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HEALTH FINANCING: AN ECONOMIC OPPORTUNITY FOR THE CARIBBEAN

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HEALTH FINANCING: AN ECONOMIC OPPORTUNITY FOR THE CARIBBEAN

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Abstract

This short paper will be presented in six Sections. **Section 1** will introduce health financing as an economic consideration in the context of health systems making the effort to reform their modes of operation. **Section 2** will provide a brief overview of health financing modes as they are experienced in different parts of the world. **Section 3** looks at the health financing experience of the Caribbean highlighting the cases that contain the seeds of a new approach for the region. **Section 4** introduces a theoretical model linking the health financing system to economic outcomes, focusing particularly on the possible efficiency and equity impacts of the system. **Section 5** seeks to identify the outlines of the way forward for the Caribbean as it seeks to zero in on a mix of health financing modes that will increase the chances of better health system performance. Finally **Section 6** considers the case for and against the new financing pillar – National Health Insurance – being considered by a number of countries in the region.

SECTION 1
Health Financing – An Economic Concern

The first point that needs to be made is that the health financing system (HFS) is one of the instruments by which the health system strives to accomplish its main functions. These functions are analogous to George Stigler's description of the four functions of the *economic system*: production, resource allocation, distribution and regeneration.[1]

For the operations of the health system to come into play finance must be available to secure the necessary inputs, to guide resources to areas of need, to give people access to what is available and to keep the system technologically up-to-date. Having said this, it is important to point out that financing is not simply a lubricant of the health system. Keeping in mind the incentive dimension of the health financing system – signals are transmitted to both providers and users of services – the health financing system is more accurately described as the very ***engine*** of the health system. It will determine what services will be provided, where they will be delivered, what the services will cost, and who has access to them.

When the health system seems not to be accomplishing its basic objectives it is therefore natural to consider the possible role of the financing sub-system in this failure. The widespread adoption of health sector reform programmes in the Caribbean since the mid 1980s suggests a general dissatisfaction of the governments of the region with the national health systems. This dissatisfaction has put three basic questions on the reform agenda:

[1] George Stigler, *Theory of Price,* Prentice Hall College Div; 4th edition (January 1987).

1) ***What are the health services that should be made universally available to the population of the different countries?***
2) ***How should these services be delivered? In particular what should be the role of the public sector?***
3) ***How should these services be financed? In particular, how much reliance on the market should characterize the system?***

It is interesting to note that although usually presented as three separate questions, the answer to any one of the three questions listed depends to some extent on the answers to the other two. In focusing on the health financing question therefore it will be necessary to make assumptions about how the other two questions might be answered. This means that although this presentation will concentrate on the economic considerations related to health financing it must be borne in mind that the outcomes that will be discussed are not independent of policy choices both in terms of the range of services that will be made available and the mode of delivery that will be adopted.

SECTION 2
Health Financing Systems: An Overview

It is customary to identify ***four*** modes of financing health services:

i) tax revenues
ii) social insurance
iii) private insurance
iv) out-of-pocket payments

While all health systems tend to reflect some mix of these financing modes, they are usually characterized by the dominance of a particular mode. In the developing countries, for example, tax revenues constitute the dominant mode and we label these systems as public sector driven.[2] In the OECD countries, with the exception of the USA, the some form of social insurance is dominant and the health systems are accordingly characterized.[3] In a few of the less developed countries out-of -pocket payments are dominant and in the USA private insurance is clearly the major plank of what is known as the most private sector driven health system in the world.[4] There is an extensive literature, mainly supplied by the World Bank, on the economic implications of the different modes of financing but it is important to note that there is some evidence that it is the institutional context and the mode of implementation of health financing which are the important determinants of some economic outcomes.[5]

Economic analysis of Public Sector issues has traditionally focused on both the efficiency and the equity implications of the measures under consideration. The assumption no

