

THE ROLE OF HEALTH IMPACT ASSESSMENT

Papers by Kelley Lee, Karen Lock and Alan Ingram

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Health, foreign policy and security: The role of health impact assessment

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1. Global Programme on Health, Foreign Policy and Security

The Global Programme on Health, Foreign Policy and Security is a research and policy initiative funded by The Nuffield Health and Social Services Fund and sponsored by The Nuffield Trust. The programme is being jointly undertaken by the Centre for Health and International Relations (CHAIR) in the Department of International Politics, University of Wales Aberystwyth, and the Centre for Global Change and Health, London School of Hygiene and Tropical Medicine.

The purpose of the Global Programme on Health, Foreign Policy and Security is to strengthen the conceptual and evidentiary base for informing policy development on the links between health, foreign policy and security. The specific aims of the project are:

- (a) to strengthen the conceptual and evidentiary base through the undertaking of five interrelated research projects;
- (b) to commission case studies as part of these projects that would provide policy lessons;
- (c) to hold themed seminars to bring together relevant research and policy communities;
- (d) to hold a final conference to bring the work programme together; and
- (e) to disseminate a range of outputs to a diverse range of stakeholders in the UK and abroad.

2. Health Impact Assessment Project

A project on health impact assessment (HIA) was one of five projects undertaken by the programme to strengthen the conceptual and evidentiary base for informing policy development on the links between health, foreign policy and security. HIA can be defined as a:

combination of procedures, methods, and tools by which a policy, programme, or plan may be judged as to its potential effects on the health of a population and the distribution of those effects within the population (WHO 1999 as quoted in Lock 2005).

“Health impact assessment: An overview” by Karen Lock provides an introduction to the HIA approach in terms of conceptual and methodological content. The paper addresses the following questions:

- What is health impact assessment?
- What are the methods for carrying out HIA?
- What are the strengths and limitations of HIA?

- How has HIA so far been used to date?
- How could it be usefully applied to analysing non-health policy areas?

The paper describes how HIA approach has been increasingly applied at the local, regional and national levels to measure the health effects of a wide range of specific non-health policy interventions. It has been used by public health departments, policy makers, community groups, nongovernmental organisations, and individuals working in a range of settings seeking to push public health issues higher on non-health policy agendas. To date, however, there has been limited formal analysis of the health impacts of specific foreign and security policies.

“Health impact assessment of foreign and security policy: A critical analysis” by Alan Ingram considers how HIA might be usefully applied to the policy intersections among health, foreign policy and security. He begins with recognising HIA as an idea and tool for achieving healthy public policy which aims:

to put health on the agenda of policy-makers in all sectors and at all levels, so they are aware of the health consequences of their decisions, accept their responsibilities for health and strengthen their links with the health sector on relevant issues (Sukumnoed and Al-Wahaibi 2005).

Traditionally, foreign policy and security analyses have not considered social impacts of actions taken in the national interest. Consequently, with few exceptions, HIA has not been widely applied to foreign and security policy (Kemm *et al.* 2004). Yet foreign and security policies can have clear and demonstrable effects on health, and these impacts have become increasingly debated and contested in recent years. Ingram focuses on the conceptual underpinnings of how this might be achieved through HIA, and finds that the main contribution of HIA lies in its potential for engagement across policy spheres via the application of structured and systematic procedures.

To complement these two conceptual papers, a case study entitled “Balancing health and trade policy: A health impact assessment of UK tobacco taxation policy” was undertaken by Kelley Lee. The aim of this analysis is to apply the HIA approach to a specific policy issue which intersects the health, foreign policy and security communities. The paper addresses the following questions:

- How has the specific policy been developed and what have been the key issues/debates in that policy?
- What are the health impacts of the given policy issue?
- Could this analysis be usefully applied to develop more health sensitive policies on this issue?
- How useful is HIA in assessing this impact?
- What lessons can be drawn from this analysis for policy makers in the health and foreign policy communities?
- What are the lessons drawn from this particular issue concerning health and foreign/security policy by the policy community?

3. Conclusions

A number of conclusions arise from this project. First, there is a need to be aware of the different approaches to HIA that can be undertaken for varying purposes and contexts. These include HIA as a tool for providing decision-makers with insights into health-related policy goals and objectives; as a means of influencing decision makers on a specific policy matter where higher priority for health is sought in relation to non-health policy goals; and as a means of making policy making more participatory and transparent by involving a wider range of different stakeholders. The main purpose for why HIA is undertaken, therefore, must be clearly defined.

Second, the application of HIA to foreign policy and security remains contingent on the development of appropriate methodologies and datasets. One of the strengths of HIA is the diversity of approaches and accompanying methods that can be drawn upon. This analytical arsenal offers the flexibility needed to apply HIA to different contexts and purposes. However, for the uninitiated, HIA can appear open ended and imprecise. The challenge is to develop methodologies which, while focused on measuring health impacts, are accessible to both health and non-health constituencies, as well as the research and policy communities within them. For foreign policy and security, in particular, methodologies are needed that account for complex causal relations which span disciplinary perspectives, policy areas, levels of analysis, and crossborder and transborder geographies. For example, the emerging conceptual frameworks on globalisation and health, and datasets gradually arising from their empirical application, offer a useful starting point. Nonetheless, demonstrating direct and indirect causal relations among health, foreign policy and security remains a key methodological challenge to be resolved.

Third, it should be recognised that HIA is potentially radical in its aim to elevate health concerns higher on non-health policy agendas. This can mean encountering institutional obstacles to undertaking and then implementing HIA effectively. Improving intersectoral collaboration across government departments and policy domains has been widely recognised as fundamental to addressing a wide range of challenges emerging within an increasingly globalised world. There are varied ways of facilitating intersectoral collaboration – inter-ministerial working groups, task forces, strategic policy frameworks, networking, and theme-based restructuring and funding. In this context, HIA can be seen in conjunction with such efforts. For example HIA could be used as a mechanism for greater networking among: (a) health, foreign policy and security communities within a given country; (b) these same communities across different countries and regions; and (c) research, policy making, civil society and private sector organisations. In other words, the most appropriate means of institutionalising HIA within established policy processes need to be identified, supported by an explicit policy for its development and implementation. This includes building capacity to undertake HIA within these diverse settings, and ensuring institutional mechanisms for using resultant analyses.

Fourth, and perhaps more intransigently, HIA can encounter political barriers. In seeking to elevate health concerns, vested interests may be challenged. This is especially so within the foreign policy and security communities which have traditionally given relatively low priority

to social welfare issues. HIA can also challenge “received wisdom” within non-health contexts, introducing new values, ideas and evidence to long established policy making processes. As such, despite improving the evidentiary basis for linking health, foreign policy and security communities, it cannot be assumed that HIA alone will lead to policy change. The political nature of policy making may mean that entrenched interests may prevail regardless of evidence to the contrary favouring the protection and promotion of public health. Beyond the “cut and thrust” of the political arena, it should also be recognised that assessments of health impact may simply be deemed of lower priority against alternative policy goals such as increased employment or economic growth. In such cases, prevailing norms and values underpinning policy making and society as a whole, rather than the evidence base, are more likely to define the appropriate balance between health and non-health goals.

The case study of UK tobacco taxation policy is a useful illustration of the methodological and political challenges faced by HIA. The UK’s status as the world’s second largest exporter of tobacco products, and the substantial economic interests of the tobacco industry within the UK, has led to policies which largely support trade in tobacco. Despite the substantial health burden from tobacco to the UK population (i.e. 120,000 deaths annually), economic arguments continue to strongly influence decisions about the appropriate level of taxation to levy on tobacco. Traditional comparisons of the economic benefits generated by the tobacco industry, with the health costs resulting from tobacco consumption, have generally tipped the political balance in favour of the former. Health impacts alone, in other words, have not led to a significant change in government policy. While HIA can contribute usefully to such policy debates, HIA may need to be used in conjunction with other evidence supporting policy change.

4. Recommendations

The rapidly growing application of HIA approaches has yet to be applied, in any substantial way, to the linkages between health, foreign policy and security. This project finds that there is considerable scope for doing so, and offers the following recommendations towards this end.

First, it is recommended that there be support for the further development of conceptual frameworks, methodologies and empirical analysis of health impacts arising from foreign policy and security. There are synergies to be gained from emerging research on globalisation and health, as well as the use of HIA in a variety of other settings. Tools and guidelines, and shared databases of evidence of health effects associated with specific types of policies would facilitate this development. Further case studies could be undertaken on a wide range of specific policy issues to apply these analytical tools.

Second, it is recommended that an explicit commitment to HIA be given, embedding the approach within relevant institutional structures and procedures that support intersectoral collaboration. A clear mandate for such analyses should be clearly allocated, along with necessary resources for implementation.

Third, *it is recommended that increased training in HIA be made available to researchers, practitioners and policy makers within the health, foreign policy and security sectors.* This could take the form of post graduate short courses, or modules within public health training courses, as well as the wider dissemination of available guidelines, manuals and case studies.

Fourth, *it is recommended that public health research and policy makers use HIA strategically as one among a range of methods for raising the priority given to health concerns in non-health policy settings.* At times, evidence of health impact can be politically influential for affecting policy change. However, it cannot necessarily be solely relied upon where powerful and long established vested interests are involved. Other types of evidence, along with efforts to change underlying values and belief systems, public opinion, may also need to be deployed.

Health impact assessment of foreign and security policy: Background paper

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1. Introduction

This paper is written as a background document to inform the Nuffield Trust project on Health Impact Assessment of Foreign and Security Policy. There has been little or no health impact assessment (HIA) of foreign policy carried out in the UK, Europe or Worldwide. This paper sets the scene for the project case studies by giving an overview of the key concepts of health impact assessment, including values, methods and applications to other policy sectors. It considers the key strengths and limitations of the approach for assessing the health impacts of foreign policy.

What is health impact assessment?

There are two broad definitions of health impact assessment (HIA). It has been defined as ‘the estimation of the overall effects of a specified action on the health of the population’(Scott Samuel, 1998). It has also been defined as the assessment of the change in health risk reasonably attributed to a policy, programme or project. The most comprehensive and often quoted definition of HIA was developed at a consensus conference of the World Health Organization (WHO):

HIA is a combination of procedures, methods, and tools by which a policy, programme, or plan may be judged as to its potential effects on the health of population and the distribution of those effects within the population (European Centre for Health Policy and World Health Organization Regional Office for Europe, 1999).

All definitions highlight that HIA is concerned with the health of populations and attempts to predict the future consequences of health decisions that have not yet been implemented.

The aims of HIA

HIA aims to assess the potential health impacts (both positive and negative) of projects, programmes and policies. HIA is a flexible and adaptable approach helping those developing and delivering policies. It is intended to improve the quality of decision-making so that policies, projects and programmes in all areas lead to improved public health, or minimize harm to population health (Lock 2000). HIA can influence decisions in four ways (Kemmerling, 2004):

1. By raising awareness among decision-makers of the relationship between health and other factors such as the physical, social and economic environment, so that they consider health effects in planning;
2. By helping decision-makers identify and assess the potential impact of a specific proposal on population health and wellbeing, and on the distribution of those effects within the population (i.e. issues of equity by considering health inequalities or the impact on specific vulnerable groups);
3. HIA can also identify practical ways to improve and optimise the outcome of proposals, by producing a set of evidence-based recommendations that feed into the decision-making process;
4. By helping stakeholders affected by policies to participate and contribute to decision-making.

Whatever approaches or methods are used, it is important to maintain a clear focus on the ultimate purpose of HIA. This is to inform and influence subsequent decision-making. HIA is not merely a research tool, it is a political tool to aid decision-makers.

2. HIA within the context of a broad health model

The HIA approach is grounded in the broad determinants of human health. These include personal, social, cultural, economic, environmental and political factors at local, national and international levels that influence the health status of individuals and populations (see table 1).

