competition, economies of scale and scope, and rationalisation of production and trade. The proposal advanced by the Commission of European Communities' interdepartmental working party for an internal market on bananas (12 May 1992) holds no such promise. Indeed, the opposite appears to be the case.

Existing national banana policies have been shown to impose hefty costs on the Community and on many banana suppliers — see Borrell and Yang (1990) and Borrell and Cuthbertson (1991). The proposals of the interdepartmental working committee for arrangements after December 1992 could impose even greater costs. Yet there are other policy options which could provide large gains in efficiency. Vested interests within the Community appear to be blocking the consideration let alone adoption of sensible policies.

Existing national policies give preferred market access to some developing countries or EC regional suppliers — preferred suppliers. These arrangements are regarded as providing aid to the preferred supplying countries or regions — most of which are small island economies. Quota schemes operating in the United Kingdom, France, Italy, Spain, Portugal and Greece limit imports of bananas into the EC from non-preferred suppliers and cause prices to be different in each country but higher than the world price — see Borrell and Cuthbertson (1991). Non-preferred suppliers are also developing countries and the quota restrictions hurt them because access is denied or restricted and the lower demand depresses the world price for bananas in other markets.

Although the quota restrictions confer some advantage to preferred suppliers through higher than normal market prices (as intended), the main advantage is captured by importers, wholesalers and retailers in countries with quotas (which is presumably unintended). The quotas restrict competition in the marketing of bananas, allowing monopoly profits to be earned at the expense of EC consumers.

Denmark, the Netherlands, Belgium, Luxembourg and Ireland impose a 20 percent customs duty on banana imports from non-preferred suppliers. This also limits imports to some degree but not as severely as quotas do in other EC countries. Germany imposes virtually no restrictions on imports.

In establishing a single EC market on 31 December 1992, separate national policies will be replaced by a unified policy which will allow free intracommunity trade. Bananas are the only product on which the EC has not yet decided how to proceed. Making a decision is proving difficult because the EC faces competing obligations.

---

Policy relating to the unified market must be consistent with all aspects of the *Single European Act 1986*; commitments to African, Caribbean and Pacific (ACP) countries (signatories to the Lome IV Convention) which include giving special access to bananas must be honored and the interests of banana producers in overseas EC territories (Guadeloupe, Martinique, the Canary Islands and Madeira) must be similarly considered; policy changes must be compatible with the General Agreement on Tariffs and Trade (GATT); and the EC is committed to liberalising imports of tropical products (which include bananas) in the Uruguay round of GATT negotiations. The welfare of EC consumers is also an obvious consideration.

Previous work (Borrell and Cuthbertson 1991) has shown that options exist under which the European Community could be made better off while the interests of supplying countries — preferred and non-preferred — could be safeguarded and improved. Essentially these are tariff-based options. Quota-based options were shown to be the least efficient. These options hurt EC consumers and suppliers in non-preferred developing countries. They suit protected EC marketers of bananas and shift the important responsibility and workings of the market away from competitive agents to officials within the European Community bureaucracy.

The Commission's current proposal is a quota-based option and is extremely complicated. Indeed, the proposal appears to be deliberately and unnecessarily complicated to mask its true effects. It is designed to greatly restrict competition within the marketing chain and to confer on and maintain advantages to selected groups within the market. Its complicated arrangements would require a big bureaucracy to monitor, administer and control. It would give EC officials a great deal of power and control over the market. Many groups, but particularly those likely to be disadvantaged by such arrangements, are eager to understand what the effects could be.

The main objective of this paper is to make transparent the effects from implementation of the proposal. The costs of existing policies as previously estimated by Borrell and Yang (1990) and Borrell and Cuthbertson (1991) for 1987 are updated to account for the changes which have occurred since then. The benefits of alternative policies are also highlighted.

*Note:* Since this study was completed, the Commission has made available some details of its final proposal. It appears to be a blend of the two variants of its proposal released in May. Essentially, the major elements of the earlier proposal analyzed in this paper remain the same — a base quota of 1.4 million tons and a supplementary quota to non-preferred suppliers, together with a complicated system of licenses and guarantees.

---

## 2. HOW THE EC PROPOSAL WOULD WORK

The EC Commission has proposed two variants of one quota-based option. Both would allow EC officials to manage trade and control competition. Quantitative controls and a 20 percent rate of customs duty on the entry of bananas from non-preferred suppliers — so-called *dollar bananas* (see box 2.1) — would cause prices to EC consumers to be bid up above what they would be in a competitive market. Through the use of various complicated licensing systems (not yet specified), people importing and marketing dollar bananas would be required to transfer revenue they earn from selling on the high-priced EC market to those supplying the market with *non-dollar bananas*. No formal quantitative restrictions would apply to the imports of *non-dollar bananas* but they would be monitored with a view to implementing controls if there were large increases in imports from preferred suppliers.

All bananas of equal quality would sell for virtually the same price across the European Community, irrespective of their origin — the only differences would reflect transport costs. But the effective price received by producers and traditional marketers of *non-dollar bananas* would be greater than the market price.

Provided producers and marketers of non-dollar bananas delivered their fruit to the EC market, they would receive supplementary revenues collected by the marketers of dollar fruit which would be transferred indirectly to them through the proposed licensing system. In effect, they would receive a kind of deficiency payment giving them higher-than-market prices and equal to the prices they receive now.

**Box 2.1: Preferred and non-preferred suppliers of EC banana imports**

Preferred suppliers	Country giving special preference	Non-preferred suppliers
<i>African, Caribbean and Pacific (ACP) countries</i> *		<i>Latin America or so-called 'dollar' area countries of Central and South America</i>
Belize	United Kingdom	Colombia
Jamaica	United Kingdom	Costa Rica
Surinam	United Kingdom	Guatemala
Windward Islands	United Kingdom	Honduras
Somalia	Italy	Panama
Cameroon	France	Ecuador
Côte d'Ivoire	France	Brazil
<i>EC overseas territories</i>		
Guadeloupe	France	
Martinique	France	
Madeira	Portugal	
Canary Islands	Spain	

\* Under the Lomé Convention all ACP countries have duty free access to protected EC markets. Germany is virtually a free market, so gives no preference to ACP suppliers.

Presently the prices received by preferred producers and marketers vary widely depending on the country to which they supply. Complicated controls over the licensing system would be designed to try to ensure existing differences were maintained so that the current quantities marketed and the revenues received by preferred producers and marketers would be maintained.

The mechanics of the proposal are set out in box 2.2. What is apparent from box 2.2 is how difficult it will be to set the quota to balance the revenues earned on dollar bananas and the supplementary payments made on non-dollar bananas. With constant changes in demand and supply it will be impossible to determine the quota level to most efficiently achieve the Commission's price targets. Inevitable differences in quality between dollar and non-dollar bananas will add to this difficulty. In practice, the quota will not be set objectively but, rather, will be a matter of judgment. And because the livelihoods of most operators in the market will become closely linked to the level at which the quota is set, they will try to influence the judgment.

The variants of the Commission's proposal differ in the manner in which the quantitative controls would be set. In the first variant a quota would be set explicitly and performance measures set up to monitor whether quantities of non-dollar banana imports and preferred suppliers' incomes were being maintained. Adjustments to the quota would be made to try to hit various performance targets.

Under the second variant, instead of an explicit quota, quantitative controls would be implicitly set through the use of a so-called *partnership* ratio. Dollar fruit could be imported in fixed ratio to non-dollar fruit. Forward estimates of consumption and production would be made and a ratio established to try to achieve various performance targets. Changes to the ratio could be made throughout the year as information about consumption and production came to hand.

It is difficult to see major differences between the two variants. The broad economic effects of both are the same — they are those depicted in box 2.2.

A major uncertainty of the proposal is how well the arrangements will work to transfer excess revenue from marketers of dollar bananas to marketers and producers of non-dollar bananas. Because of the licensing arrangements proposed and the quota restrictions the EC banana market will be far from a competitive market. Incentives may be created for marketers of non-dollar and dollar fruit to exploit their market powers.