[2] Normand, Charles and Weber, Axel, *Social Health Insurance: A Guidebook for Planning*, WHO/ILO, 1994.
[3] Glaser, William A., *Health Insurance in Practice*, Jossey-Bass Publishers, Oxford, 1991.
[4] Creese, Andrew, *User Charges for Health Care: A Review of Recent Experience*, WHO, 1990.
[5] Wagstaff, A., van Doorslaer, E., van der Burg, H. *et al.* (1999) Equity in the finance of health care: some further international comparisons, *Journal of Health Economics*, 18: 263–90; Musgrove, Philip A (Ed), *Health Economics in Development*, World Bank, 2003.

doubt is that the considerations of social welfare, which concern economists, are importantly linked to the ***efficiency*** and ***equity*** criteria, which underpin our analysis. In respect of efficiency considerations the analysis would normally point to the derived impact of market or policy changes on output. Equity considerations would normally invoke the principles of ***vertical*** or ***horizontal*** equity, which tell us about the welfare impacts of the market or of policy.

In a situation where the health system is palpably not meeting all health needs that can impact on income and welfare and where the economic system is known for its tendency to generate highly skewed distributions of income, there seems to be a strong case for public policy intervention.[6] In fact, there are ***three*** features of the health system which clearly point in the direction of market failure:

i) the asymmetry of information between health service providers and users of the system;
ii) the uncertainty of health needs and health outcomes; and
iii) the externality which characterizes many health conditions

In one sense it is not surprising that the public sector has emerged in many countries as the lead player on the health system stage. In another sense the case can be made for a dominant role for the public sector on the grounds that the public sector has a quasi-Coasian mission to minimize the transaction costs of a system that can certainly be feasibly organized along very different lines.

SECTION 3
Health Financing in the Caribbean

The first point that needs to be made is that health financing accounts for a significant proportion of the income of the region and public health financing for an even more significant share of the government's total expenditure. As Table 1 shows, the GDP share of national health spending on average approximates **5%** of the income of most countries. There are outlier countries with higher averages closer to **6%** namely, Barbados **6.3%** and St. Kitts and Nevis **5.78%**.

Turning to the structure of the financing we find that in the CARICOM region only two countries – Antigua and Barbuda and Suriname - have health systems with significant **social insurance** funding and only one country – Jamaica – seems to have made significant efforts to increase reliance on **out-of-pocket** payments. In the decade of the nineties the level of hospital revenues rose more than ten fold, and although still a small fraction of the total financing the trend was noticeable. **Private insurance** has been growing significantly and in many countries of the region almost one quarter of the population is covered in this way.

[6] David de Ferranti et al, *Inequality in Latin America and the Caribbean: Breaking with History?* World Bank, 2003; *Facing Up to Inequality in Latin America*, IDB 1998

Table 1
National Health Expenditure
as a percentage of GDP – Period Averages

Country	Period	Health Expenditure as a % of GDP – Period Averages
Antigua and Barbuda	1980-1998 & 2001	5.12
Bahamas	"	4.89
Barbados	"	6.30
Belize	"	4.89
Dominica	"	5.09
Grenada	"	4.87
Guyana	"	5.15
Jamaica	"	4.55
Saint Kitts & Nevis	"	5.78
Saint Vincent and the Grenadines	2001	6.1[a]
Saint Lucia	2001	4.9[a]
Suriname	1980-1994, 1996, 2000	5.07
Trinidad and Tobago	1980-1998 & 2001	4.58

[a]: 2001
Source: www.paho.org - PAHO NHExp database, 2003

For 14 countries of the region PAHO has estimated that the average public/private split in health financing is of the order of **57/43** with Trinidad and Tobago having the highest percentage of private expenditure – **55%** and Guyana the lowest –**31%**.[7]