Table 1: Determinants of Health considered in an HIA

Determinants of Health	Examples
Pre-conceptual/in utero	maternal health, health of foetus during pregnancy
Behavioural/lifestyle	diet, smoking, physical activity, risk taking behaviour (for example, unsafe sex, illicit drugs)
Psycho-social environment	community networks, culture, religion, social inclusion
Physical environment	air, water, housing, noise, waste
Socio-economic status	employment, education, training, household income
Provision of and access to public services	transport, shops, leisure, health and social services
Public policy	economic, welfare, crime, agriculture, health policies
Trans-border and global policy issues	International trade, European Union policy, foreign policy, multi-national industries (for example for tobacco, food, oil)

By adopting a broad model of health, it becomes clear that most public or political decisions have the potential to impact on public health both positively and negatively. This obviously means that the greatest scope for improving the public's health often lies outside the control of the health services, through interventions in economic, housing, agriculture, transport, education and other 'non-health' sectors including foreign and security policy. Hence, in the majority of cases HIA has been applied to 'non-health' sector policy and projects. In most countries the interface between the health and non-health sectors is still fairly limited, for example, to links between health care and social care, and public health and environmental health. Health is not routinely a priority for other ministries or agencies. However, the financial burden of negative health impacts of their policies often falls on the health sector, both through impacts to public health and increased demands for health care.

HIA is one concept that has emerged to identify those activities and policies likely to have major impacts on the health of a population. It is increasingly proposed as a way of bringing together stakeholders from diverse backgrounds (including those from the public, private and voluntary sectors as well as the community) to identify and address how the development and implementation of a policy or programme will affect the wider determinants of health.

Many health determinants are interrelated and there are several cross cutting issues that affect health (for example poverty). The systematic nature of HIA recommends that health impacts be considered by way of a number of categories. The categories cover a series of intermediate factors that are determinants of health, through which changes due to a policy or project can impact on people's health. The precise categories used and their component parts may vary according to the nature of the proposed policy, programme or other development thus providing sufficient flexibility in the application of the health impact assessment concept in different circumstances. The categories of health determinants used in table 1 illustrate one example of such a classification.

3. The development and methods of HIA

Methodological and historical background

The basic concepts of HIA are not new and they will be familiar to those working in public health. HIA builds on and brings together many existing methods and disciplines including policy appraisal, risk assessment, stakeholder analysis, evidence-based health care, epidemiology and environmental impact assessment.

HIA has its roots in two main developments:

- 1) The promotion of healthy public policy; and
- 2) Environmental and social impact assessment.

In the 1970s and 1980s there was considerable interest in 'healthy public policy'. This was a key component of the Ottawa charter for health promotion (World Health Organization 1986). The concept included policies designed specifically to promote health (for example, banning cigarette advertising) and policies not dealing directly with health but acknowledged to have a health impact (for example, transport, education, economics).

The WHO Health for All programme (adopted in 1977 and launched at the Alma Ata Conference in 1978) and the WHO's healthy cities programme (launched in 1988) stimulated interest in the important part local government and communities can play in improving health, including urban planning and regeneration, transport and other strategies looking at the physical and social environment. More recently this has been updated as the WHO global health policy "Health for All for the 21st Century" which includes a recommendation to undertake HIA (World Health Organization, 2004).

Sustainable development plans by national and local authorities have further added to wider policy initiatives, which have implications for improving population health. These initiatives have been strengthened by increased public awareness of social and environmental effects on health. The open debate of these issues at international, national, and local levels has dramatically increased between the mainly environmental focus of the UN Earth summit in Rio de Janeiro (in 1992), and the recent World Summit on Sustainable Development in Johannesburg (in 2002) whose agenda had a much greater focus on poverty and human health issues (United Nations, 2003).

The principles of HIA are similar to social impact assessment and environmental impact assessment (EIA), and there are often many overlaps with the types of impacts considered in each. Initially HIA developed as a natural extension of these methods. Many countries, including the European Union and the USA have a legal requirement to carry out EIA. In Europe, Impact assessment methodologies are applied at both the level of the EU and individual member states. The first European directive on Environmental Impact Assessment (EIA) was adopted in 1985 (1985). There is also experience with sustainability assessment and integrated impact assessment. The last of these has been developed in the context of the complex challenge of identifying the implications of long-range trans-border pollution and involves the integration of many diverse sources of data. A legal basis for assessing policy health impacts emerged in Article 129 of the Maastricht Treaty (1993) and remained in article 152 of the Amsterdam Treaty (1997). Article 129 on public health stated that 'health protection shall form a constituent part of the Community's other policies'. However as article 129 precluded harmonising legislation it had little influence on policy within Member States (McKee *et al.*, 1996). It also did little to foster an inter sectoral approach to policy at a European level (Mossialos and McKee, 2000) as despite the intentions of article 129 the means to carry it out are lacking. Article 152 of the Amsterdam treaty (ratified in 1999), stated that 'a high level of human health protection shall be ensured in the definition and implementation of all community policies and activities'. This strengthened the case for EU action, creating an opportunity to develop HIA as a means to achieve assessment of policy health impacts. There is currently no statutory duty in law in any European country to undertake HIA.

It remains unclear who should be responsible for initiating HIA in the EU (the Commission, the European parliament or member state governments). While there has been much discussion about integrating public health into other policies, the only examples of progress have been pilot HIA projects funded through Directorate General (DG) Sanco, as part of the EU Health Strategy 2000, and the current public health programme 2003-2008 (2002). An initial guide to assessing policy health impacts was published by DG Sanco (European

Commission, 2001) but has yet to be implemented. A more recent EC funded project aims to develop a generic methodology for HIA of EU policies and has been piloted on the European Employment Strategy (Scott Samuel, 2003). HIA is a cross-cutting theme in the EU's current public health programme. Yet despite this activity, there remains some scepticism about its future potential at EU level (Hubel and Hedin, 2003), (Kreiger *et al.*, 2003), and it is unlikely to be made mandatory.

The voluntary status of HIA within the EU contrasts with that of EIA and Strategic Environmental Assessment (SEA) which have a statutory legal basis (1985, 1987). While health protection is defined in EIA legislation, in practice, little has been achieved in integrating health considerations into the process (Breeze and Lock, 2001), either being completely absent or restricted to technical issues such as levels of pollutants. The ownership of the EIA, SEA or other impact assessment processes by agencies that have no direct stake in population health is seen as an obstacle to the effective integration of health concerns. Some recent European initiatives are attempting to strengthen the health elements of EIA. One approach is so-called 'integrated impact assessment tools'. The EU is currently in the process of developing integrated approach for screening new proposals (Hubel and Hedin, 2003). Another approach is to integrate aspects of HIA in a new European legal protocol on SEA (Breeze and Lock, 2001), launched at the 5th Pan European Ministerial Conference on Environment in 2003. The protocol offers a potential mechanism to institutionalise HIA in European law (Breeze and Lock, 2001) but there has been little progress since its adoption.

In practice, HIA is a voluntary process which has been addressed and applied differently by countries across Europe. The methods developed and their application to policy will be explored in the subsequent sections.

Overview of HIA methods

HIA is a multidisciplinary, inter sectoral process within which a range of evidence about the health effects of a proposal is considered in a structured framework. It takes into account the opinions and expectations of those who may be affected by a proposed policy. Evidence for the potential health impacts of a proposal are analysed and recommendations for improving health are fed into the decision making process (Lock, 2000)

As can be seen from the following section on discussing what HIA has been used for, numerous different methods of HIA have been developed. This is reflected in the WHO definition which explains that HIA is '*a combination of procedures, methods and tools*' (European Centre for Health Policy and World Health Organization Regional Office for Europe, 1999). HIA methods vary depending on the intended audience (decision-makers versus community based), the issue being assessed (projects versus policies) and resources (both time and money available). The methods used also tend to reflect the disciplines of those planning or conducting the HIA. There are many different toolkits and methods that have been developed and used (many of which can be accessed via the weblinks given in the references). However, the large number of different approaches is not as important as it seems as all methods have similarities. The basic steps remain consistent features in all descriptions of HIA methods (see figure 1). This serves to highlight the inherent flexibility of HIA, and the ability to adapt the process to the requirements of the particular circumstances.

Core stages of the HIA process

There is a general consensus about the core stages of HIA that are summarised in Figure 1. These stages are briefly described below. Further details can be found in various methodological guides available (see the list of additional resources given in the references). It should be noted that not every HIA necessarily has to follow this framework rigidly. HIA can be adapted to the specific context.

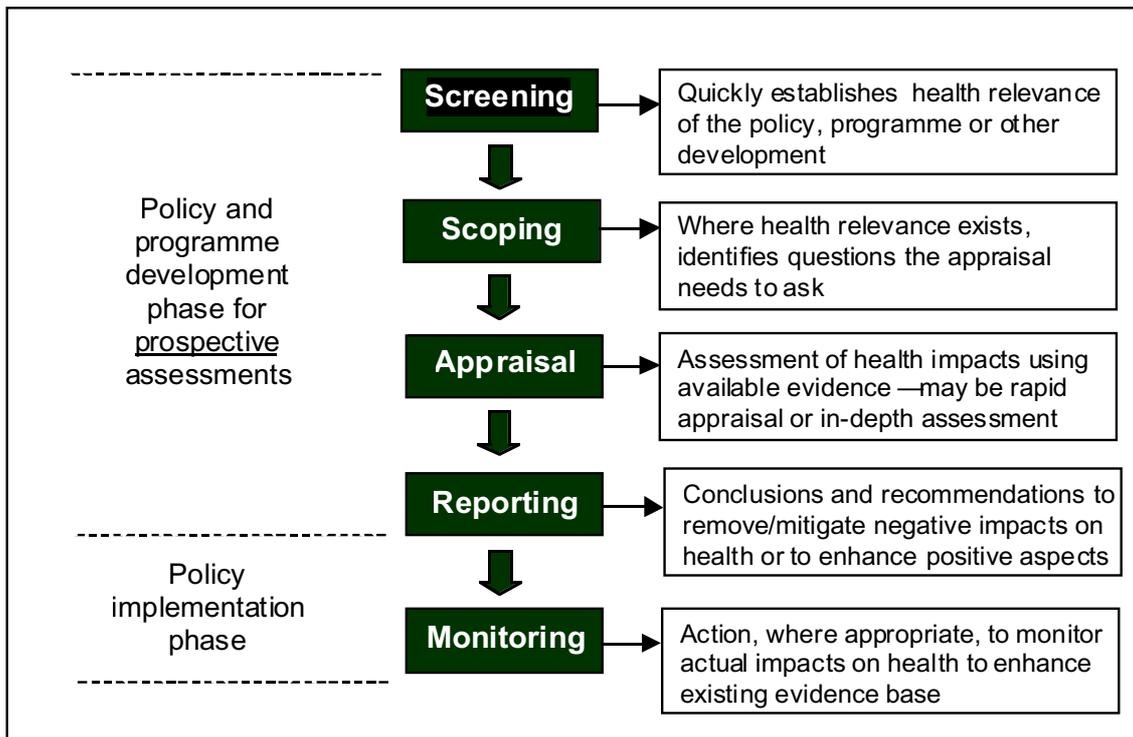
Screening: Systematic screening of policies and programme proposals provides a quick preliminary assessment of the relevance to health of the proposals. It is an important first stage of the health impact assessment and can be done with or without the assistance of screening tools and checklists. It enables any significant issues relating to health to be identified and a decision to be made on whether or not there is a need for more detailed assessment to take place.

Scoping: If there is felt to be a need for further consideration of the health impacts or potential impacts, the scoping stage identifies the questions that need to be addressed in the assessment process, and the scope of the HIA for example, the geographical area, the population and the timescales to be covered.