The Commission does not appear to have worked through the practicalities of how the licensing arrangement would work (Commission Working Party 1992). It has stated that the allocation of dollar import quantities by issue of import certificates among various operators (marketers) would be used as a mechanism to favor existing preferred suppliers — but the mechanism (or mechanisms) has not been revealed.

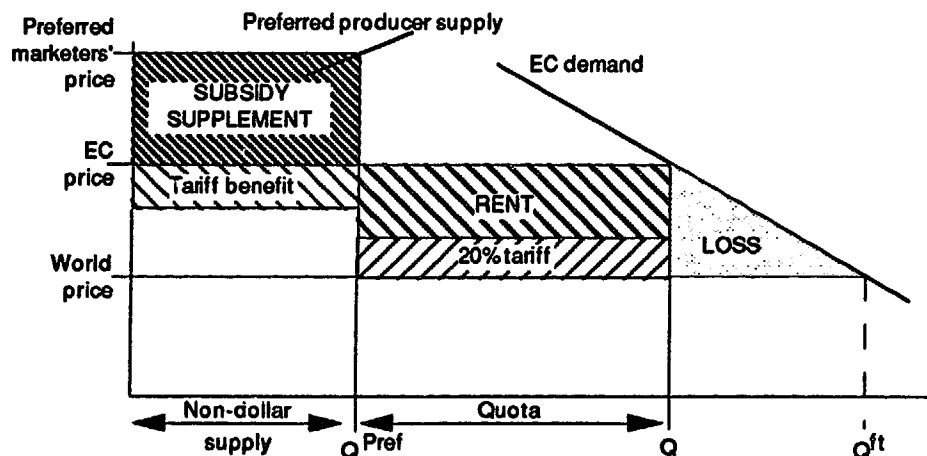
---

### Box 2.2: The mechanics of the Commission's proposal

The Commission's proposal is illustrated graphically below. 'Dollar' bananas (the term given to bananas from non-preferred suppliers) will be subject to a guaranteed minimum quota of 1.4 million tons and an autonomous quota which will be varied with a view to managing the EC internal price. The minimum quota would be increased by a minimum of 3 percent annually. Non-dollar bananas will not be subject to any restrictions. The controlled quota supply plus the uncontrolled non-dollar supply will determine the total supply  $Q$ .

The total supply of  $Q$  bananas will cause the internal EC consumer price for bananas to settle at the EC price and above the world price. The EC price will exceed the world price by at least the 20 percent of customs duty to be levied on the cif value of dollar bananas. The tariff revenue raised from the duty will be retained by the Commission — a proposal which should raise serious questions on both a national and international level. At the EC price, consumption will be reduced from  $Q^{ft}$  to  $Q$ , generating a net economic loss for the Community of the amount LOSS.

The excess of the EC price over and above the world price plus the tariff will determine the RENT earned initially by marketers of dollar fruit and subsequently transferred as the SUBSIDY SUPPLEMENT to prop up preferred producer and marketer prices. At this price, non-dollar suppliers will be induced to supply  $Q^{pref}$ , — an amount similar to that supplied now. Theoretically, the RENT earned would exactly match the SUBSIDY SUPPLEMENT. In practice, setting a quota so that these two amounts are exactly equal would be nigh impossible. Set too high the quota would not create prices high enough to generate the excess revenue to pay sufficiently high supplements. Set too low it would create prices and supplements higher than intended. These might induce increases in non-dollar supplies above those intended.



Demand and supply are continuously changing and, given the likely inelastic nature of demand, even small changes in market conditions could greatly disrupt the balance between rents and supplements. Setting of the annual quota would become extremely important to many groups in the market. Their livelihoods would depend on it. Setting of the quota would become vulnerable to political interference.

If there were quality differences between dollar and non-dollar fruit, higher rents and supplements would be required to maintain existing preferred suppliers' prices. The quality of at least some preferred suppliers is inferior to that of dollar fruit. The market price received by these preferred suppliers would be below the indicated EC price and so larger supplements would be required to maintain their prices. To force the non-preferred marketers to raise sufficient rent to pay the extra supplement the quota would need to be constrained below the level indicated in the graph to lift the EC price further above the world price plus the tariff.



Politically, setting the quota and licenses will gain a lot of attention. With no objective basis for deciding either quotas or supplementary transfers, these decisions will become an event which will generate much socially unproductive effort in both the EC and in the producing countries.

EC marketers of non-dollar bananas have long operated under uncompetitive conditions due to the quotas applying in their countries. The marketing and supply of non-dollar bananas is dominated by a few trading/marketing entities. If these marketers jointly or separately are able to restrict the supply of non-dollar bananas they will force the EC internal price to rise above that intended by the Commission. Because of the quota limit on dollar fruit, restricting non-dollar fruit would reduce supply below that intended by the Commission in setting the quota. With the supply of non-dollar bananas restricted, marketers of dollar fruit would be forced to bid up the subsidy supplements they paid to marketers of non-dollar fruit for the right to market dollar fruit. In this way the higher EC prices would be transferred to the marketers of non-dollar fruit.

Although marketing of dollar fruit is largely unrestricted and open to competition in Germany and those countries imposing a 20 percent tariff only, it is concentrated on a handful of marketing companies. It may be that with the imports of bananas limited (under the proposal) it would pay marketers of dollar fruit to further restrict the supply of bananas below that intended by the Commission knowing that once the quota was full no additional imports could compete. Importers may be able to do this by importing fruit to fill the quota but subsequently destroying that fruit to force up the price on the EC market. If non-dollar bananas were inferior to dollar bananas, it may pay marketers of dollar bananas to buy up imported non-dollar bananas and destroy them rather than dollar bananas. Because of the concentration of control in the marketing and supply of non-dollar bananas, any excess revenues earned by marketers of dollar bananas may end up being shared in part with marketers of non-dollar fruit.

In an open market it is unlikely that concentration of control would be a problem because of the threat of competition. In the most open market within the European Community now, Germany, marketing margins are the lowest of any EC country and are competitive with US margins after accounting for exchange rate differences — see box 3.1.

True, there can be no concrete proof that marketers of bananas would exploit their market powers created by quotas and licences. Nonetheless, incentives will be created to encourage and partly condone such behaviour by the Commission's proposal. And once introduced, such arrangements would be difficult to remove. This difficulty is well illustrated by the problems of removing the protection now provided by existing national banana quota schemes.

---

---

### 3. MEASURING THE ECONOMIC AND WELFARE EFFECTS OF THE EC PROPOSAL

How bad is the EC proposal relative to existing policies they are designed to replace and relative to alternative policies which could be introduced? Borrell and Yang and Borrell and Cuthbertson have shown that existing national policies are highly inefficient relative to a free trade situation. Existing policies provide a measuring stick by which to judge the efficiency of other policies such as the Commission's proposal.

The previous analysis was based on data for 1987 and hence reflected the structure of the market at that time. Since 1987 the market has grown markedly. In 1987 total EC banana imports equalled 2.5 million tons. On recent trends, EC banana imports could reach 3.6 million tons for 1993. To provide a current basis of measurement, we up-dated the data and model of the two previous studies to reflect the structure of the market in 1993. The price data in the model are those for 1990 while the trade data are World Bank projections for 1993 — see Appendix A. The current version of the model also includes different assumptions about retail margins in Europe from those made in previous studies — see box 3.1.

#### **Box 3.1: This model compared with earlier versions: retail margins**

A major difference between the model run in this study and that in the study of Borrell and Cuthbertson is in the treatment of retail margins in Europe. The study of Borrell and Cuthbertson sought to refine the treatment of retail margins over that provided by Borrell and Yang. This study makes a further refinement in the form of a more exact treatment of the influence of the dollar/Deutschemark exchange rate on the EC free market retail price. The German retail price is used as an indicator of the retail margin that would prevail if free trade replaced existing arrangements. The German margin is appropriate because a virtual free market exists in Germany.