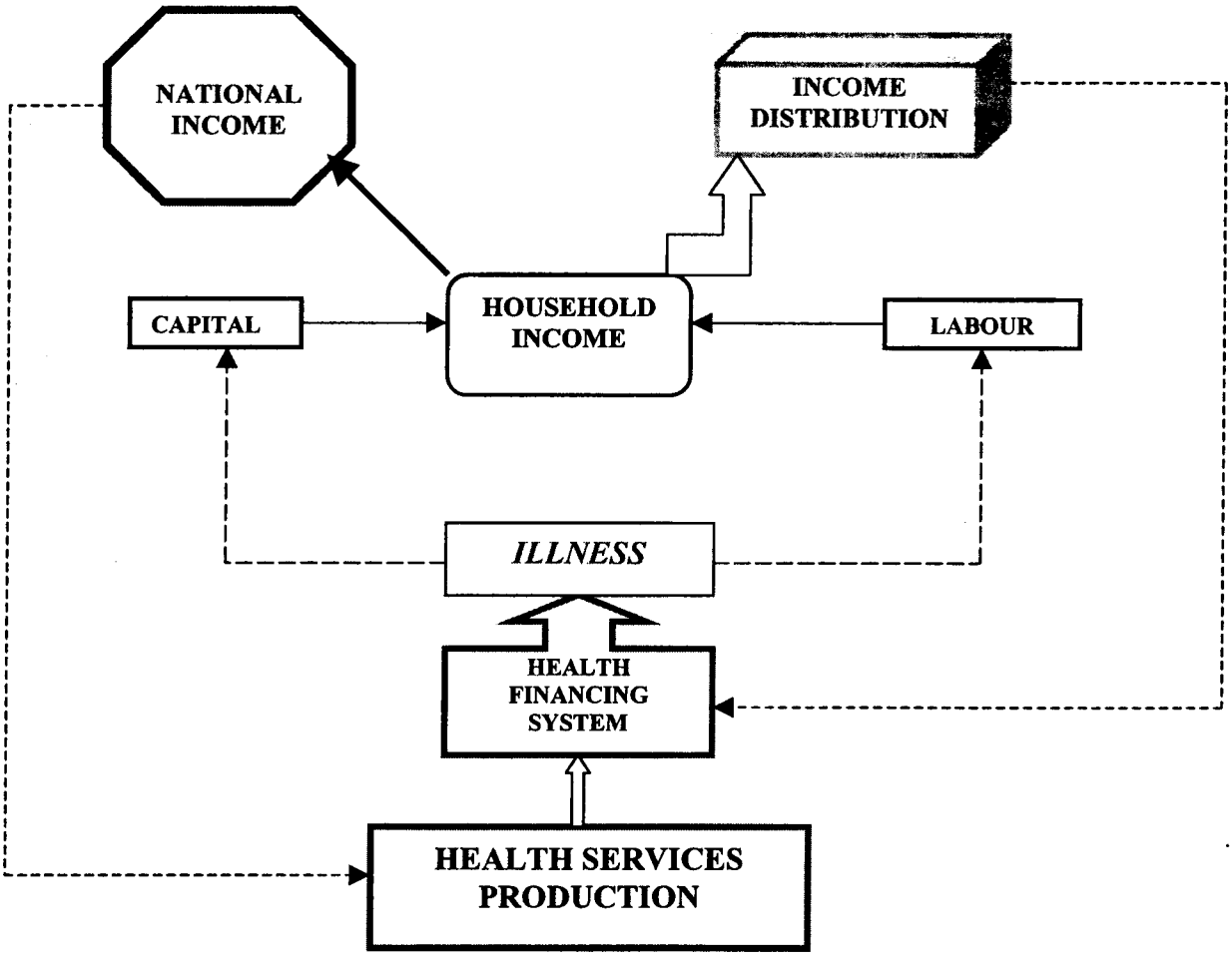
In the light of the expressed interest by a number of countries in introducing a social insurance pillar into their national health financing systems it is noteworthy that the region has two social insurance systems each more than two decades old. The Medical Benefits Scheme in Antigua/Barbuda was introduced in 1978. The system was originally part of the Antigua Social Security Scheme but was delinked in 1980. The scheme covers both contributors and non-contributors and although it is supposed to cover a limited range of conditions the interpretation of coverage has been remarkably generous. The scheme has recently been the subject of a Commission of Enquiry for alleged management excesses, but it remains a scheme, which could be a model for the rest of the Caribbean. The fact that the scheme has survived although it never benefited from the payments which the Government was legally bound to make on behalf of its employees, says a lot for its resilience.