Appraisal: The appraisal stage itself also has in-built flexibility. It can take the form of a rapid appraisal, which might be done over the course of a few days, or an in-depth appraisal, which may require a period of weeks or several months. The appraisal may include quantitative and/or qualitative assessments that cover both risks and hazards to health, and opportunities to help people to improve their health by adjusting elements of the proposals or by integrating new elements within it.

Reporting recommendations to decision-makers: The conclusions of the appraisal and assessment are reported to those responsible for the decision-making and should meet political timeframes. The report should make any recommendations necessary to remove or to mitigate any negative impacts on the health of a population or on specific groups within a population. Similarly, the report should identify ways on which the proposal could be enhanced in order to positively encourage and support people to improve their health and well being.

Figure 1: Main stages in an ideal health impact assessment process (adapted from several sources including Scott Samuel, Birley *et al.* 1988).



4. Policy Applications of HIA worldwide

HIA has been used in many countries in the world, for various types of policies and programmes in a wide range of policy sectors. The main applications are summarised in Table 2.

The following sections will look at how HIA has been applied at a policy level in various regions of the world. Most experience of HIA comes from the European Union including both countries of the old EU-15 and new EU member states which are mostly from Central and Eastern Europe. Countries that have applied HIA vary widely in levels of economic development (from the UK to parts of Sub-Saharan Africa) and many have gone through recent periods of rapid economic, social and health transitions (including Central and Eastern Europe and South East Asia). The application of HIA to policy will be explored in more depth by using an example from the Republic of Slovenia.

Table 2: What are the main applications of HIA to decision-making?

Application	Example
Urban and transport planning	Urban regeneration schemes and policies: for example in London and Wales. Transport strategies: for example in Scotland, Merseyside, London.

Political lobbying	Input of a rapid HIA to the Public Inquiry into the Manchester Airport Second Runway expansion.
National Policy Appraisal	Examples can be found in Canada, the Netherlands, Thailand and Wales.
Sub-National/ Regional/ Local Policy Appraisal	Mayor of London Strategies (economic development, spatial development, waste, air quality, culture etc) Swedish County Councils
Environmental HIA (EHIA)	Examples can be found in New Zealand, Australia, Central and Eastern Europe (through WHO National Environmental Health Action Plans) and South America. This usually covers issues such as waste disposal, air quality and transport, water pollution.
Developing country policy and programme appraisal	This has mainly been used to appraise donor aid projects (for example, World Bank, Asian Development Bank, UN Food and Agriculture Organization). Examples include agricultural, water and sanitation policies, the World Commission on Dams, Oil pipelines (e.g. Chad), Mining

HIA in Europe

Although HIA is not a legal requirement in the EU, 12 governments recognise its potential to improve decision-making (Welsh Assembly Government and Eurohealthnet, 2003). Several of the pre-2004 member states already have considerable experience at applying HIA at local, regional and national level including Germany, Ireland, UK, the Netherlands and Sweden. An overview of HIA applications in EU countries is given in Table 3.

Table 3: Selected examples of how HIA has been applied at a policy level in EU member states

Country	Administrative level at which HIA conducted (national, regional, local)	Examples of Policy sectors to which HIA has been applied
Netherlands	Health impact screening of national policy (Varela Put <i>et al.</i> , 2001)	Housing policy (IIUE, 1999 (English translation 2001)), employment (Van Putten, 1999), environmental energy tax (Varela Put <i>et al.</i> , 2001), national budget (NSPH, 2000)

Country	Administrative level at which HIA conducted (national, regional, local)	Examples of Policy sectors to which HIA has been applied
England	National	Burglary reduction initiative(Hirschfield <i>et al.</i> , 2001), National alcohol strategy (Kemmer, 2004), Health assessment of Foot and Mouth Disease Control Policy (national and local)
	Regional	London Mayoral strategies including transport, waste disposal, economic development (London Health Commission, 2001, London Health Commission, 2003)
Wales	National (Breeze, 2004)	Home energy efficiency scheme, EU Objective 1 funding programme (Breeze and Kemmer, 2000),
Sweden	National	EU Common Agriculture Policy (Dahlgren <i>et al.</i> , 1996), Alcohol policy
	Local county council level (Berensson, 2004)	Various
Czech Republic	Regional	Health risk assessment (National Institute of Public Health, Prague) Health Impact Assessment in the Hygiene Service (Volf and Janout, 2001) Development of regional plan-strategic health plan (planned)
Slovenia	National	HIA of national food and agriculture policy- the effects of adoption of the EU CAP into national policy (Lock, Gabrejelic <i>et al</i> 2004)

Sources: Welsh Assembly Government (2003), Health Development Agency HIA gateway website (<http://www.hiagateway.org.uk/>) {Lock and McKee, 2005}, Welsh Assembly Government (Welsh Assembly Government and Eurohealthnet, 2003), (Lock *et al.*, 2004a)

Most of the ex-communist countries of Europe (many of which joined the EU in May 2004) have some tradition of assessing health impacts of policies. For example, in 1966 the public hygiene service in the former Czechoslovakia was given legal powers to assess health impacts, although in practice it had little influence on decisions (Gullis, 2004). However, this formal 'environmental health' role was narrow, focusing on adherence to technical standards rather than assessment of policy decisions. It contrasts with the emergence of broader public health approaches, creating a legacy of ambiguity about the concept of HIA and how it can be used.

Many of the new EU member states have already developed (or are in the process of developing) more broadly based models of HIA, adopting multi-sectoral approaches to public health. Some countries have been developing methods for HIA, supported by a range of capacity building activities e.g. Slovakia (Gullis, 2004) and Slovenia. Various approaches have been developed, influenced by HIA methods from elsewhere in Europe, particularly UK, Sweden and the Netherlands. Such HIA 'toolkits' are widely available on the internet and there are many methodological similarities between national models and application (Lock, 2000), although none have been applied to any foreign or security policy issues. A second approach, environmental health impact assessment (EHIA), is more specifically focused on the narrower environmental health perspective and tends to be applied more to specific projects than policy. Examples can be found in Poland, Hungary, Lithuania, Czech Republic, Slovakia and Estonia, being applied to projects such as air pollution and waste management (Cherp, 2002). Although it would be easy to dismiss this approach as not being applicable to Foreign Policy, recent discussions in the European Commission (Directorate General Public Health, 2001) and at National Government level on the threats of bioterrorism suggest that the more focused environmental health perspective may be applicable to certain security policy when the issues are tightly circumscribed, such as those related to specific biological and chemical threats.

HIA as part of EU accession in the Republic of Slovenia

As none of the EU countries have conducted HIA of foreign policies, the example of HIA of agricultural policy in Slovenia will be used to illustrate how HIA methods can be applied to a complex non-health sector policy process.

HIA was undertaken by the Ministry of Health in Slovenia as an appropriate approach to investigate how adopting aspects of the Common Agricultural Policy (CAP) funding and policy as part of EU accession requirements would impact on population health. This was important as public health was not a directly negotiated factor within the CAP. The public health aspects within EU agricultural and food production policies are limited mostly to food safety, animal welfare and environmental protection.

HIA methodology is flexible depending on the context and is still being tested and improved, particularly at a national policy level. The HIA approach used is summarised in Table 4.

The first, and most difficult task, was to clarify which policies and instruments of CAP should be considered, and what affect they would have when implemented nationally. It became clear that this could not be done with certainty, partly because there were ongoing negotiations

Table 4: Summary of the HIA methodology used in Slovenia

Screening and analysis of policies and instruments of CAP
Rapid appraisal workshops with stakeholders
Review of research evidence on health impacts
Analysis of Slovenian health and related indicators
Prioritisation of evidence and formation of policy recommendations for Slovenian Government
Presentation of findings to Parliament (November 2003)

with the EU about the amount of CAP subsidies that Slovenia would be allocated on accession, and also because of the different way each country applies the regulations and funding. At the beginning of the HIA there was insufficient detail on how Slovenia proposed to implement certain aspects of the CAP including rural development policies. To assist the analysis agricultural experts from the University of Ljubljana modelled and interpreted potential policy scenarios which would be likely when integrating CAP requirements in Slovenia.

The steering group agreed that due to the constraints it was proposed that the HIA focus on three agricultural regimes; dairy, fruit and vegetables and wine, which were analysed in greater detail due to their importance in agriculture and their potentially significant health impacts. It was also felt that the HIA must recognise that there are other drivers of health and policy change in the agricultural sector, including issues of rural development, socio-economic and cultural change which must be taken into account as part of the HIA process. The HIA considered how some aspects of the proposed EU rural Development funding could be used to benefit the health and well-being of rural populations.

After identifying some of the key instruments that would be used to implement CAP in Slovenia, the HIA identified and collected information about possible health impacts that a policy might create. The HIA took a participatory approach, which is less usual in the application of HIA to national policy. In this example it involved collecting information from national and regional stakeholders in a series of meetings. In total, 66 people participated, including representatives of farmers, food processors, consumer organisations, schools, public health, Non Governmental organisations, development agencies, and officials from government ministries. These included Ministries of Agriculture, Economic Development, Education, Tourism, and Health. During the workshops participants considered the core agricultural policy issues and identified potential health issues and other concerns. These concerns were grouped under various headings outlined in table 2.

The next stage in the HIA process was to compare stakeholders' concerns with the existing evidence in the scientific literature. It was planned that literature reviews would be used in combination with the existing data in Slovenia to support or refute the health concerns put forward by the stakeholders. Various new reviews were planned including: Environmentally friendly farming; Mental health and rural restructuring; Socio-economic factors & social

Table 5: Key concerns about agricultural policy development after accession in Slovenia

Loss of income, employment, housing and social capital in rural communities
Increased food imports and impact on exports
Nutritional value of food and food safety
Environmental issues: e.g. intensification of farming
Potential benefits of organic production
Barriers to small and medium sized enterprises
Occupational health
Capacity of local services (employment, education, health & social) to adapt to any changes post-accession

Source: Outcomes of stakeholder HIA workshops, Slovenia 2002

capital in rural areas; Occupational health; Nutrition and public health. Not all reviews were completed due to lack of funds, so some of the potential impacts had less extensive evidence than others to support them due to practical constraints rather than simply poor evidence.

Indicators of how policies may affect the current situation in Slovenia were based on existing nationally and regionally collected data. This included, for example, the level of food production (e.g. milk and vegetables and fruit); methods of food production (e.g. intensive versus organic); levels of food imports and exports; food processing including on farm processing; access of consumers to food – retail outlets & prices; patterns of food consumption; food-borne disease statistics; environmental pollution; occupational health; and socio-economic factors including correlation between high unemployment, inequalities and prevalence of disease.

The final HIA report was completed by the Ministry of Health in October 2003. This presented the results and recommendations for the government of Slovenia on a range of agricultural issues that were likely to occur after accession to the EU, with adoption of the CAP. It was presented to the parliamentary inter-governmental committee on health on November 19th 2003.

The HIA in Slovenia was a pilot project to estimate the likely impact on health of a complex policy sector such as agriculture. It was acknowledged at the start that there would be a need to continue to develop the methodology and that, given the complexity of policies, the analysis would not be as comprehensive as desired. An important part of this process is the lessons that are learned regarding the implementation of HIA and agriculture policy in Slovenia and other countries. There were many limitations to the methods used, including lack of data, time and resources. It has been difficult to evaluate the specific effect that the HIA may have on population health, mainly due to the complexity of the policy process in the EU and Slovenia, but also because health benefits would likely accrue in decades rather

than a few years. However, the HIA proved to be a useful method for improving inter-sectoral collaboration between sectors, in this case, ministries of health, agriculture and regional development agencies. It has had benefits for work on future food, nutrition and health policies, including the National Food and Nutrition Action Plan.