Given the sustained strength of the Deutschemark over the dollar since 1987, the free market retail margin used by Borrell and Cuthbertson, which was the average margin in Germany over the period 1978–90 measured in US dollars, now appears to be too low. Although the margin did not change much measured in Deutschemarks, because of the strength of the Deutschemark, German retail margins measured in US dollars increased appreciably after 1986 well above those in the United States. Previously they had been similar and the averaged data over the period 1978–90 used previously reflected this. In the current version of the model the free market retail margin is assumed to be that which applied in Germany in 1990.

---

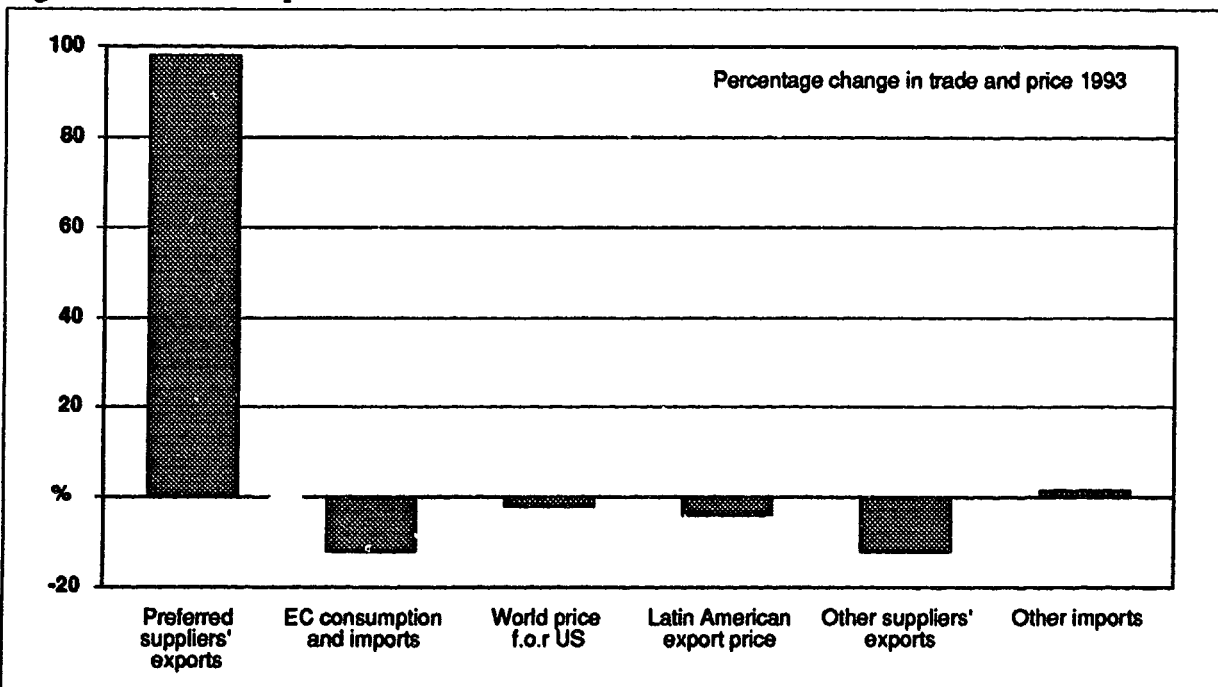
## The point of reference: inefficiencies of existing policies

Up-dated measures of the economic effects of existing policies are reported in figures 3.1, 3.2 and 3.3. The effects of the EC country policies on the world market are similar in percentage terms to those reported in the two earlier studies — figure 3.1. However, the costs of the policies have increased in line with the growth in the market — figure 3.2. What previously Borrell and Cuthbertson estimated that existing policies cost EC consumers around US\$1.4 billion a year, the new estimate is \$1.6 billion. The distribution of these costs by country or country group is set out in figure 3.3. The policies are costly for all countries except Germany because of its virtual free market policy.

As an instrument for delivering aid to various preferred supplying countries and regions existing policies are highly inefficient — as reported in the earlier studies. In total, an estimated \$302 million is received as a form of aid income by preferred suppliers due to the higher prices they receive. But it costs EC consumers an estimated \$5.30 to transfer each dollar of that aid to preferred supplier countries and regions.

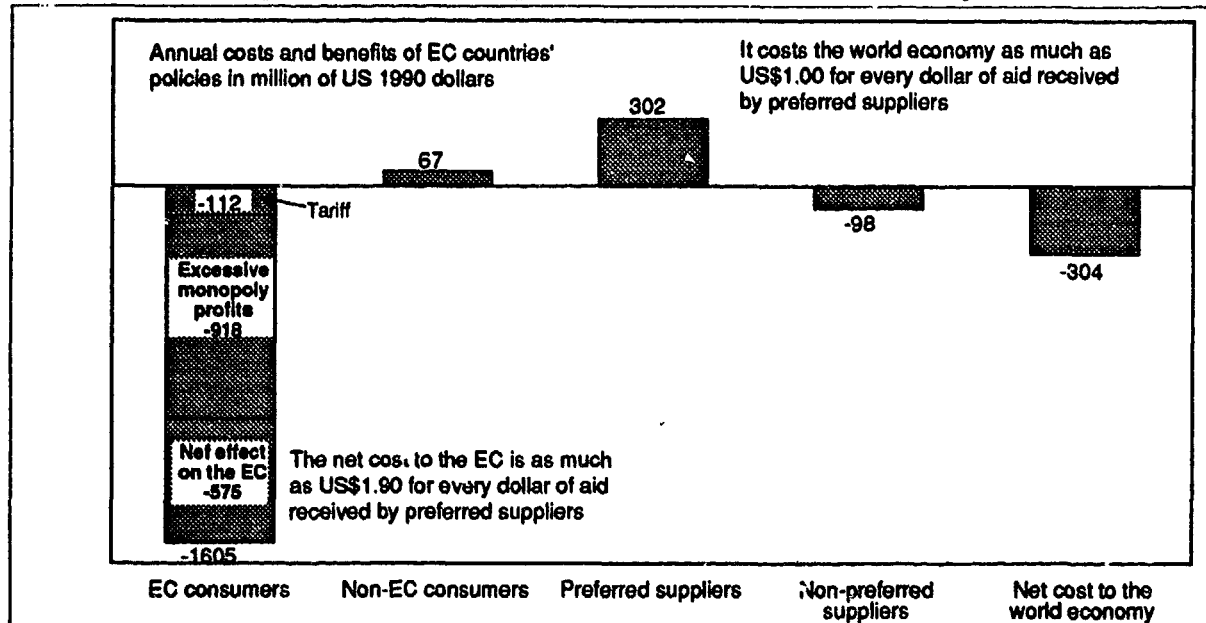
Of each \$5.30 paid by consumers, over \$3.00 goes to EC importers, wholesalers or retailers as monopoly profits, \$0.37 is collected as tariff revenue by the Commission, one dollar is transferred to preferred suppliers and the rest — nearly a dollar — is wasted through outright