The State Health Insurance Foundation (SZF) of Suriname was established in 1981 and has remained a partial scheme in that it covers only government employees. About one-third of the population is covered by the scheme and participants can obtain services from virtually any health provider registered with the system. This scheme too has shown remarkable resilience, having survived periods of unemployment exceeding 40% and with a virtual collapse of the economic system in the early nineties. The reduced ability to keep up with payments to providers has led to the introduction of co-payments by these providers. This does not appear to have negatively affected the operations of the SZF.

[7] Pan American Health Organization. *Health of the Americas,* Vol. 1:98, Scientific Publication No. 569

SECTION 4
A Theoretical Model linking health financing with the economy

In the diagram below we present a simple picture of the channels through which the health financing system can impact on equity and efficiency. The story begins with the production of health services, which makes use of the resources in the economy. The volume of health services produced is assumed to depend on the national income of the country. Since access to health services by households or individuals will be by means of the health financing system we make the assumption that the access profile of the health financing system is determined by the distribution of income in the society.



The Financing of Health Needs: Efficiency and Equity Impacts

We then consider what happens when households experience illness. If we assume that households are not covered by some form of health insurance we can postulate two

possible impacts. On the one hand, the time available to offer labour on the market will be reduced and on the other hand, there will be a tendency to liquidate assets to cope with medical and other expenses. In both cases the illness experience will tend to depress the income level of the household. Reduced household income will in turn lower, ceteris paribus, national income and will cause deterioration in the distribution of income. A cycle is therefore activated whereby there is a worsening of the overall economic situation both in terms of efficiency and equity, as long as illness persists.

To fully appreciate the effect of this cycle it is useful to point out at this stage that living condition surveys in Jamaica and in The Caribbean show that at any time almost ***five percent*** of the adult population is seeking to access health services from the health system. Compounding this is the observation that between one quarter and one half of those who report illness do not make contact with the health system. The implication is that there is an unmet health need the impact of which will not appear in the normal estimates based on health system data. In other cases, because of the reality of stigma and discrimination certain individuals may choose not to make contact with the health system.