HIA in less developed countries

In the 1990s, following Agenda 21, many international donor organisations and international agencies accepted the need for a clearer policy for assessing health impacts and some produced guidance or guidelines on HIA or health in environmental assessment. These included the UK Department for International Development (Birley 1995), Asian Development Bank (Birley and Peralta 1992) and World Bank (Birley, Gomes *et al.* 1997). Other organisations which have also considered assessing health impacts as part of their work include the World Commission on Dams (World Commission on Dams 2000), and various WHO regional offices. However, in reality none of these organisations have adopted HIA into routine policy or practice, but have mainly applied the approach to specific development projects.

Most of the HIA work conducted in Africa has been on large development projects, such as dams and oil pipelines, often as part of environmental assessments. It has also mainly occurred at the implementation stage rather than the decision-making stage of projects. For example, the World Bank funded a thorough environmental and health impact assessment for the US\$3.5 billion Chad Oil Export project (Jobin 2003) involving Chad, Cameroon and oil companies. This was carried out by a panel of overseas environment and health experts. The key health issues raised were management of malaria risk and spread of HIV/AIDS with increased movement of construction workers along the route. The HIA led to intensive measures for the environmental management and treatment of malaria, for reduction of road traffic accidents and construction accidents. It also had provision for new sources of drinking water, and sewage treatment. The HIA also highlighted AIDS prevention as something that was often neglected in such projects, and led to extra measures to minimise HIV transmission along the project, although stronger measures for HIV prevention were not implemented. An evaluation of the impact of the EIA and HIA showed that the mitigation measures introduced following the HIA had reduced the expected number of deaths from malaria, road traffic accidents and construction accidents, occurrence of sexually transmitted and gastrointestinal diseases particularly among those involved in the project (Jobin 2003). However, many of the panel recommendations concerning wider environmental, health and social equity considerations for the people living in the region were largely ignored in the final execution of the project.

There has been very little development or use of HIA in countries of Latin America and the Caribbean. Most of the examples of HIA have focused on mining and again have taken a project-based approach as part of environmental assessments. For example, the World Bank assessed the health effects of the rapid expansion of the informal gold-mining sector in Ecuador as part of an environmental impact assessment (World Bank 1997).

What are the reasons for a lack of development of HIA of policy in less-developed regions? In 1999, the WHO regional office for South East Asia (WHO SEARO) discussed the need to

develop and apply tools such as HIA as part of a multi-disciplinary regional inter-country consultation. Despite this, by 2003 the number of HIAs conducted had not increased in the region and so a situation analysis was conducted in 9 of the 10 member states (Caussy, Kumar *et al.* 2003). The SEARO countries, Bangladesh, Bhutan, Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka and Thailand, have very diverse levels of economic and social development, and it was decided to analyse the political and institutional issues that may have supported or prevented HIA development. The countries were assessed using 4 key indicator variables;

- policy framework and procedures for HIA
- existing infrastructure required to support HIA
- the capacity for undertaking HIA
- the potential for inter sectoral collaboration

The analysis showed that environmental assessment was used implicitly as a substitute for HIA. HIA itself was not explicitly or routinely conducted except in Thailand. Only Thailand, Indonesia and Sri Lanka have some policy procedures or frameworks to support HIA. Thailand is the only country that has been successful at explicitly introducing HIA as part of its recent health sector reforms. HIA is now required as part of the new National Health Act 2002. The Thai government have made a commitment to funding a HIA research unit which conducts national HIA directed by an autonomous board under the leadership of the Minister of Public Health. It has now conducted national and regional HIAs in a range of policy sectors. Many of these have been focused on infrastructure or development projects, and seek to balance the health of local communities with the other policy pressures. For example, the HIA of Pak Mon Hydro Power Dam showed that the local villages had suffered due to a reduction in fishery resources which had a negative impact on local income, and socio-economic status. The HIA has led to the needs of the local villages being taken into account and mitigation measures initiated which improve rural livelihoods by changing the Dam opening frequency to aid a return of the fishing industry. However, they have also developed HIA at a national policy level, for example looking at the health and economic effects of sustainable agriculture. The Thai example shows that it is possible in a short timescale to implement a strong and effective system of HIA of policy if there is government commitment, the presence of a policy framework and sufficient resources. It is not clear whether the Thailand HIA process will be expanded to foreign policy, as this is currently not on the targeted list which includes agriculture, industrial development, environment and energy policy.

5. The strengths and limitations of HIA of policy

It is now clear that there are many examples of projects and programmes that have been subjected to HIA, but much less experience of applying HIA to national policy, and none of applying it to issues of foreign or security policy. Despite the limited application to policy process evaluation has shown that policy HIA leads to many benefits for 'healthy decision making'. Many of these are focused on how HIA demonstrates the effectiveness of inter-sectoral working for complex policy issues. The systematic approach of an HIA is seen as

creating a structured approach for demonstrating the broad health agenda to other agencies and policy sectors (Francis and Elliot, 2005, Roscam Abbing, 2004). Secondary to this, HIA is also seen as providing a clear mechanism for health to inform decision-making, most usually in the non-health sector (Roscam Abbing, 2004). If a participatory approach to HIA is taken, evaluation has shown in many cases that HIA encourages and empowers public participation in decision making (although this is often more applicable at sub-national policy level) (Ison, 2004).

There are now a few countries that have institutional structures for routine HIA of policy. Ultimately, if HIA is to contribute to policy-making in a routine way, it must be integrated with administrative processes, in a similar way to EIAs. At a national level in Canada HIA has been incorporated into the legislative framework through Environmental Health Impact Assessment (Ministry of Health, 2004). Despite considerable experience over several years in Europe, only the Netherlands and Wales have established national resourced HIA units operating as part of government (Varela Put *et al.*, 2001), (Breeze, 2004) (Francis and Elliot, 2005). In the Netherlands, the government considered how health consequences of policies could be assessed, and developed procedures involving health screening of parliamentary documents and policies by a dedicated resourced HIA unit based in the Netherlands School of Public Health (Varela Put *et al.*, 2001). In the UK there has been differing experiences of HIA of national policy, and the extent of its use has varied widely amongst the devolved administrations. In England, despite a number of policy documents highlighting the potential importance of HIA for public health, there has been no national policy development of its use. Although HIA has previously been the subject of interdepartmental government working group it no longer appears to be a current political theme. In Scotland, HIA has also been conducted in an ad-hoc way. Although there have been a number of nationally funded pilot projects (including those on transport, urban renewal, and housing projects) there is a feeling that HIA has not really taken off in the devolved Scottish administration (Douglas and Muirie, 2004). This is in contrast to development of HIA in Wales, which has been an integral part of government working since the National Assembly for Wales was established in 1999. There have been a large number of HIA projects covering a diverse range of policies including EU Objective 1 funding, the National Skills and Employment Action Plan, Housing strategy and Home Energy Efficiency Scheme (Breeze and Hall, 2001). HIA development continues to be supported by a nationally- funded HIA unit which works to support government. The most comprehensive development of HIA currently in any country has been the development of HIA in Thailand as part of their health systems reform process (Healthy Public Policy and Health Impact Assessment Program, 2004). In other countries HIAs have been conducted on an *ad hoc* basis, but some have had a clear mechanism to feed into government strategy making. Such approaches have included joint ministerial committees or interdepartmental working groups, e.g. UK, Slovenia (Lock, 2004b), although the public health benefit of these mechanisms has not been proven.

A failure to embed HIA in the organisational structure of decision-making bodies reduces the benefits that can accrue for inter-sectoral working. This was the case in British Columbia, Canada, where, following political changes, HIA fell off the policy agenda having previously been located within the cabinet (Banken, 2001). In Lithuania a more systematic approach has

been piloted to embed HIA in administrative processes and structures (den Broeder *et al.*, 2004). The project applied the policy arrangement model to analyse the political and administrative circumstances to understand the opportunities and barriers for HIA implementation. However, despite some insights gained through this approach it was also found to have limitations both in designing practical recommendations and in giving insufficient recognition to the influence of different actors on the process. It is likely that difficulties in institutionalisation of HIA and inter-sectoral public health will be similar for all countries whatever approach is taken. Experience in Wales has shown that the use of HIA by governments at a national level alone is not sufficient, and need to be reinforced by efforts to support take-up locally and regionally (Francis and Elliot, 2005).

Apart from the organisation and capacity issues that have limited the application of policy-level HIA, there also continue to be several issues in the methodology of HIA that are unresolved (Parry and Stevens A, 2001). Although there is increasing agreement about the wide variety of factors that influence health, the comparative importance of these varies across professional and public views. At present, different models of HIA measure health impacts in different ways. Most use some checklist procedure, which uses the perceived determinants of health as markers for changes in health risks for example, using employment levels as a marker for the status of community health. The difficulty with this is that causal pathways are so complex that it is not often possible to say if an outcome will definitely be good or bad for the health of a population. It is important to realise that such health indicators can potentially measure the direction and progress towards possible health improvement but this is not necessarily equivalent to a specific measure of health impact. It is important to note that despite the limitations this can prove a useful finding and is similar to that often used in EIA (Lock and McKee, 2005).

HIA aims to influence the decision making process in an open, structured way. To do this it has to acknowledge that assessing and ranking evidence is not a wholly objective process and involves a series of value judgments. There are currently no evaluated methods for prioritising evidence from different sources to make recommendations, and political imperatives are likely to affect the outcome, each HIA has developed its own framework. The balance between objective evidence and subjective opinion should be explicitly recognised in reports of HIA.

The findings of a HIA are often limited by financial and time costs. There is a need for a balance between rigorous methods that require specialist skills and high levels of resources and those that can be used more easily and cheaply by non public health specialists. The two approaches are not mutually exclusive and can be combined in a continuum of options for assessment, which includes preliminary project screening, rapid appraisal, and in-depth assessment. The decision of which method to use may relate to whatever will have most weight in influencing the decision making process in a timely way. Ultimately there will have to be a trade-off between costs and quality particularly with policy HIA (Lock, 2000).

To date, few HIAs of policy have demonstrated the effect they have had on health outcomes. This is not surprising as it is methodologically difficult, and has been further restricted by the lack of funding for longer term monitoring and evaluation. However, there have been some

HIAs that have demonstrated that the HIA recommendations influenced changes that led to reductions in likely disease occurrence (Jobin, 2003).

Finally, even if HIA was implemented more widely it is not clear how it would be integrated into the policymaking process more effectively. Health is only one consideration of governments and other issues may prevail, such as security issues, economic, environmental, employment, export and other considerations. The balance between these issues is political but the aim of HIA is to ensure that possible health consequences are not overlooked. In this way, any negative impacts on health can be removed or mitigated. However, this requires that HIA is seen as a political not research tool to enable that health considerations influence policy.

This can create a tension between the political use of HIA and the need to base the findings on the most rigorous evidence available. Evidence for actual or potential impacts can come from many sources including epidemiological evidence, local routine data sources from health and other sectors, and qualitative sources of data collection (some of which may be gathered specifically for the HIA). Due to the nature of the broad determinants of health, the evidence base available to support the HIA process is often criticised. It may be of poor quality, detailed but still inconclusive, incomplete or difficult to locate (Mindell *et al.*, 2001). Unfortunately epidemiology and related health sciences, which could contribute to HIA, are currently limited in their ability to explore outcomes other than death or disease incidence, and are unable to quantify causal pathways and the multiple interactions between risk factors. This emphasis on health determinants means that HIAs will confront considerable uncertainty in making definitive conclusions about potential health impacts. For many policies, especially those implemented at a national level where even the immediate effects are often unclear, the causal pathways are very complex, with the current evidence base patchy and often irrelevant to concrete policy options. This is particularly true in the field of foreign and security policy, except for a few discreet issues such as bioterrorism. For this reason HIA practitioners have to acknowledge the constraints of only being able to make recommendations based on the "best available" evidence given the time and other resource limitations.