Figure 3.1: National policies of EC countries influence world banana trade



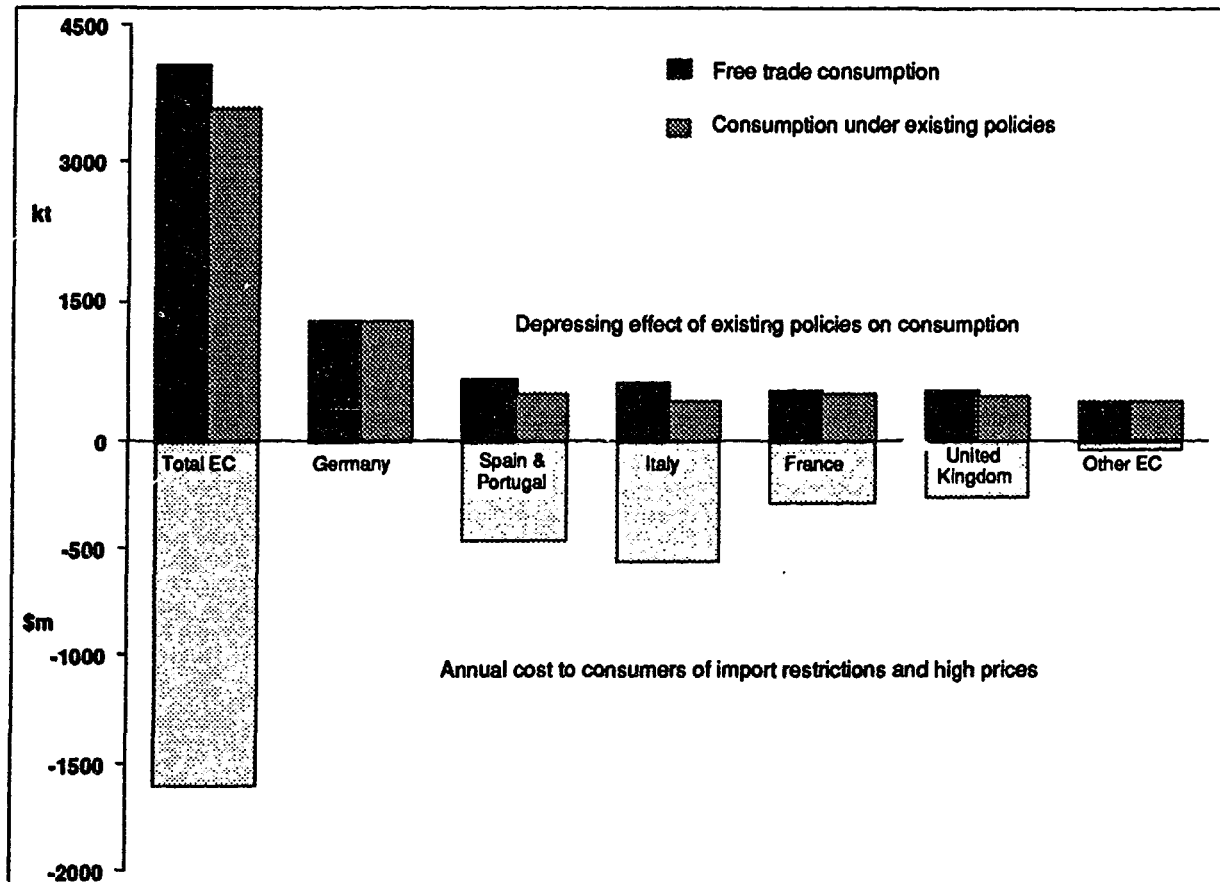
Data source: Model results.

**Figure 3.2: Existing national banana policies of EC countries are costly**



Data source: Model results.

**Figure 3.3: Existing policies discourage consumption and impose big costs on consumers**



Data source: Model results.

inefficiencies created by the arrangements. For instance, more resources are used up in producing bananas than is necessary because at least some of the bananas now produced at high cost in preferred supplying countries could be produced with fewer or cheaper resources in the more efficient, non-preferred supplying countries of Latin America.

Overall, the net cost to the European Community is around \$1.90 to transfer each dollar to preferred suppliers. Additionally, because existing policies constrain EC import demand generally, they depress the world price of bananas. This imposes an indirect annual cost on non-preferred suppliers (mainly Latin American countries). And for every dollar of aid received by preferred suppliers a cost of \$0.32 is imposed on banana producers elsewhere. In total this is equivalent to an estimated \$98 million annually.

### How the proposal measures up

To evaluate the effects of the Commission's proposal we model the quota proposal assuming a number of different objectives which the Commission may seek to pursue were the proposal to become operative. The versions of the proposal modelled are set out in box 3.2.

#### *Even the most liberal interpretation of the proposal is highly restrictive and costly*

The estimated annual costs to the EC of seven versions of the proposal relative to the costs of existing policies are given in figure 3.4. Version 1 which aims to protect the revenues and sales volumes of preferred producers and marketers represents probably the narrowest and strictest interpretation of the Commission's somewhat vague proposal. Estimates of the annual cost of this version are for an increase in annual tariff revenue from \$112 million now to \$271 million (a cost to EC consumers), a decrease in excess profits earned in marketing bananas — from \$918 million to \$517 million — and some reduction in outright inefficiencies — \$576 million to \$466 million. Overall, version 1 represents a small improvement over the costs of existing policies — \$1.6 billion down to \$1.2 billion annually. Nonetheless, the policy under this version would remain highly inefficient. It would cost EC consumers around \$4.00 for every dollar of aid received by preferred suppliers. For every dollar received by preferred suppliers, non-preferred suppliers would continue to incur a cost of about \$0.30.

Under version 1 the EC consumer price would settle out at an estimated \$1850 per ton, slightly less than the current weighted average EC price of \$1877 per ton. Among EC countries, German, Dutch, Belgium, Danish, Irish and Luxembourg consumers would face higher prices and their costs in terms of reduced consumption and higher prices would go up an estimated \$492 million a year compared to now. Consumers in all other countries who now pay prices above \$1850 per ton would benefit from lower prices and increased consumption.

---

---

In effect the policy under version 1 would shift the costs of existing policies away from the high banana price countries to the low banana price countries — mainly Germany.

*The EC proposal could be even more inefficient than the policies it aims to replace*

The quota established under version 1 — 2260 thousand tons for 1993 — is probably the highest quota the Commission would conceivably allow. A higher quota would not meet the Commission's implied intention to protect the sales volume and revenue of preferred producers and marketers. Moreover, another interpretation of the Commission proposal is that it may also seek to provide some sort of compensation to non-preferred suppliers and marketers for placing restrictions on their access and for loss of the excess profit currently

**Box 3.2: Versions of the proposal modelled in this study**

*Version 1:* The model is used to solve for a specific quota level. The quota will push up the retail price and marketing margin above a competitive level. The quota determined by the model will be that required to increase retail prices enough, so marketers of dollar bananas can just afford to cross-subsidise the marketing of non-dollar fruit to a point where total revenues (sales price plus subsidy supplement) earned on non-dollar fruit are the same as now. This assumes a highly efficient mechanism for forcing marketers of dollar fruit to transfer the extra revenue they will earn because of high retail prices to marketers and producers of non-dollar fruit — although at this stage the Commission has not specified in any detail how this will work. The subsidy supplement would represent the difference between the price marketers of non-dollar fruit receive now and that which would prevail across the EC under the quota proposal. It is also assumed that marketers of non-dollar fruit would continue to pay producers of non-dollar bananas the prices they are currently paid.