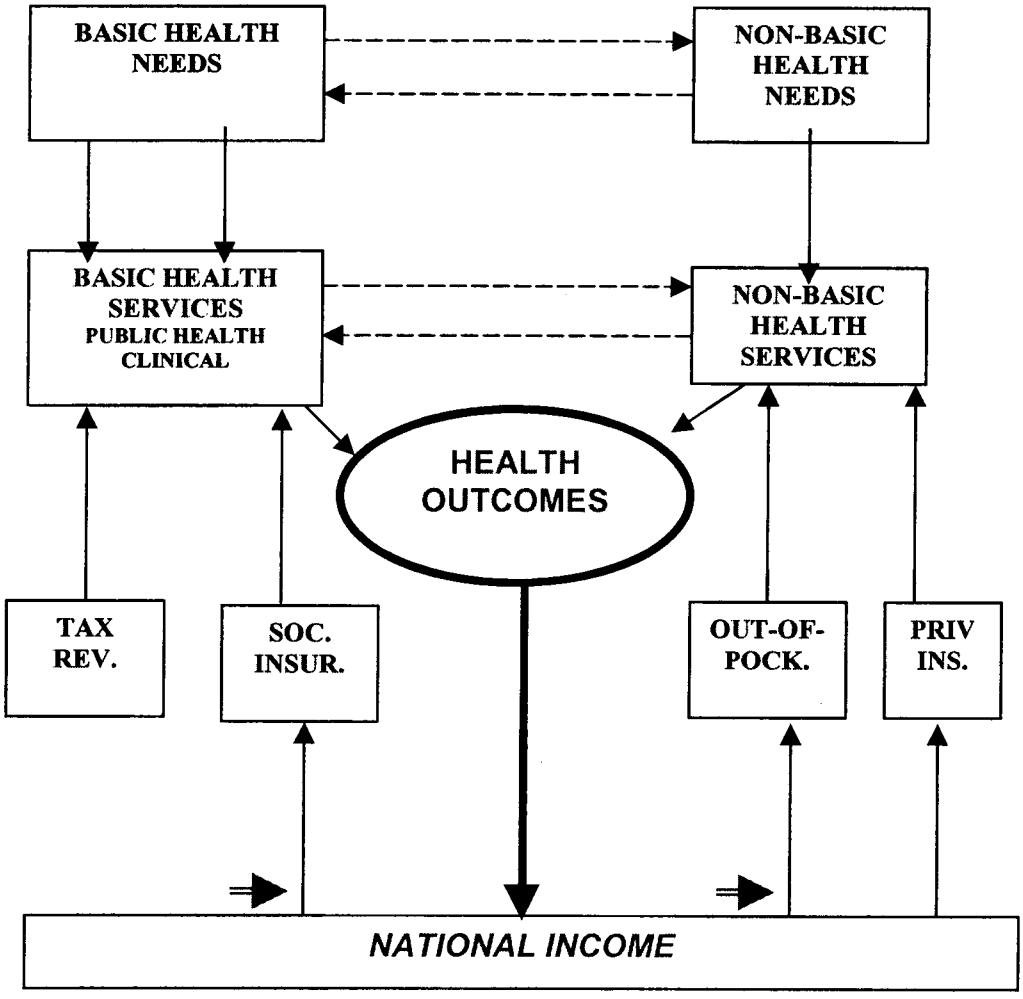
These suggestions are clearly brought out in the studies on the economic impact of HIV/AIDS on the countries of the region. On the one hand, using health system data as well as survey data it has been estimated that if unchecked, the HIV/AIDS epidemic will erode the national income of these countries by **5%** per annum, on the average.[8] However, HIV/AIDS is certainly one disease where a significant number of people affected do not voluntarily make contact with the health system. The **5%** reduction in income may therefore not be a true picture of the full impact on the economy.

SECTION 5
The Way Forward for the Caribbean

Since the purpose of the health system is to contribute to the well being of all individuals in the society an appropriate health financing system will seek to foster a proper fit between health services and health needs. In this context, it would seem that the reform imperative at this time is for a deliberately ***service-targeted health financing system.*** The diagram below illustrates.

[8] CAREC/UWI, *The Economic Impact of HIV/AIDS in Jamaica and Trinidad and Tobago*, 1997

Service-Targeted Financing of The Health System



The system described in the diagram begins with the implicit distinction between basic and non-basic health needs and therefore between basic and non-basic services. The presumption is that the decision on where to draw the line will, in the final analysis, depend on an appropriate health needs assessment. Having said this, however, it is to be noted that, as the diagram suggests, the distinction between ***basic*** and ***non-basic*** is a dynamic one which can change as health conditions or expectations or economic circumstances change.

In the health literature the term "basic" tends to refer to a much more limited set of health services than envisaged for the countries of the region. Following the World Bank terminology we may refer to a more sophisticated set of services as being "essential". However, it can be argued that what middle-income countries like those in the Caribbean can afford also goes beyond an "essential" package of services. To avoid terminological confusion we will refer to the services to be covered by public or social funding as tax

and social insurance ***benefits***. The package will therefore be referred to as the ***benefit package of services***.