There is much debate about what is the 'best available' evidence. Many scientists argue that quantified estimates are more influential but it should be remembered that not everything that can be quantified is important, that things should not be quantified if not done robustly, and that not everything that is important can be quantified. So in HIA it is accepted that evidence from a variety of sources is necessary. However, this creates its own problems. Prioritising and making recommendations using evidence from different sources and methodologies is fraught with difficulty. HIA also has to be aware that the evidence can be mixed, contradictory or limited, and so an important part of the process is involving key stakeholders to ensure that any recommendations are based on a clear understanding of their different perspectives, and are reached by consensus.

However, one of the major criticisms of HIA is that the methods of collecting and analysing evidence are not sufficiently rigorous to withstand scrutiny and challenge. The current evidence base for many health determinants is inadequate for accurately informing a process

of assessment. In completed studies the principal sources of evidence have come from literature reviews and qualitative methods. However, often the most useful information is not being routinely collected. Seldom is there going to be the time or money available for collection of primary data. Although it may be preferable for decision makers to have a quantitative measure of health impact, the limitations of qualitative estimates may have to be accepted as the best evidence available. This may limit the strength of the recommendations an assessment can make both in terms of the certainty and size of an impact (Parry and Stevens A, 2001).

6. Conclusions

HIA is a developing process worldwide, at local, regional and national levels. It can be usefully used by public health departments, policy makers, community groups, non-governmental organisations and individuals working in a range of settings to push public health issues up the political agenda. Its flexibility often means that it can be easy to integrate into existing processes. However, there are still several issues that are unresolved about its utility for policy-making. Many HIA practitioners, supported by strategies of national and local governments, have devised HIA to engage and influence decision-makers. The other main approach presents HIA as a tool for use by decision-makers to help them gain better insight into the health agenda, including balancing health against other policy considerations. In this way HIA is often more acceptable as it is presented as a means of dealing with some of the challenging aspects of decision-making. Another HIA approach with strong support, and driven by the public participation agenda, emphasizes the ability of HIA to bring a range of different stakeholders into the process in order to make policy making more transparent and inclusive. These different approaches of HIA are not incompatible but have been applied in various combinations depending on the context.

There remain considerable obstacles to implementing inter-sectoral policy approaches such as HIA. These include identification of the most appropriate methods to be used, institutionalisation of the process, development of mechanisms for inter-sectoral participation, and building public health capacity. While HIA is not the only way to ensure that health is on the broader policy agenda, it does offer one approach to embed public health in sectors in which it is currently marginalised. Its strengths include the combination of a structured approach with flexibility of methods, as well as involvement of a wide range of stakeholders (WHO, 1999, Lock, 2000). HIA can add value to inter-sectoral policy-making by complementing other approaches such as inter-ministerial working groups that have not necessarily been that successful.

One of the major requirements for success is the existence of an explicit policy for HIA development and application, such as legislation or routine HIA procedures in the policy process both nationally and within international agencies. Other factors that are important to consider to implement HIA successfully include the development of simple tools and guidelines that can be easily adapted to different settings and contexts; Shared databases across countries for the evidence of health effects associated with specific types of development projects or policies; and capacity development within organisations not only on methods for conducting HIA, but also to improve skills for working inter-sectorally. This

training must be targeted at public health practitioners and decision-makers in both health and non-health sectors who will be responsible for policy development. To date, there has been little or no intersectoral public health work on the health impacts of foreign and security policy, and health impact assessment has yet to be introduced in this sector. HIA research and development needs to be continued to improve both methods and the evidence base to assess health impacts of complex policy areas such as foreign policy.

Weblinks for further reading

Gateway Websites

HIA gateway at Public Health Excellence Centre at National Institute of Clinical Excellence: <http://www.publichealth.nice.org.uk/page.aspx?o=HIAGateway> (last visited 21 November 2005) [This site is the easiest and most comprehensive place to start, although mostly focused on UK examples.]

Health Impact Assessment Database, Netherlands School of Public Health: <https://webcollect.rivm.nl/hiadatabase/> (last visited 21 November 2005).

World Health Organisation HIA website: <http://www.who.int/hia/en/> (last visited 21 November 2005).

Websites showing applications of HIA

HIA in central Government in Wales: <http://www.cmo.wales.gov.uk/content/work/health-impact/index-e.htm> (last visited 21 November 2005). [This site includes The National Assembly for Wales's definitive guide to the use of HIA in central Government. Plus examples of completed HIAs on the website including the use of EU structural funds.]

Health Canada: Environmental Health Impact Assessment as a tool for population health promotion and public policy: This is the weblink to the handbook, and also will link to examples of its application http://www.hc-sc.gc.ca/ewh-semt/pubs/eval/handbook-guide/vol_1/chap_7_e.html (last visited 21 November 2005).

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Health impact assessment of foreign and security policy: A critical analysis

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1. Introduction

There has been little health impact assessment (HIA) of foreign policy to date. Foreign policy analysis has traditionally not considered social impacts of actions taken in the national interest; nor, despite certain exceptions, has HIA been widely applied to foreign policy (Kemmer, Parry and Palmer, 2004; Lock, 2005). However, foreign policy has clear and demonstrable effects on health, and these have become increasingly debated and contested in recent years. This makes explicit consideration of how HIA may be applied to foreign policy timely.

This paper does not aim to show that foreign policy has health impacts (although some illustrative vignettes are presented). This has been done in numerous studies. The aim of this paper is to further the development of HIA of foreign policy by presenting a general conceptualisation and discussion. For Sukkumnoed and Al-Wahaibi (2005) (cited in Lee, 2005, p.4), HIA is an idea and tool for achieving healthy public policy, which aims:

to put health on the agenda of policy-makers in all sectors and at all levels, so they are aware of the health consequences of their decisions, accept their responsibilities for health and strengthen their links with the health sector on relevant issues.

The overarching purpose, then, is to consider how HIA may add value to these broader goals. This is important, because, as Labonte and Spiegel (2003, p.723) suggest, 'Global health research outside a context in which policy makers, civil society, and the media are engaged risks generating more knowledge but little action'. The key points of this report are that the main contribution of HIA lies in its potential for such engagement via the application of structured and systematic procedures to the assessment of health impacts, and that while foreign policy presents a number of distinct challenges for HIA, these can be addressed meaningfully. Despite the apparent rise of non-state actors in foreign policy, states retain special roles and responsibilities. The analysis is therefore state-centric. In keeping with the UK global health programme, UK foreign policy represents one key point of departure.

The paper was produced in a number of stages. First, the key dimensions of health and key principles of health impact assessment were considered. Second, the nature of foreign policy was conceptualised through a review of foreign policy documents and academic literature. Third, a search for studies relevant to the health impact assessment of foreign policy was conducted using internet search tools and academic bibliographies. Publications were then

reviewed, and examples and ideas of particular importance identified. Fourth, following the recommendation of Labonte and Torgerson (2002) the main relationships were conceptualised graphically.

The paper begins by outlining what is involved in the health impact assessment of foreign policy, summarising its grounding in human rights and international humanitarian law, and elaborating the concepts of foreign policy and health. Health impact assessment is then considered in relation to two key, and often over-riding, foreign policy fields that are of particular significance for health: economics and security. Here, literature is reviewed to identify and develop frameworks that can be used to assist in the screening, scoping and appraisal stages of HIA. In the case of foreign economic policy, the paper is able to draw on extensive synthetic research examining the health impacts of globalisation. In the case of security policies, a small group of studies that have attempted to assess the potential health impacts of recent cases of the use of force are considered to generate a schematic analytical framework. Further synthetic work would enable the development of this area. Third, how HIA can feed into foreign policy processes is discussed, with particular reference to issues of participation and reporting to policy makers.

2. The grounding for HIA of foreign policy

Foreign policy can be conceptualised simply as the collective actions taken by a government to manage relations with the outside world. It is therefore an official enterprise, undertaken in the name of national interests. The World Health Organization (WHO) defines health as ‘a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’, and situates it in the context of a wider web of determinants. The intersectoral nature of health has been affirmed many times (Ritsatakis, 2004). HIA is predicated on the notion that many causes of ill health and disease lie outside the reach of health systems; therefore to improve health concerted action is required not just within health systems, but across a range of sectors, and particularly those that affect health the most. HIA is defined by the World Health Organization as:

a combination of procedures, methods, and tools by which a policy, programme, or plan may be judged as to its potential effects on the health of population and the distribution of those effects within the population (cited in Lock, 2005, p.1).

HIA can influence decision makers in four ways (Lock, 2005, p.2):

1. By raising awareness among decision-makers of the relationship between health and other factors such as the physical, social and economic environment, so that they consider health effects in planning;
2. By helping decision-makers identify and assess the potential impact of a specific proposal on population health and wellbeing, and on the distribution of those effects within the population (i.e. issues of equity by considering health inequalities or the impact on specific vulnerable groups);
3. By identifying practical ways to improve and optimise the outcome of proposals, by producing a set of evidence-based recommendations that feed into the decision-making process;

4. By helping stakeholders affected by policies to participate and contribute to decision-making.

The ultimate purpose of HIA 'is to inform and influence subsequent decision-making. HIA is not merely a research tool, it is a political tool to aid decision-makers' (Lock, 2005, p.2). HIA is therefore located firmly within the scientific study of health, but with overlaps into governance processes. It is also grounded in a broad view of health, which sees its determinants as lying in a wide range of sectors, including public policy, socio-economic status, and the provision of and access to public services.

To summarise, the health impact assessment of foreign policy therefore involves the judgement of the potential effects on health of collective actions taken by states to manage relations with the outside world, with the goal of informing and influencing decision-makers about how to improve both health and foreign policy.

The case for HIA of foreign policy is underpinned by affirmations of human rights in international declarations, notably the Universal Declaration of Human Rights and UN International Covenant on Economic, Social and Cultural Rights (Labonte, 2004). A number of states also declare their support for human rights in their foreign policy documents (Bush, 2002; Foreign and Commonwealth Office, 2003). Additional support in the case of conflict comes from international humanitarian law. The WHO notes that 'Every country in the world is now party to at least one human rights treaty that addresses health-related rights, including the right to health and a number of rights related to conditions necessary for health' (WHO, 2005a), and the preamble to the Constitution of the WHO states that 'The enjoyment of the highest attainable standard of health is one of the fundamental human rights of any human being' (WHO, 1948). In this context, the right to health is judiciable and applies both to healthcare and underlying determinants, such as access to safe and potable water and adequate sanitation, healthy environments, and access to health education (Labonte, 2004).

In addition, there is a sense that foreign policies are affecting the everyday lives of increasing numbers of people and places as a result of economic globalisation (see Box 1). On this point, Millen *et al* (2000, p.388) argue that assessing impacts on the health of poor people would be an effective way to narrow the gap between economic theories and their practical consequences. Similarly, Woodward *et al* (2001, p.875) argue:

the design and implementation of international rules need to take full account of their potential effects on the health care system and health related sectors. This implies the need for a full health impact assessment of international agreements and measures that may have significant effects on health related sectors, whether directly (e.g. through constraints or influences on sectoral policies) or indirectly (e.g. through the availability of resources and input costs), before they are implemented.

It has also been argued that globalisation is tightening the epidemiological community of fate between rich and poor (Farmer, 2001; Garrett, 2001). From this perspective, HIA of foreign policy is a rational counterpart to epidemiological globalisation. Given the increasing salience of health in foreign policy, widely-raised claims about the role of health in contributing to economic development and social stability, and the need to think more deeply about the nature of security, foreign policy practitioners may conclude that HIA is an increasingly relevant tool for improving their own policy making.