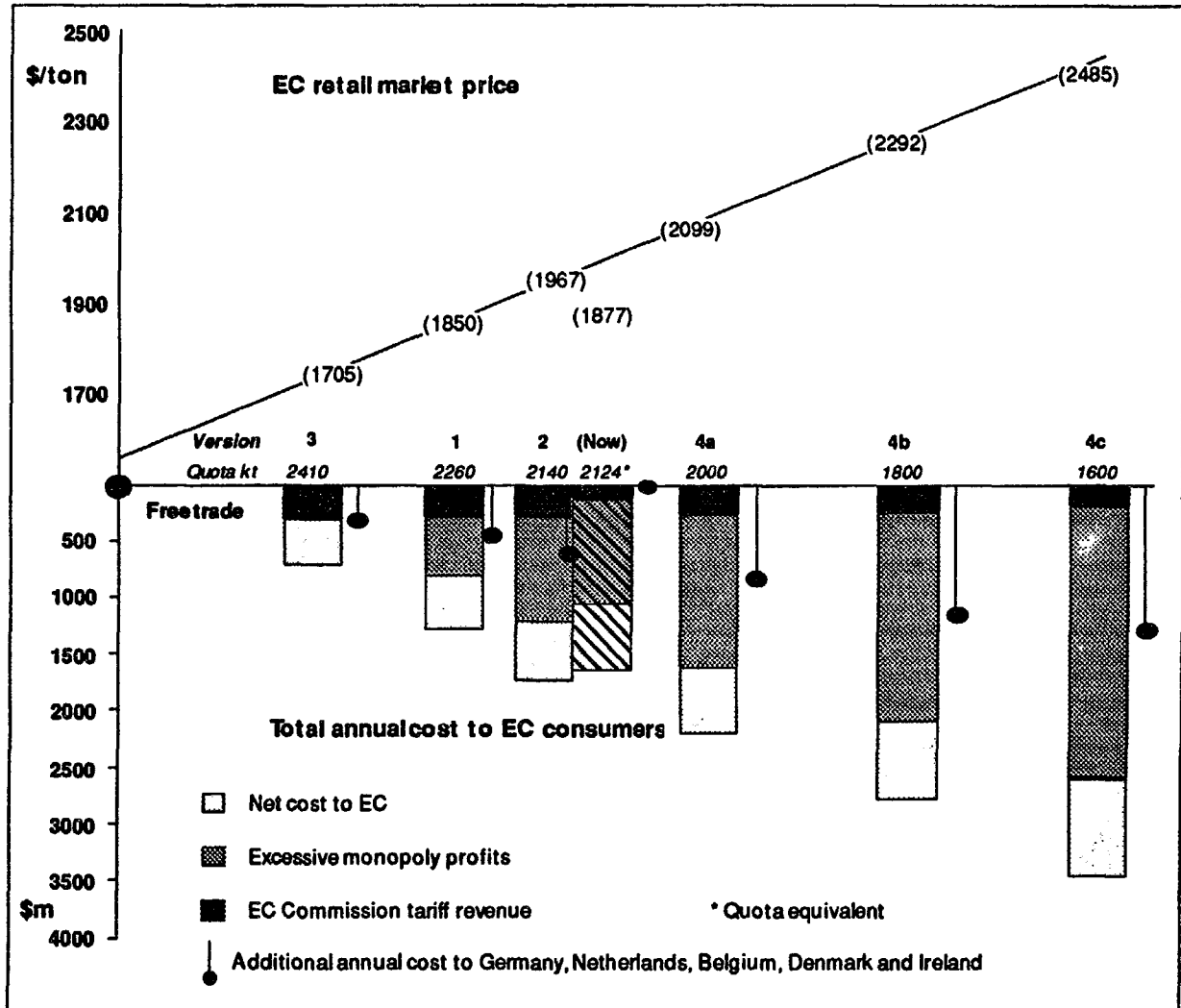
*Version 2:* As above except that the specific quota is determined so as to ensure all marketers of bananas — dollar and non-dollar alike — who now receive retail margins above competitive levels continue to do so. Marketers of dollar fruit in Italy, United Kingdom and France now receive retail margin above purely competitive levels.

*Version 3:* Like variant 1 except that the quota would be set to generate enough extra revenue from the sale of dollar fruit to maintain high prices to producers of non-dollar bananas only. The monopoly profits of non-dollar and dollar marketers would not be preserved.

*Version 4:* The quota is not determined by the model. Rather, the quota is fixed at progressively lower levels than that determined by the model under variant 1. This is done to ensure the Commission overshoots on its objective of preserving existing benefits to producers and marketers of dollar bananas whose access has been restricted by the quota. Essentially this reflects the fact that the Commission will have a preference to overshoot and provide more protection than now rather than risk undershooting.

---

Figure 3.4: Like existing policies the EC proposal looks costly



Data source: Model results.

earned by marketers of dollar bananas in France, the United Kingdom and Italy. To do this the quota would be further restricted to drive up EC retail prices and marketing margins. If the Commission sought to compensate marketers of dollar bananas fully, while still aiming to achieve its other objectives in relation to preferred producers and marketers — version 2 — a quota set at 2140 thousand tons for 1993 and giving a EC consumer price of \$1967 per ton would, on model estimates, do this. As revealed in figure 3.4, the total costs to EC consumers would rise compared to now — \$1.7 billion per year compared to \$1.6 billion now — due in part to the increased tariff revenue collected by the Commission. The costs to German, Dutch, Danish, Belgian, and Irish consumers would increase by \$643 million a year.

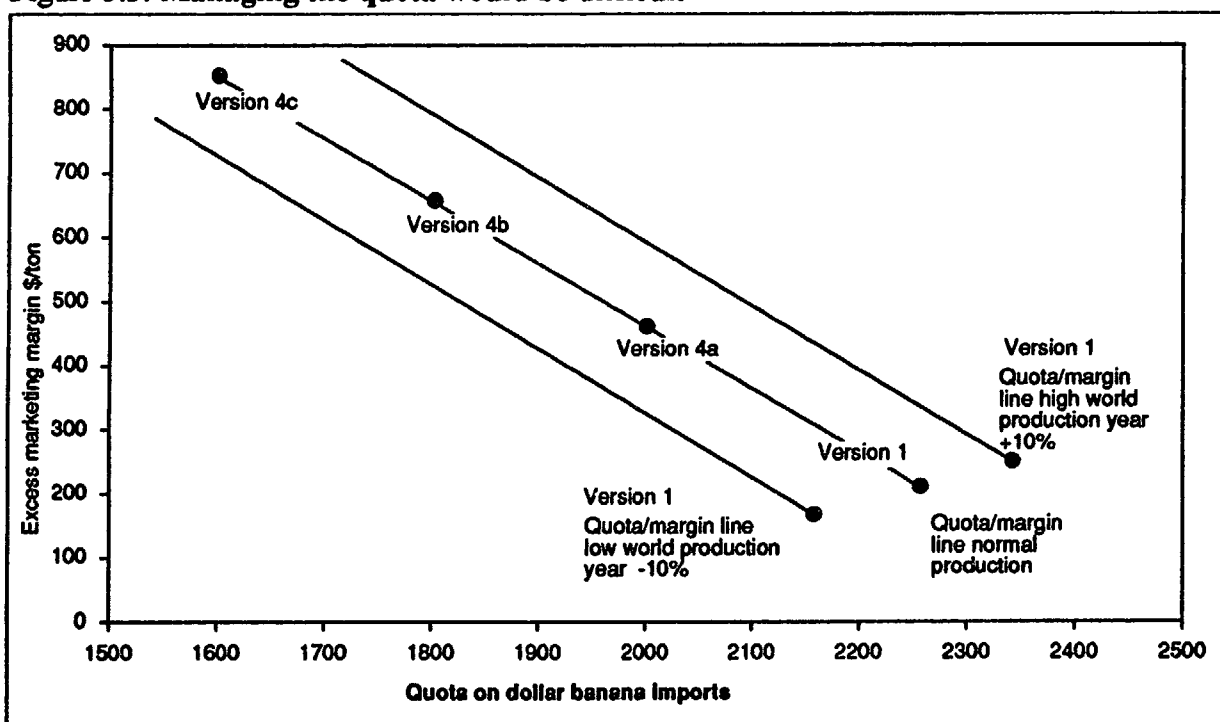
### *Setting the quota efficiently would be extremely difficult*

The differences between version 1 and version 2 help highlight another feature of the Commission's proposal: the economic effects of the proposal are highly sensitive to the level at which the quota is set. A 3.5 percent reduction in the quota causes more than a 30 percent increase in the cost of the proposal. Under version 4a, with a quota set at 2000 thousand tons — less than 12 percent below version 1 — the cost of the proposal blows out to an estimated \$2.2 billion annually or 72 percent higher than version 1. The costs to German, Dutch, Danish, Belgium, Luxembourg and Irish consumers would increase by \$871 million a year. Versions 4b and 4c show the effects of further restricting the quota.

The high sensitivity of the effects of the proposal are further highlighted in figure 3.5. The figure reveals how small reductions in the quota cause large increases in the marketing margin above the competitive level which would prevail in the absence of quotas. These excess marketing margins would be required to achieve the Commission's assumed objectives under the versions modelled.

Figure 3.5 also shows how small changes in annual production in non-preferred suppliers — plus or minus 10 percent (well within the realms of possibility) — would require changes in the quota to achieve the objectives of the scheme. A 10 percent decline in non-preferred suppliers' production in any one year would cause an increase in the world price of bananas

**Figure 3.5: Managing the quota would be difficult**



Data source: Model results.



and the EC import price. Consumption within the EC would decline to some extent in response to the higher price. The quota would have to be reduced accordingly to maintain an excess marketing margin to cross-subsidise the sale of non-dollar bananas — 2260 thousand tons down to 2162 thousand tons for version 1. But because of a higher world and EC import price, the excess margin could decline somewhat — \$208 per ton down to \$152 for version 1 — and the sales and revenue of preferred producers and marketers would remain as now.