Economic Context of Health Financing

There are three economic aspects to the context of a health financing system. These are portrayed in the diagram above and can be dealt with at the outset. The first is the recognition that regardless of the mode of financing identified – tax revenues, social insurance, out-of-pocket payments and private insurance – the fundamental source of all health financing is the ***national income***. What this suggests is that prior to the structuring of the financing system there must be some general agreement as to the share of national income that would be devoted to provision of health services. Since there is no *a priori* way of knowing what is the "right" share we are normally guided by historical experience, the experience of other countries and by some notion of the expected net cost of fulfilling previously unmet demand and improved quality, after taking planned efficiencies into account.

The second economic aspect of the system portrayed is the suggestion that in a system where basic or essential services are adequately financed by public or social funding, non-basic or non-essential services will normally be financed by private means – out-of-pocket payments and private insurance. However, there is no reason, in principle why out-of-pocket spending cannot finance services that are part of a universally accessible benefit package. Presumably, what the shift to a social insurance type of funding suggests is that, except for those cases where out-of-pocket spending surfaces as co-payments, it really does not have a role in determining access to services deemed important enough to be part of a benefit package. What this suggests is that market forces are not to be afforded a dominant role in determining access to health services.

As we have suggested earlier, it is important to keep in mind that over time the conception of what is non-basic or non-essential can change, depending on the evolution of particular health conditions in the society. There is therefore a need here is for some flexibility and for the financing system to build up a pool of reserves that would facilitate the adjustments needed during periods of re-definition of the benefit package.

The third important economic aspect of the system presented is the feedback of health outcomes onto the National Income. The diagram shows how the National Income impacts on health outcomes through the various financing channels. However, the human capital impact on National Income is often ignored both by health planners and by economic planners. The truth is that ***it is in our economic interest to get the health system functioning optimally.*** In this sense health sector reform is much more than making a few changes in the health sector. In a very important sense the health financing system is one of the instruments available to development planners as they seek to correct or improve the distribution of income and the quality of life in the society.

In summary, what is highlighted in the diagram is the fact that because of differences in the nature of health needs, differences in the distribution of needs, differences in personal

capabilities and differences in personal preferences, the financing of the health system will almost always be a mixture of different modes. What this means is that every health system is characterised by its particular ***structure*** of financing. The structure of the financing system is itself defined by how much of the financing comes from the different sources. It is in this sense that ***financing reforms are meant to change the structure of the overall health system.*** The aim of the financing system is to get the delivery system to generate those health outcomes deemed to be desirable and to do so in a way that the society can continue to afford.

SECTION 6
The case for the new pillar – National Health Insurance

The Case In Favour

There are three reasons why a National Health Insurance system is to be preferred as the dominant financing mechanism for the health sector in the Caribbean. Stated briefly, we can list these reasons as follows:

a) the fact that the NHI is **a dedicated financing mechanism** is very good news for the health system at a time when the demand pressures on the tax revenue pool are likely to become even more powerful;

b) the fact that the NHI is **not simply a funding mechanism** but an information-based health planning system means that unlike the tax system it can be structured to control costs as well as maintain quality;

c) the fact that the **public/private dichotomy will no longer apply** to the services covered by NHI means that the multi-tiered health care delivery system which has grown up under the present tax funding system should become a thing of the past.

Dedicated Financing

The case for dedicated financing of the health system is a simple one. The truth is that when the health system is subject to unpredictable flows the impact on the quality of care available to the population is almost instantaneous. Staff shortages, unavailability of pharmaceuticals, and non-serviceable equipment all add up to a widening gap between the health needs of the population and the services which are being sought. Although this situation will affect the entire population it is important to note that chronic unpredictability would mean that members of the labour force who need care will either have to temporarily withdraw their labour or significantly reduce their level of effort. Either way the economic system is immediately threatened in a way which, even the education system does not threaten it, when this latter system is malfunctioning. ***Health is special because of the close link between the functioning of the health system and the functioning of the production system.***

It is also instructive to note that even though the intentions of the government might be good – with the observed budget share of health spending, in almost all the countries, remaining stable over a very long period – the combination of increased demands as well as increasing costs has meant that the capacity of the tax system to assure adequate funding for the health system has been steadily reduced. This is even more significant in the light of the fact the economy has been growing steadily over the past few years. What has happened is that the present tax funding mechanism does not allow the health system to tap into the full extent of the income base of the country. ***What is required is a financing mechanism which is more directly linked to the income base of each country.*** Instead of being subject to the constraints and preferences of the Ministry of Finance, a NHI system would directly extract resources from the income base and apply them in accordance with the national goals determined by the Ministry of Health.