Foreign policy

Foreign policy conventionally refers to the conduct of external or international relations by states, i.e. 'The activity whereby state actors act, react and interact' (Evans and Newnham, 1998, p.179). From a realist perspective, this activity typically involves the pursuit of power and interests in the fields of economics and security, in the sense of threats to state sovereignty and national interests (Fidler, 2005).¹ While states are not sole actors in the formation and conduct of foreign policy, they tend to occupy a privileged position as coordinators, enforcers and legitimators by virtue of their coercive, legislative, diplomatic, extractive and ideological capabilities. Policy is considered here, then, as the formulation and execution of particular courses of action by elected office holders and public officials. This process necessarily involves prioritisation, and deciding between competing priorities in limited time horizons with imperfect information.

Primary concerns with economics and security are reflected in the UK Foreign and Commonwealth Office's (FCO) White Paper (FCO, 2003). Each of the FCO's eight strategic policy priorities involves economics or security in some way (Box 2).

At the most schematic level, then, foreign policy activities can be grouped under two broad headings: economics and security. Both have implications for health and both involve flows across political borders. Commitments to human rights and sustainable development, which are in theory applicable to all the fields listed, in practice figure more or less prominently in each. HIA can therefore complement human rights and environmental impact assessment of foreign policy.

Box 1: Illustrations of health impacts of foreign policy

1. In rural China, high school student Zheng Qingming kills himself by jumping in front of a train. Friends say it was because he couldn't afford the last US\$ 80 of school tuition fees, which meant he could not take the college admission test. The overall annual tuition is more than the average village family in his region earns in a year. Health care, like education, has become scarce and expensive since China embraced the market economy, and his grandfather had already spent the family savings on treating a lung disease.
2. In Zambia, Chileshe waits painfully to die from AIDS. The global funds and antiretroviral programmes are too little and too late for her. She was infected by her now dead husband, who once worked in a textile plant along with thousands of others but lost his job when Zambia opened its borders to cheap, second-hand clothing. He moved to the city as a street vendor, selling cast-offs or donations from wealthier countries. He would get drunk and trade money for sex – often with women whose own husbands were somewhere else working, or dead, and who themselves desperately needed money for their children.

1. This paper borrows insights from critical realism. In common with realists, material concerns with power and interests in the fields of economics and security are taken to exert powerful and often over-riding imperatives on the behaviour of states. However critical realism also involves the insight that power and interests are not all-determining or eternal, or necessarily perceived in rational or coherent ways, though policies may exhibit a certain logic. In other words foreign policy is an open system.

3. In northern Mexico, a young girl named Antonia is suffering from severe asthma. She is falling far behind in school. Her parents don't have enough money to pay for specialists or medicines, and wonder whether her problems are connected to the industrial haze and foulsmelling water that come from the nearby factory. They can't afford to move. All their savings were used up when corn prices plunged after the border opened to imports from the US, and it is not clear how they would make a living. How could so much corn grow so cheaply, her father Miguel used to wonder.
4. In a Canadian suburb, two people die when a delivery van swerves into oncoming traffic and slams into their car. The van driver, Tom, survives. He either fell asleep at the wheel or suffered a mild heart attack. No one knows, and he cannot remember. It was his 15th day of work without a rest. When the assembly plant where he once worked relocated to Mexico, driving the van became one of his three part-time jobs, at just over minimum wage and with no benefits. He alternated afternoon shifts at two fast food outlets, did early night shifts at a gas station and drove the van late nights as often as the company needed him. With the recession over, they had needed him a lot lately.
5. In Iraq, the number of traumatic injuries from shooting has increased greatly since the war, according to reports from major hospitals in the centre/south ... The future burden of disability from traumatic injuries will inevitably rise as conflict continues. There are an estimated 10 million landmines and explosive remnants of war in north Iraq alone that could take up to 15 years to clear ... Security problems restrict demining and removal of ordnance in central and south Iraq, where urban and rural populations face increased risk from munitions storage containers, explosive ordnance, mines and cluster munitions used during the war, though the extent of the problem is unknown.

Note: Example 1 is a real case cited in Labonte, Schrecker and Sen Gupta (2005). Examples 2-4 are composites, presented by the same authors, based on numerous other studies. 5 is an extract from Medact (2004).

Box 2: UK Strategic Policy Priorities (FCO, 2003, p.30)

- a world safer from global terrorism and weapons of mass destruction
- protection of the UK from illegal immigration, drug trafficking and other international crime
- an international system based on the rule of law, which is better able to resolve disputes and prevent conflicts
- an effective EU in a secure neighbourhood
- promotion of UK economic interests in an open and expanding global economy
- sustainable development, underpinned by democracy, good governance, and human rights
- security of UK and global energy supplies
- security and good governance of the UK's overseas territories

Health

Health can be thought of here in terms of four related dimensions, whereby the determinants of health, equity and health services contribute to health outcomes. Outcomes relate to the manifold experiences of wellbeing, morbidity and mortality, which can be assessed using a variety of methods depending on the scale under consideration. The term outcome also signals that health is thought of as being the result of processes. This links to the idea that health is influenced by social determinants, a term that while defined differently by different authors, tends to refer to a recurring core group of phenomena, in particular poverty, income inequality and environmental conditions (Box 3).

Box 3: Determinants of health

Dahlgren and Whitehead (1991)

- age, sex and hereditary factors
- individual lifestyle factors
- social and community influences
- living and working conditions
- general socioeconomic, cultural and environmental conditions

Marmot and Wilkinson (2003)

- the social gradient (between rich and poor)
- stress
- early life
- social exclusion
- work
- unemployment
- social support
- addiction
- food
- transport

Lock (2005)

- Pre-conceptual/in utero
- Behavioural/lifestyle
- Psycho-social environment
- Physical environment
- Socio-economic status
- Provision of and access to public services
- Public policy
- Trans-border and global policy issues

WHO (2002a, 2002b)

- Violence

In addition to those factors listed, the WHO has specifically recognised violence (defined as ‘The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation’, (WHO, 2002a, p.5) as a leading public health problem worldwide, and called for a shift towards violence prevention strategies (WHO, 2002b, WHA49.25).

Equity is a further important dimension of health. For the WHO (2005b):

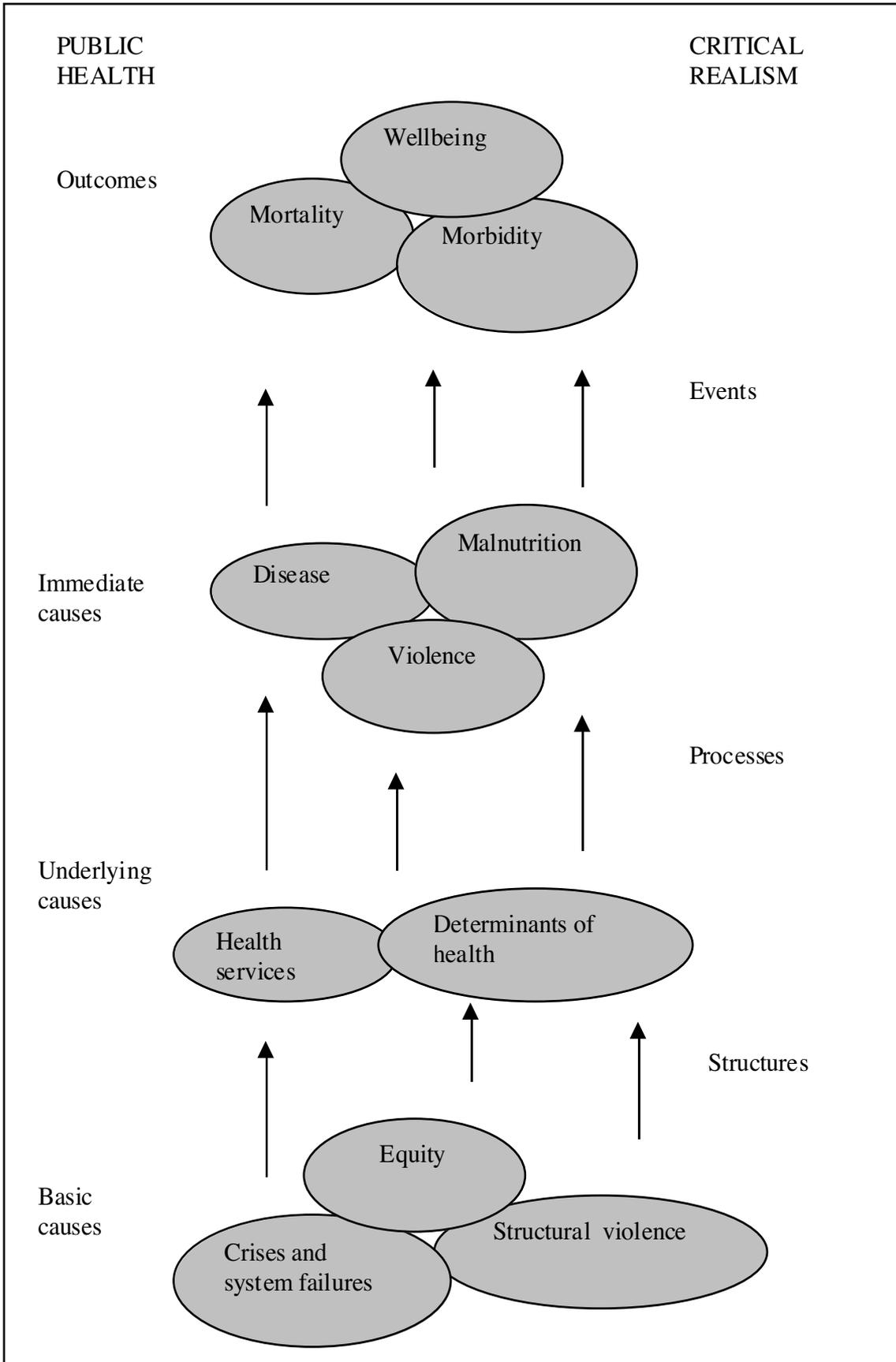
Equity is the absence of avoidable or remediable differences among populations or groups defined socially, economically, demographically, or geographically; thus, health inequities involve more than inequality—whether in health determinants or outcomes, or in access to the resources needed to improve and maintain health—but also a failure to avoid or overcome such inequality that infringes human rights norms or is otherwise unfair.

The reference to resources needed to improve and maintain health signals, finally, that access to health services, *inter alia*, is an essential part of health. Also implicit in these frameworks is the basic insight that the distribution of power shapes each of these dimensions of health. Labonte and Torgerson (2002) advocate making power (in relation to gender, race and migration) an explicit component of frameworks analysing the health impacts of globalisation.

Health outcomes can also be thought of in terms of levels of causation (Figure 1). The purpose of figure 1 is, first, to illustrate the multiple and complex causes of health outcomes. Second, it indicates that a narrow focus only on biomedical outcomes may obscure the role of deeper social processes and structures in generating patterns of outcomes overall (Farmer, 2001; O’Manique, 2004). This approach to public health has some affinities with critical realism in the social sciences, which sees events arising from underlying structures and processes. Different disciplines (biomedicine, public health, political economy, anthropology, political science, international relations, history, geography) and methods (qualitative, quantitative) may reveal different parts of this complex reality; HIA therefore may involve multiple approaches to build up a richer picture than would be possible from just one perspective.

Finally, there is the problem of complexity potentially descending into chaos. If the field under study involves complex webs of causation, how is it possible to attribute reliably causes and effects? This issue may be addressed on three levels. First, it points to the prime need for rigorous application of research methods, to the highest intellectual standards. However, philosophical or normative differences may lead to different health impact assessments that may not necessarily be solved by appeals to rigour alone; parties may not accept certain accounts of causation. Second, then, reference can be made to clear international standards about responsibilities for respecting and realising human rights. For example, the laws of war attribute particular responsibility for occupied territories to the occupying power; during conflict, certain responsibilities are incumbent upon belligerent parties. Third, differences of analysis and interpretation can only be adequately addressed in open and democratic political cultures and processes. This represents the ultimate context for considering competing claims.