Without such a decline in quota the sales and revenue targets for the preferred producers and marketers would not be achieved. The Commission would come under pressure to make adjustments. Similarly, changes in internal EC market conditions such as growth in demand from year to year and changes in demand due to changes in the price of other fruit will require continual changes in the quota to efficiently achieve the objectives of the proposal.

Quality differences between dollar and non-dollar bananas would add to the difficulties in setting the quota. To the extent that the market may have a preference for dollar bananas, non-dollar bananas may trade at a discount to dollar bananas under the Commission proposal. If non-dollar bananas traded at a 10 percent discount to dollar bananas, under version 1 the quota would need to be reduced from an estimated 2260 thousand tons to 2173 thousand tons so that the excess marketing margin would increase from an estimated \$208 per ton to \$292 per ton. Making such fine adjustments in setting the quota in the face of great uncertainty about the quality differences perceived by consumers would be virtually impossible.

*The Commission would face pressures to set the quota restrictively rather than liberally*

The sensitivity of the effects of the proposal to small changes in the quota and to unpredictable changes in world and EC market conditions mean that setting the quota to efficiently achieve price, marketing margin, and welfare transfer objectives would be difficult in the extreme.

Ultimately, officials well removed from the market would be forced to make judgements about the level of the quota. Overshooting in pursuit of the Commission's objective by setting the quota conservatively — that is tending to set it on the low side — would have several managerial advantages. The main objective, to protect the sales revenue of preferred producers and marketers, would at least be achieved; non-preferred producers and marketers would be offered some form of compensation in the form of higher marketing margins on the restricted volumes they would be permitted to sell — a sort of sweetener — and; the performance of the scheme in terms of its critical objectives would become less sensitive to fluctuations in the world and EC markets. In addition, higher banana prices would suit producers of other fruit within the the EC because higher banana prices would encourage the consumption of other fruit.

---

---

This all points to a quota being set more in line with versions 4a, 4b or 4c than version 1. If so, it also points to a unified EC banana policy at least as inefficient as the set of national policies it is set to replace. It also points to a number of additional problems.

*Other inefficiencies of the proposal*

Preferred producers and marketers want the quota to be restrictive. A 1 percent reduction in quota could yield the preferred producers and marketers an estimated additional \$50 million in profits. This would hold out the possibility of inducing increased non-dollar banana production which, in turn, would require further off-setting decreases in the quota on dollar bananas. For example, if preferred suppliers were successful in lobbying for an initial 60 thousand ton decrease (or 2.5 percent) in the quota from that determined under version 1, and all of the extra preferred supplier revenue raised as a result were channelled back to preferred producers in the form of higher producer prices, non-dollar banana production would increase by an estimated 146 thousand tons. This would require a similar sized additional reduction in the quota on dollar bananas. It would impose additional costs on non-preferred suppliers and add to the unpredictability of the proposal.

Also adding to its unpredictability would be the fact that the market would be highly uncompetitive. True, over half the EC bananas are currently sold under conditions of restricted competition anyway, but quotas and licenses would greatly remove the threat of EC-wide competition. Without the threat of competition it may pay some marketers of bananas to either collude to further restrict the supply of bananas — destroy them after importation — or, in some cases to even do so individually. Because of the nature of EC banana demand, a 1 percent decrease in market supplies raises the EC consumer price by an estimated 10 percent. Any marketer with more than a 10 percent share could be made better off by destroying bananas after they had been imported and recorded against the quota. All other marketers of bananas would also benefit by such action and so the incentives to collude in such activity are also very great. Were this to occur it would add to the costs of the policy in obvious ways.

*Protecting marketers' excess profits seems to be the major result*

If the Commission were to aim to protect only the revenues of preferred producers and not of their marketers — version 3 figure 3.4 — the proposal would impose costs on consumers considerably less than is the case under other versions. Still, costs to EC consumers would be 2.3 times higher than the benefits that would be received by preferred producers, but this would be less than half the costs of existing schemes. Moreover, 40 percent of the cost to consumers would be due to the 20 percent import duty on bananas. This helps highlight another apparent objective of the proposal: to raise revenue for the Commission. The 20 percent tariff plays only an incidental part in protecting the revenues of preferred producers.

---

If the primary objective of the proposal is to guarantee the revenues of preferred producers only, there would be no need to impose the additional 20 percent import duty; nor would it be necessary to protect the excess marketing margins of marketers. If the proposal were geared simply to achieve the primary objective, its economic costs could be reduced to around \$400 million or less each year. If preferred marketers' excess margins were not protected, they would be forced to compete with the most efficient marketers of bananas. Either they would lower their margins or be forced out of business, leaving the marketing of preferred producers bananas to more efficient operators.

If the stated objective of the proposal — to protect the revenues of preferred producers — were truly the primary objective of the proposal, fixing the quota in a manner consistent with variant 3 should be the Commission's aim; it could remove the provision for a 20 percent import duty. But indeed, were this the case, why operate a quota scheme at all? The same objective could be achieved more simply and more efficiently using a self-financing tariff.

*A self-financing tariff would be far more efficient*

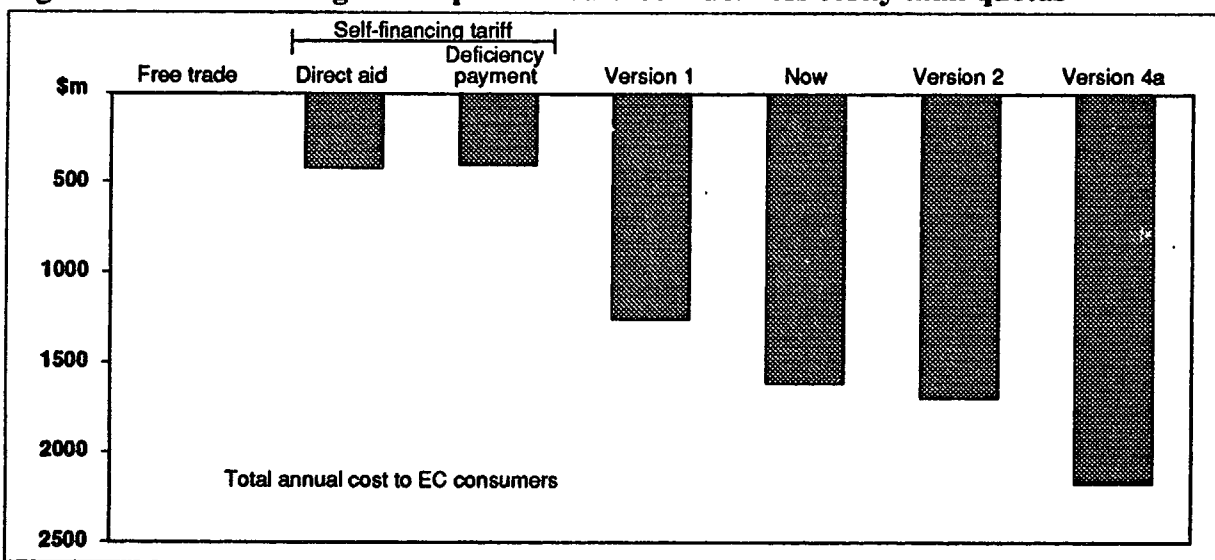
A tariff could be set to raise enough revenue to operate a direct deficiency payment scheme as proposed in the two previous studies. The level of tariff now required to generate sufficient revenue for such a scheme would be less than that calculated previously because of the structural changes which have occurred in the EC market since 1987. Where previously a 17.8 percent tariff was estimated, now a 17.3 percent tariff would be sufficient because the market has grown — giving a greater volume of imports over which to spread the fixed costs of the deficiency payment scheme.