The NHI as a planning system

Perhaps the most elementary mistake made in conceptualizing the NHI is to see it simply as a financing instrument, nothing more than an income or payroll tax. In fact, there is no reason why a NHI system cannot be financed through a system of expenditure taxes. The truth is that the NHI has the potential to be a relatively efficient cost-recovery system for the health sector. It does this by maintaining a closer link between the average value of health services and the average cost to the beneficiaries.

The NHI is best viewed as a powerful instrument in the hands of the health planners of any country. This because for the NHI to work properly it must incorporate and co-ordinate a two-part information system – health information and financial information – which would make it possible to monitor the quality of service and control costs in all covered parts of the health system. The important thing here is that this concern with costs means that it will always be in the interest of the NHI system to ensure that what are covered are those services which maintain and improve the health status of the population. The experience of many countries after the Alma Ata declaration has shown that it is not good enough to have good intentions about safeguarding the health status of the population. It is important to have a financing system which performs better financially the more it contributes to keeping the population healthy. In other words, NHI managers understand very early that the best way to keep the NHI viable would be for the NHI to do much more than collect enough money to pay for services.

More than this, since the claims processing function of the system is based on a transparent link between services provided and compensation, it is customary for all NHI systems to incorporate a quality assurance system. Such a system is not one of moral suasion but one with a distinct threat of non-payment if the service provided does not meet a pre-agreed standard.

Efficiency and Equity of the NHI at the Social Level

By covering a defined package of services deemed to be epidemiologically relevant to the country, the NHI allows for the pooling of previously separate public and private funds in a way which makes the same level of joint funding give greater access to more services,

presumably leading to a better level of population health. This is an argument for the social efficiency of the NHI. With universal access to the benefit package those persons who could not previously get needed services in the private sector would now have access to such services. What is more, no one who had this access before would now have less access. In terms of the overall welfare derived from access to health services the NHI is clearly a Pareto-efficient arrangement – some are made better off without any one being made worse off – in terms of access.

The system also makes the entire health system more horizontally equitable, in that persons with similar health needs will have access to the same package of services. This is one of the advantages of breaking down the barrier between the private delivery system and the public delivery system. In a society where the evidence tells us that the distribution of income is not getting better, the NHI will be making a contribution to correcting this undesirable imbalance between the different socio-economic groups in the country, thereby reducing the chance that differences in living conditions will be translated into differences in health status.

The Case Against

Apart from the unfounded charge that the NHI is nothing more than a payroll tax there are a few criticisms and challenges which must be addressed.
Three criticisms raised when NHI is compared to the present tax funded system are the following:

a) the NHI is a complex system and will incur high administrative costs;
b) being wage and salary based the NHI adds an extra burden to employers to which they will respond by reducing the level of employment;
c) the capacity of the NHI to adjust premiums to cover costs means that for the covered services costs are in fact open ended.

Fortunately none of these criticisms is as severe as it might first appear. In respect of the first criticism the truth is that the NHI is a system with well-defined and logically connected elements most of which are already at work in the present health system. The main difference is that under the NHI these different elements will be focused towards the attainment of specific health goals and will now be linked by an information system which allows for greater synergy between the different elements. What is more the HEU understands that the information system – the main innovation of the NHI – is certainly less complex than the one used by the banking system today and with the steady improvements in technology, the system can be expected to become more and more user-friendly as time goes by. As far as the health system is concerned, moving to a NHI is not a move backward to complexity, but a forward-looking and progressive move to a culture of efficient and equitable management of the country's health services.