Figure 1: Levels of causation of health outcomes (after Medact, 2002, p.6)



3. Assessing the health impacts of foreign economic policy

Globalisation (or transnational economic integration) forms the main context for the formulation of foreign economic policy; according to the FCO strategy the stated goal of the UK in this sphere is: 'Promotion of UK interests in an expanding global economy'. Official international development policy can be seen as lying largely within this field, given the extent to which increased participation in the global economy is taken as an axiomatic part of development itself (Blair, 2000; Rist, 2002).

The debate on globalisation and health has been polarised by the nature of some interventions. For example, a reading of reductive econometric studies based on aggregate multi-country analysis led one advocate for neoliberal globalisation to assert:

In summary, globalisation, economic growth, and improvements in health go hand in hand. Economic growth is good for the incomes of the poor, and what is good for the incomes of the poor is good for the health of the poor. Globalisation is a key component of economic growth. Openness to trade and the inflow of capital, technology, and ideas are essential for sustained economic growth (Feachem, 2001, p.504)

This is significantly at odds with much, if not most, other scholarship on these relationships in other fields, and studies that take a more grounded and contextual approach, or, in other words, analyse the specific health effects of specific policies in particular places. Responding to Feachem's intervention, Lee *et al* (2001) refer to a 'complex web of cause and effect'. As Labonte and Torgerson (2002, p.4) recognise, 'the links between globalization and health (or environment) are complex, contingent and often indirect'. And for Huynen, Martens and Hilderink (2005), population health is characterised by 'complex multi-causality'. This underlines the need for health impact assessment to be sensitive to context, and suspicious of ahistorical and aspatial abstraction, as well as empirically rigorous and undertaken within clear analytical frameworks.

The failings of neoliberalism led to a major debate during the 1990s about the extent to which the 'Washington Consensus' represented an adequate template for economic growth and poverty reduction (Maxwell, 2005; Kim *et al*, 2000). According to Birdsall *et al* (2005, p.145-146), 'Almost all successful cases of development in the last 50 years have been based on creative – and often heterodox – policy innovations... Conversely, countries that have adhered more strictly to the orthodox structural reform agenda – most notably in Latin America – have fared less well' (see also Chang, 2002). And Weisbrot *et al* (2001) argue across a range of development indicators that the period of neoliberal globalisation (1980-2000) delivered less rapid progress than the preceding 20 years. However, the policy consensus has been slow to catch up with findings such as these. As Perin and Attaran (2003, p.1217) note in relation to the dominant policy consensus, 'aid donors spent the 1990s absorbed in how to run gutted health systems with the greatest managerial efficiency, while doing much less to restore the lost health services that could have saved lives'.

Following criticism of neoliberal economic strategies, poverty reduction was adopted by the World Bank and other major institutions as a second policy goal; however, poverty reduction is still seen within a neoliberal framework, that is, predicated upon market-led growth and increasing economic integration. While this can under certain circumstances lead to reduced poverty and improved health, this is by no means automatic, and is dependent on a range of

intervening variables. Even where it delivers growth *and* poverty reduction (themselves generalised concepts that need to be unpacked), market-led strategies can produce other undesirable health impacts.

Labonte and Torgerson (2002) provide the most comprehensive critical review of conceptual frameworks linking globalisation and health. Huynen, Martens and Hilderink (2005) claim to go beyond Labonte and Torgerson by recognising that links between globalisation and health are ‘more complex’ than do the latter. However, their framework in fact adds little further understanding of this complexity, and downplays the significance of power and of people as active agents shaping globalisation. Given the importance of power to foreign policy, and of agency in health impact assessment, the work of Labonte and Torgerson, and the study by Labonte *et al* (2004) which is in large part based on it, are taken as the main reference points here.

Reviewing criteria for ‘good’ frameworks, Labonte and Torgerson outline three models, of simplified, mid-level and high-level complexity linking globalisation and health. They state (p.8) that in this context a good framework:

... is one that is comprehensive, yet also layered so that it can also be simplified for policy and public communication purposes. It is supported by theory, empirical evidence or, at least argumentative text. The framework incorporates elements indicative of both positive and negative globalization/health effects. It identifies people as social actors, and the elements of differing levels of the framework accommodate an analysis of the social distribution and use of power, for instance, by incorporating gender and race as important analytical and conceptual elements. Most, if not all, elements have data available, or such data could be reasonably obtained. New elements lacking current data sources are only introduced because there is convincing theoretical argument supporting them.

The lack of data on any particular variable is not a sufficient reason to abandon or reject HIA; the principle is that HIA is undertaken with the best available data. Theoretical frameworks linking economic globalisation and health are useful in pointing to where relevant data can be sought.

The framework identifies multiple pathways and elements by which economic globalisation influences health. It is made up of interacting levels (super-ordinate categories and a series of global, domestic, community and household contexts) and categories (e.g. political systems, pre-existing endowments, macro-economic policies, policy capacities, geographic disparities and health, education and social expenditures). While the model is not exhaustive, it is capable of elaboration and adaptation to context, and provides a useful template for screening the potential effects of foreign economic policy on health. The paper also provides pointers to an extensive array of literature analysing and substantiating linkages between specific globalisation processes and health as does Labonte *et al* (2004). (See summary of arguments in Box 4).

Drawing on this literature, it is possible to identify a wide range of foreign economic policies that have demonstrated health impacts. This framework provides a tool for screening, scoping and appraising the health impacts of foreign economic policies.

Box 4: Causal pathways linking globalisation and health (from Labonte *et al*, 2004, online)

1. How contemporary globalization affects health depends on the historical context of particular countries, specifically their political, social and economic traditions (e.g. democratic, oligarchic, patriarchal, theocratic, dictatorial); and their stock of pre-existing endowments (e.g. level of economic development, environmental resources, human capital development).

2. Globally, the major vehicles or *processes* through which contemporary globalization operates are imposed macroeconomic policies. One category consists of the Structural Adjustment Programs (SAPS) of the World Bank and IMF, which were the precursors to and a key component of today's 'free trade' agenda, and the more recent Poverty Reduction Strategy Papers (PRSP) program of the World Bank and IMF, required for debt relief and, increasingly, for development assistance. A second category consists of enforceable trade agreements (notably those administered by the WTO) and associated trans-border flows in goods, capital and services. Third, official development assistance represents a form of wealth transfer for public infrastructure development in poorer nations. Fourth, there are 'intermediary global public goods' – the numerous yet largely unenforceable multilateral agreements we have on human rights, environmental protection, women's rights, children's rights and so on.

3. These vehicles, in turn, have both positive and negative health effects on domestic policy space, by increasing or decreasing public sector capacity or resources and regulatory authority. Key domestic policies that condition health outcomes include universal access to education and health care, legislated human and labour rights, restrictions on health-damaging products, such as tobacco, or exposure to hazardous waste and environmental protection. Liberalization, whether through trade agreements or through SAPs, lowers tariffs on imported goods. This has been particularly hard on developing countries, which derive much of their national tax revenue from tariffs and which lack the capacity to institute alternative revenue-generating sources. This affects their abilities to provide the public health, education and water/sanitation services essential both to health and to economic development. Global and regional trade agreements, in turn, are increasingly circumscribing the social and environmental regulatory options of national governments.

4. National policies and resource transfers affect the abilities of regional or local governments to regulate their immediate environments, provide equitable access to health-promoting services, enhance generic community capacities (community empowerment) or cope with increased and usually increasingly rapid urbanization.

5. At the household level, all of the above determine in large measure family income and distribution (under conditions of poverty, for example, when women control household income, children's health tends to be better), health behaviours and household expenditures (both in time and in money) for health, education and social programs.

In addition, each level affects, and is affected by, environmental pathways. Among the most important of these are resource depletion (water, land, forests), biodiversity loss, pollution, and the loss of ecosystem services such as the sequestration of carbon by forests.

4. Assessing the impacts of security policies

Where security policies involve the use of force the effects are on some levels simple, straightforward and predictable. However, even in the case of violence, many of the links between security policies and health are also complex, contingent and indirect. HIA of security policies therefore also needs to be able to identify and take account of multiple causal pathways.

Evans and Newnham (1998, p.490) define security as ‘The absence of threats to scarce values’, and state that ‘Historically, security has been seen as a core value and ultimate goal of state behaviour’. Security problems threaten the ‘sovereignty or independence of a state in a particularly rapid or dramatic fashion, and deprive it of the capacity to manage by itself’ (Waeber, 1995, p.54). The primary instruments of security policy are usually thought of as the state’s coercive bodies: the military, foreign intelligence and counter-subversion agencies, but broadening out into the use of political, economic and diplomatic policies to protect the state and its citizens from threats, ensure stability in regions of particular interest, and foster a generally favourable international environment. Of these, sanctions are the most coercive. Security can therefore be seen in narrow or broad terms. This section focuses on the use of force and sanctions.

In one sense, security policies can be seen as promoting the well-being of the citizenry of the home country, and in this way, having positive health impacts. From this perspective, it might be possible to argue that during the Cold War, the defence of the West through the NATO alliance, nuclear deterrence, and under Reagan, rollback protected the security, and therefore health, of Westerners. But this would be to adopt a political rather than public health perspective, and advance a highly specific and partial analysis. A more comprehensive and systematic approach would require the analysis of health impacts across political and ideological dividing lines, extending outside the narrow context of Western Europe. On a more basic level, the use of coercion and other forms of leverage involve harm to the health of others. Each phase of the current ‘War on Terror’ (the invasion of Afghanistan, the invasion of Iraq, the extension of counter-terrorism across state borders, and the franchising of the War on Terror by other states) has been accompanied by widespread concern about its humanitarian effects and implications, not to speak of its strategic wisdom and potential for ‘blowback’.

The first level for the HIA of security policy is therefore at the level of ideology and discourse (this corresponds to Labonte and Torgerson’s discussion of political systems and processes in economic globalisation). For the purposes of conceptual analysis, four broad strategic approaches may be outlined: neo-conservatism, realism, liberal internationalism and peace.²

2. This approach is similar to that of Fidler (2001), who examines how health as a foreign policy issue might be framed by different perspectives on international relations. He applies different categories, however.

These categories are not exhaustive, and are arguably Eurocentric. They correspond both to philosophical positions in international relations theory and practical realisation in social movements (Table 1). They are important because they inform, influence and help to explain the formulation and conduct of foreign and security policy. Because each takes a particular standpoint on conflict and the use of force, each can plausibly be related to different sets of implications for health. Each is therefore significant at the level of primary violence prevention.

The first two derive from Cold War strategy, but find analogues in the current global strategy in the War on Terror. Neo-conservatism emerged originally in relation to the Reagan administration strategy of not just limiting, but overturning Communist influence in strategic regions and in the present equates with strategy of military primacy, prevention, pre-emption and regime change pursued by the current Bush administration. Realism corresponds with the more limited objectives of containment pursued for much of the Cold War, under principles of balance of power and deterrence. Liberal internationalism corresponds to the vision of conflict resolution through multilateral institutions and international law. Peace draws on the practices of peace, human rights and environmental movements and scientific communities that sought to build bridges across Cold War ideological and political barriers. In the present context, this corresponds to approaches addressing the putative 'root causes' of structural violence as well as conflict.

In practice some, at least, of these categories overlap (for example, realism and liberal internationalism often appeared as two sides of the same coin in US Cold War strategy) and they span competing philosophical and normative orientations. For example, neo-conservatives are unlikely ever to see conflict resolution as lying in practical terms in the transformation of society away from hierarchical and conflictual patterns towards peace, or pragmatic containment, or multilateral cooperation. Proponents of peace strategies are unlikely ever to come to power in many states. Yet these are the values that animate many concerned about the health impacts of foreign policy.