The economic costs of the self-financing tariff scheme and deficiency payment arrangements relative to costs of selected versions of the proposal are set out in figure 3.6. Such a scheme can be seen to be considerably more efficient than even the most efficient version of the Commission's proposal. A tariff only option offers other advantages. It would be simple to administer, compared to a quota-based scheme; transfers of deficiency payments would be direct, certain and well targeted compared to indirect, highly uncertain and hit-or-miss under the Commission's proposal which would use quotas and licenses; setting of the tariff could be done in an objective way and would therefore be less vulnerable to political interference compared to the setting of a quota; the effects of the tariff would be simple to monitor relative to the effects of a quota and licenses; the effects of a tariff would be predictable by comparison to a quota and licenses; and importantly, the marketing of bananas in the EC would be subject to the full forces of competition which should encourage open, expansionary practices, efficiency, innovation, quality, and consumer-oriented marketing efforts — it would eliminate protection for inefficient marketers and eliminate hidden incentives for manipulating supplies to exploit consumers.

---

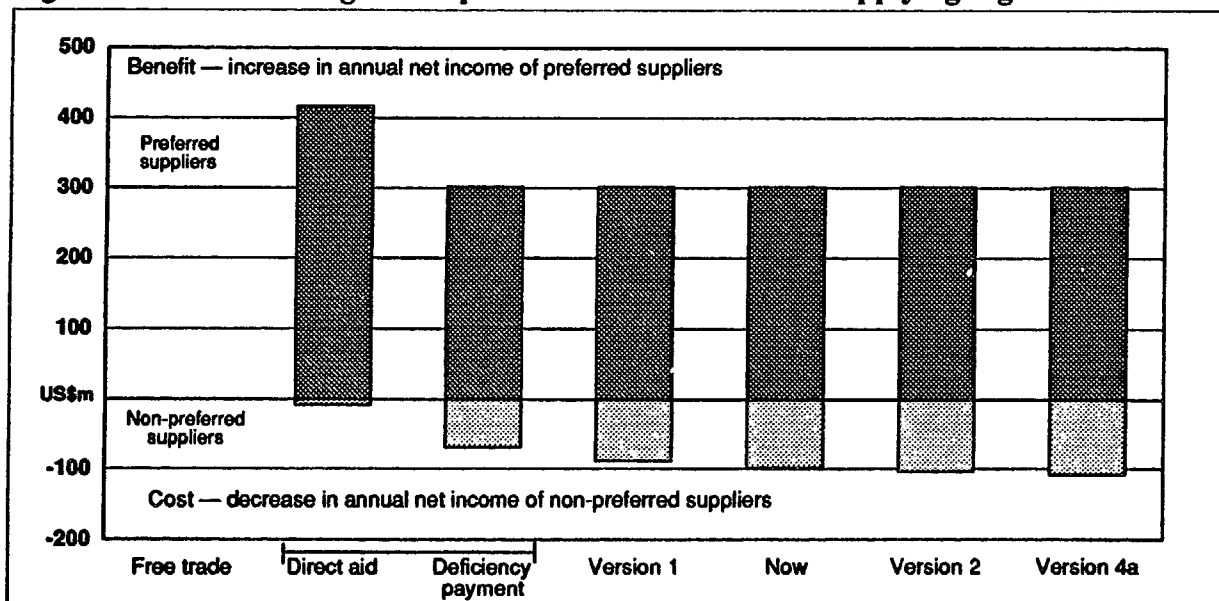
In the earlier studies we have pointed out that direct aid payments and a self-financing tariff would be even more efficient than a deficiency payment scheme which was financed by raising revenue through a tariff. In figure 3.6 and 3.7 the estimated up-dated costs and benefits of such a scheme are compared with those for other schemes. The results show the direct aid/self-financing tariff type of scheme to be the most efficient way of achieving the Community's goal of providing assistance to preferred supplier countries and regions and that this can be achieved while nearly eliminating the costs now imposed on non-preferred suppliers.

**Figure 3.6: Self financing tariff options would be much less costly than quotas**



Data source: Model results.

**Figure 3.7: Self-financing tariff options are best for banana supplying regions too**



Data source: Model results.

#### 4. A BETTER PROPOSAL WOULD SEEK GENUINE REFORM AND GAINS FROM UNIFICATION

At best the Commission's proposal for a unified EC banana policy and market appears to be little more than a way of replacing existing distortionary national policies with an almost equally distortionary single policy and market. The main difference between the effects of existing national policies and the proposed scheme is that a large proportion of the costs would be shifted from consumers in the United Kingdom, France, Spain, Portugal and Italy to consumers in Germany, the Netherlands, Belgium, Denmark, Ireland and Luxembourg. Given the scope for collusion among marketers and the incentives to set the quotas tightly, the Commission's proposal could impose costs even higher than existing policies. Quota restrictions may be applied in such a way as to reduce banana imports to levels less than now and markets which currently gain the benefits of mostly open and competitive marketing would face closed and uncompetitive conditions. Closed, less than fully competitive and inefficient marketing would be extended Community-wide.

For the developing countries exporting bananas, the proposal offers little. At best it would maintain the aid currently delivered to preferred supplier countries and not impose additional costs on non-preferred suppliers. At worst, it would impose higher costs on non-preferred suppliers and introduce considerable uncertainty and confusion about the level of support preferred supplier countries would receive. Whatever the quota and licensing system decided upon by the Commission it would result in indirect transfers or payments of subsidies which would not be able to be well targeted. Some existing preferred producers may miss out.

The opportunity to reduce the costs imposed on non-preferred suppliers and to increase the efficiency of delivering aid to preferred suppliers seems to have been overlooked. Likewise, the opportunity to increase competition in marketing, to rationalise trade, and achieve better economies of scale and scope in the distribution and marketing of bananas seem to have been overlooked.

To meet the stated obligations of the Community, to honor commitments to banana producers in preferred regions and to guarantee their existing privileges of access and high prices, much more simple, administratively convenient and competitive policies could be used. These involve the use of a self-financing tariff to raise revenue to operate well-targeted deficiency payment or direct aid schemes for these producers. Under these schemes the costs of meeting the Community's major obligation could be reduced to less than 25 percent of current costs, the interests of preferred suppliers could be preserved or expanded and the costs imposed on non-preferred suppliers could be virtually eliminated. However, under a self-financing tariff the excessive marketing margins of currently-protected marketers of both non-dollar and dollar fruit would be eliminated. Currently-protected marketers would be the only losers of self-financing tariff options.

---

Understandably, protected marketers will lobby to try and maintain their privileges. The EC proposal seems to be designed to encourage that. Under a small self-financing tariff-based scheme, the privileges of such marketers could only be maintained through direct transfers from the Community budget. Such transfers would be highly transparent, controversial and difficult to sustain. Under the EC proposal, consumers would bear the cost and it would be less visible and open to public scrutiny — in part because the proposal involves the use of highly complicated non-transparent instruments. But maintaining excessive marketing margins for EC marketers of bananas is hardly the objective of the *Single European Act 1986*. Indeed, it is inconsistent with the spirit of the Act.

Officials who have designed the proposal and who would have to administer its complex arrangements are in an awkward position. On the one hand their tasks would be difficult and thankless. On the other hand, the difficult and thankless tasks would provide them with tremendous power and control over the market.

The proposal is inconsistent with the fundamental principles of GATT. The allocation of quotas and licenses would be discriminatory, and restrictive non-tariff barriers would be established. Barriers would be raised against non-preferred suppliers in order to provide a trade advantage to preferred suppliers. The proposal also contravenes the principles of the current Uruguay Round reforms. As such it represents a further hurdle in the negotiation process.

The EC countries currently without quota arrangements and which enjoy the benefits of mostly open markets — particularly Germany — will be major losers of the proposal should it go ahead. They have a vested interest in maintaining relatively open markets. They should therefore have a stronger political will to act than the quota-protected countries. However, even in the quota-protected countries, consumers and the Community at large stand to be made better off through implementing genuine reform rather than that proposed.