With respect to administrative costs there are international norms in respect of both private and social insurance systems and the design of the NHI system could certainly be structured to be consistent with these norms. There is nothing in the NHI per se which

biases it towards higher-than-normal administrative costs. The costs that will be incurred depend on how the NHI system is designed and on the calibre of its management.

The second criticism which sees the NHI as a negative factor in employment is based on two assumptions which do not hold in the case of The Caribbean. The first is that at the macroeconomic level the cost of the NHI to employers would be significant. There are two reasons why this is not the case. The first is that the T&T labour market is not very competitive. What this means is that any increase in labour costs is usually passed on to the consumer in the form of higher prices. The employer really bears no cost. Any impact of the NHI will therefore be on the general price level. This means that if this price level increase is accompanied by at least a proportionate increase in the volume and quality of health services the overall welfare of the community will not fall.

The second reason why the cost to employers will not be significant is that the employers' share of the NHI cost is really a small fraction of the total compensation to employees. Even at a NHI aggregate cost of TT$ 800 million, and with a 50% employers' share, the fraction will only be about 1/60 of the total employee compensation bill. That is just over 1 ½ %.

Another critical assumption behind this criticism is that the responsiveness of the demand for labour to the wage rate is significant. However, **to date, there is no study of the labour market anywhere in the Caribbean that has shown an elastic labour demand curve.** All the evidence points to highly non-responsive labour demands. What this means is that changes in wage levels do not impact significantly on the level of employment. Employment in the Caribbean seems to be directly related to the income influences, not to price influences.

In summary, there is no basis whatsoever for the charge that the NHI will cause employment to fall.

The final criticism is probably the most important. For if the NHI will put the health system on a path to increasingly higher costs, even with the expected benefits, it will not be a desirable policy option. There is no question that cost control will be one of the major challenges of the NHI system. It must be remembered, however, that how the NHI works depends crucially on how it is designed and how it is implemented. The important thing to note is **that the NHI can be designed with a strong cost control bias.** There is nothing inherent in the NHI which makes it necessarily a cost explosive system. In fact there are at least **four design features which are employed to keep costs under control.**

The first cost control feature is the use of the information system to monitor how costs are generated in the health system. This information can then be used by the management of the NHI system to take timely steps to increase the productivity and the purchasing efficiency of the delivery system.

The second cost-control feature of the NHI is the emphasis on the gate-keeping function of family physicians and the incentives given for high quality primary care. The expectation is that, as the primary care system improves, the tendency will be for lower utilization of the more expensive parts of the health system by many persons.

The third cost-control feature is the bias that can be built into the provider-payment system towards **capitation** payments for individual physicians and **global budgets** for institutional providers. Specialists will normally be paid using a combination of global budgets and fee-for-service. In other words, the use of the fee-for-service payment system will be minimized. This should certainly help in keeping the cost of health care under control.

A fourth cost-control feature would be the tendency of the NHI management to engage in strategic outsourcing of certain functions – collections and claims processing, in particular. The idea here is that since there are other agencies and institutions, which routinely perform these functions as part of their normal operations, the NHI can benefit from the efficiencies which will have been developed over the years. While there would certainly be a cost attached to these services the NHI should be in a position to negotiate a cost-efficient deal.

It is instructive to end with a few words from Sir George Alleyne, former Director of PAHO and now Chancellor of the University of the West Indies and Chairman of the Caribbean Commission on Health and Development:

"A great challenge for the Caribbean is to find some form of financing that accepts the role of the public sector in providing services for those who in a free society have the right to accede to them and at the same time ensure that there is a basic package of clinical services available to all citizens."[9]

[9] Working Paper prepared for the Caribbean Trade and Adjustment Group's Paper, *Improving Competitiveness for Caribbean Development,* July 2001.

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