The opportunity exists to target aid to ensure a higher pay-off from it than now. Under the Commission's proposal the mechanism for delivering support to preferred supplying countries and regions would become less direct and certain than now. The mechanism proposed relies on one group of marketers collecting excess marketing margins on the sale of dollar banana, handing that to marketers of non-dollar bananas, who in turn hand it to preferred producers. There are many grey areas relating to which groups will have what amount of market power and how they will use it in the distribution of the excessive marketing margins created. There is a very real danger, therefore, that were the proposal to go ahead, increasingly restrictive regulations and controls would be introduced to try combat the types of problems which would arise in a closed and relatively uncompetitive market such as that proposed. The costs of the proposal could turn out to be much greater than those estimated here.

---

**Bananas is the last remaining product on which the European Community must make a decision about how to unify its market. Acceptance of the Commission's proposal would be a major victory for the protected banana marketers of the European Community and a major loss for the Community itself, its consumers, and dollar and non-dollar banana producers. This is hardly the intended objective of EC market unification.**

---

## APPENDIX A: NOTES ON DATA

In this study 1990 prices and 1993 forecast trade volumes are used. Prices are mainly taken from FAO documents and trade tapes. The US import cif price is derived by multiplying the US import fob price by a factor of 1.12. The German import cif price is taken from the UN trade system. The Canary Islands export fob price is derived by subtracting transportation costs from the cif price (from EC Commission report). The retail price in Spain is estimated by adding average retail margins in France and UK to the cif price. US prices are used as world indicative prices whereas German prices are used as free market prices in the EC. There are some differences in retail margins between US and Germany. This is mainly due to non-tradable characteristics of retail services. The retail price in other EC countries is estimated by adding a 20 percent tariff plus retail margins to the German cif import price. Imports and exports for 1993 are World Bank forecasts.

### *Baseline data*

<b>Prices</b>	<b>\$US/ton</b>
US for (free on rail)	566
US retail	948
German retail	1520
UK retail	2036
France retail	2086
Spain retail	2587
Other EC retail	2315
Latin America fob	1643
Jamaica & Windward Islands fob	245
Guadeloupe & Martinique fob	548
Cameroon & Cote d'Ivoire fob	506
Somalia fob	354
Canary Islands fob	696
Other ACP fob	333
<b>Imports</b>	<b>'000 tons</b>
France	503
UK	477
Italy	437
Spain & Portugal	496
Germany	1293
Other EC	415
Rest of World	6143
<b>Exports</b>	<b>'000 tons</b>
Guadeloupe & Martinique	339
Jamaica & Windward Islands	359
Cameroon & Cote d'Ivoire	186
Somalia	78
Canary Islands & Madeira	438
Other ACP	97
Rest of World	8267



## REFERENCES

- Borrell, B. and Yang, M. 1990, *EC Bananarama 1992*, WPS 523, International Economics Department, World Bank Washington, DC.
- Borrell, B. and Cuthbertson, S. 1992, *EC Banana Policy 1992: Picking the Best Option*, Centre for International Economics, Canberra.
- EC Commission 1992, *Setting-up the Internal Market in the Banana Sector*, Report compiled by a Commission ad hoc 'Bananas' interdepartmental working party working to Commission guidelines, Commission working document, SEC(92) 940 final, Brussels.
- FAO (Food and Agriculture Organisation of the United Nations) 1991, *Banana Statistics*, CCP:BA 91/6, Rome.
- FAO 1991, *Banana Information Note*, Rome.
- FAO 1991, *Medium-Term Outlook for World Trade in Bananas*, CCP:BA 91/3, Rome.
- World Bank 1989, *World Development Report 1989*, Oxford University Press, New York.
- World Bank 1991, *World Development Report 1991*, Oxford University Press, New York.
-

**Policy Research Working Paper Series**

<b>Title</b>	<b>Author</b>	<b>Date</b>	<b>Contact for paper</b>
WPS934 Public Hospital Costs and Quality in the Dominican Republic	Maureen A. Lewis Margaret B. Sulvetta Gerard M. LaForgia	July 1992	P. Trapani 31947
WPS935 The Precautionary Demand for Commodity Stocks	Boum-Jong Choe	July 1992	S. Lipscomb 33718
WPS936 Taxation, Information Asymmetries, and a Firm's Financing Choices	Andrew Lyon	July 1992	C. Jones 37699
WPS937 How Soft is the Budget Constraint for Yugoslav Firms?	Evan Kraft Milan Vodopivec	July 1992	CECSE 37178
WPS938 Health, Government, and the Poor: The Case for the Private Sector	Nancy Birdsall Estelle James	July 1992	S. Rothschild 37460
WPS939 How Macroeconomic Policies Affect Project Performance in the Social Sectors	Daniel Kaufmann Yan Wang	July 1992	D. Kaufmann 37305
WPS940 Private Sector Approaches to Effective Family Planning	Karen G. Foreit	August 1992	O. Nadora 31091
WPS941 Projecting the Demographic Impact of AIDS	Rodolfo A. Bulatao Eduard Bos	August 1992	O. Nadora 31091
WPS942 Efficient Environmental Regulation: Case Studies of Urban Air Pollution (Los Angeles, Mexico City, Cubatao, and Ankara)	Arik Levinson Sudhir Shetty	August 1992	WDR 31393
WPS943 Burden-sharing among Official and Private Creditors	Asli Demirgüç-Kunt Eduardo Fernández-Arias	August 1992	K. Waelti 37664
WPS944 How Public Sector Pay and Employment Affect Labor Markets: Research Issues	Gail Stevenson	August 1992	PHREE 33680
WPS945 Managing the Civil Service: What LDCs Can Learn from Developed Country Reforms	Barbara Nunberg	August 1992	P. Infante 37642
WPS946 Retraining Displaced Workers: What Can Developing Countries Learn from OECD Nations?	Duane E. Leigh	August 1992	PHREE 33680
WPS947 Strategies for Creating Transitional Jobs during Structural Adjustment	Stephen L. Mangum Garth L. Mangum Janine Bowen	August 1992	PHREE 33680

### Policy Research Working Paper Series

	<b>Title</b>	<b>Author</b>	<b>Date</b>	<b>Contact for paper</b>
WPS948	Factors Affecting Private Financial Flows to Eastern Europe, 1989-91	Mohua Mukherjee	July 1992	R. Lynn 32169
WPS949	The Impact of Formal Finance on the Rural Economy of India	Hans Binswanger Shahidur Khandker	August 1992	H. Binswanger 31871
WPS950	Service: The New Focus in International Manufacturing and Trade	Hans Jürgen Peters	August 1992	A. Elcock 33743
WPS951	Piecemeal Trade Reform in Partially Liberalized Economies: An Evaluation for Turkey	Glenn W. Harrison Thomas F. Rutherford David G. Tarr	August 1992	D. Ballantyne 38004
WPS952	Unit Costs, Cost-Effectiveness, and Financing of Nutrition Interventions	Susan Horton	August 1992	O. Nadora 31091
WPS953	The "Pedigree" of IEC Conversion Factors for Per Capita GNP Computations for the World Bank's Operational Guidelines and <i>Atlas</i>	Michael Hee	August 1992	E. Zamora 33706
WPS954	How OECD Policies Affected Latin America in the 1980s	Chris Allen David Currie T. G. Srinivasan David Vines	August 1992	T. G. Srinivasan 31288
WPS955	OECD Fiscal Policies and the Relative Prices of Primary Commodities	George Alogoskoufis Panos Varangis	August 1992	D. Gustafson 33714
WPS956	Regression Estimates of Per Capita GDP Based on Purchasing Power Parities	Sultan Ahmad	August 1992	E. O'Reilly-Campbell 33707
WPS957	Carbon Taxes, the Greenhouse Effect, and Developing Countries	Anwar Shah Bjorn Larsen	August 1992	WDR Office 31393
WPS958	EC Bananarama 1992: The Sequel — The EC Commission Proposal	Brent Borrell Maw-Cheng Yang	August 1992	A. Kitson-Walters 33712