The second and third levels of HIA deal with the decision to use force in any given situation, and the conduct of the use of force. In relation to the decision to go to war, Murray *et al* (2001, p.346) are prepared to consider that while war might cause a sudden increase in direct and indirect mortality but might result in fewer deaths in the long term 'if it led to the deposition of a regime whose policies cause high mortality'. This appears implicitly, at least, to endorse the viability of 'regime change' strategies, but leaves many difficult and possibly intractable questions, including: is the trade off between deaths now, and lives (potentially) saved later acceptable? To whom? What are the probabilities? Who decides? In practice, such a position is difficult to reconcile with peace/human rights perspectives. In contrast, Medact (2002) adopt the position that 'war is a major hazard to health and prevention must always be better than cure'.

On the conduct of war, Murray *et al* (2001) suggest that the health impacts of conflict can be thought of in terms of direct and indirect effects. Direct effects relate to death and injury caused by violence 'on the battlefield' itself. Indirect effects refer to the health impacts of the destruction of infrastructure, population displacement, disruption of health services, and increased susceptibility to disease outbreak. Health impacts may also result for many years after conflict.

Current attempts to assess the health impacts conflict offer a range of approaches that may be used to conduct health impact assessments of future conflicts. Murray *et al* (2001) identify a number of sources and methods: intercensal analyses and other demographic studies; civil registration of vital statistics; surveys; eyewitness accounts; and official reports.

HIA before the onset of conflict is complicated by the inherent difficulty of predicting the course of conflicts. The wider humanitarian crisis triggered by NATO intervention in Kosovo (itself a response to internal repression) in 1999 undoubtedly had untoward health impacts, but was largely unforeseen in NATO countries. Some agencies predicted that the 2003 invasion of Iraq would generate a major humanitarian crisis that did not emerge in the way that was projected.³ The envisaged potential for use of weapons of mass destruction likewise

Table 1: Strategic security orientations

Orientation	Neo-con	Realist	Lib. Int.	Peace
Worldview	Power as an instrument of liberty	Tragedy of power	Power civilised	Power abolished
Approach	Primacy; pre-emption; prevention; regime change	Containment; balancing; pragmatism	International law; multilateral institutions	Transformation of society; demilitarisation
Use of force	Necessary and welcome	Unfortunate but possible	Avoidable through rational politics	Illegitimate
Health impact implications	Increased conflict	Unhealthy stability	Addressed via multilateral institutions	Part of human rights work
Health issues of concern	Equivalent to moral issues	Impact on national interests	Impact on international peace and security	Human right to health

failed to materialise. For Medact (2002), analysis of the potential health impacts of an invasion of Iraq:

was hampered by the quality of the data and many discrepancies. Much data is not available, not collected and/or not published, or its quality is questionable. Statistical, methodological and interpretive errors bedevil most of the available information but erroneous figures are repeated from one apparently authoritative source to the next.

3. See for example the leaked UN humanitarian assessments at <http://www.casi.org.uk/info/undocs/internal.html>. Accessed 29 October 2005.

Murray *et al* (2001) highlight further challenges in quantifying the public health impacts of conflict: health information systems often cease to operate, and conflicts are inherently politicised, making intentional misrepresentation of effects (or their non-representation) likely. The statement by US General Tommy Franks about Iraq that ‘We don’t do body counts’ is but one manifestation of this issue (cited in BBC, 2005). Although called further into question by the conduct of the War on Terror, from the first Gulf War onwards, Western military planners and foreign policy makers foregrounded the idea of clean war, surgical strikes and precision targeting. However, as Dardagan *et al* (2005, p.3) state, that ‘Assurances that military forces “make every effort to avoid civilian casualties” are no substitute for real data-gathering and analysis, and can have no basis without it’ (see also Roberts *et al*, 2004).

It can be argued that the difficulty of conducting HIA of the use of force does not obviate the rationale for attempting it; it merely reinforces the need for clarity and rigour, and for learning from previous cases. Foreign policy itself is not always distinguished by these qualities. Decisions to use force are also taken under conditions of imperfect information, and foreign policy outcomes cannot be predicted with certainty. But this is not an excuse for low intellectual standards in either foreign policy or health impact assessment. Foreign policy makers themselves ought to be held to intellectual standards as high as those analysing the potential effects of their decisions. Also, the availability of good data is in part a function of political will and social concern. If this is low, HIA can itself be targeted to address this problem.

HIA is premised not on the ability to make perfect predictions, but on the best use of the best available evidence. There is also a question of how evidence is interpreted, and the extent to which the uncertainties around projections are made explicit. The use of scenario-based methods (themselves widely employed in foreign and security policy analysis) may offer ways to counter this problem, though this may also lead to wide margins of error.

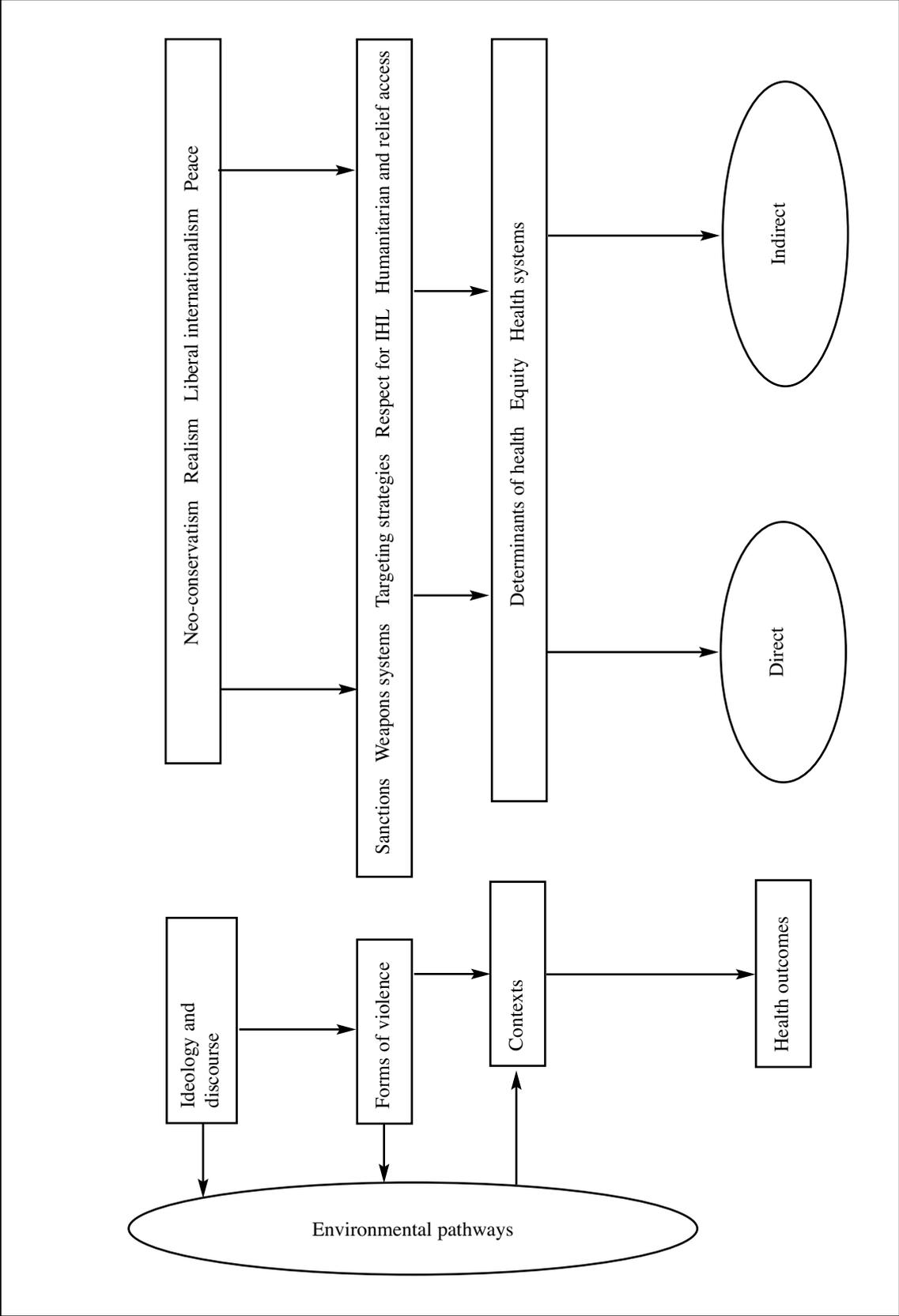
International humanitarian law represents an attempt to regulate and minimise the effects of collective violence that provide ways to assess its effects during conflict. International humanitarian law (IHL) provides clear statements that are directly relevant to health, and which can be taken as a basic starting point for health impact assessment (Box 5) (Kellenberg, 2005). Furthermore, for Dardagan *et al* (2005, p.3), ‘the continuous detailed tracking, recording, analysing, understanding, and responding to the effects of violent conflict on its innocent victims is, in our view, among the highest humanitarian imperatives, an imperative which has particular application to governments who conduct military interventions.

IHL specifies principles in relation to specific facets of conflict: protected persons and property, conduct of hostilities, women, children, refugees, internally-displaced people, missing persons, and weapons. Here it is perhaps worth noting that protected persons include civilians and the staff of relief operations, and protected objects include all civilian objects, plus military medical facilities and ambulances. IHL, then, provides a framework for how the health impacts of the use of force can be categorised and how they should be collated.

Figure 2 presents an attempt to conceptualise in simplified terms the health impacts of the use of force, modelled in part on the approaches of Medalt (2002) and Labonte and Torgerson

(2003). Further synthetic research would help to develop this framework and the nature and strength of the causal relations it represents. Signalling the first ideological and discursive level, the framework moves to consider forms of violence.

Figure 2: HIA of security policies: use of force



Sanctions, can have clear effects on health. By undermining the economy of the targeted country they may hit key determinants of health, such as income, poverty levels, nutrition and availability of medical supplies. Given the ability of elites to evade the direct effects of sanctions, they are also likely to be detrimental to equity within countries ('smart' sanctions are intended to circumvent this problem). Second, the range of weapons systems is vast, and each has a range of direct and indirect impacts, relating to how they affect people, infrastructure and the environment. These may have considerable legacy effects, for example in the case of unexploded ordnance, landmines and environmental contamination. Third, the extent to which IHL is respected influences the health effects of the use of force. This may or may not enter into the application of sanctions, choice of weapons systems, and targeting strategies in addition to the actual conduct of operations. Fourth, the extent to which IHL is respected influences targeting strategies. This has many implications, regarding, for example, whether civilian populations are targeted directly or are exposed to the effects of the targeting of military objects. The extent to which electricity, water, sewage, transport and communications networks are targeted is also of profound significance. Finally, and again related to respect for IHL, the nature and quality of humanitarian access and response and military relief is likely to influence health impacts.

Each of these dimensions of violence interacts with the dimensions of health. To use Dahlgren and Whitehead's listing of the determinants of health, the use of force impacts social and community activities, living and working arrangements, as well as the general socioeconomic, cultural and environmental conditions. Second, this can be extended to consider the political dynamics set in chain by conflicts. What kind of entity emerges from conflict? For example a functioning democracy, able and willing to respect the human rights of its citizens, or a failed state? Third, there are impacts on health systems themselves, which are embedded in these contexts, and are reliant on reliable supplies as well as more general security. Fourth, because elite, rich and poor segments of societies experiencing conflict have unequal wealth to draw upon, they may be able to insulate themselves from the effects of conflict to differing degrees, and to obtain different levels of healthcare. Conflict may also affect unevenly the situation of men, women, children, the disabled and the elderly, and different ethnic and religious groups. Conflict therefore has implications for health equity.

Each of these dimensions may interact with others and feed through into direct and indirect health impacts. Indirect health effects are likely to persist long after the cessation of hostilities. As with economic globalisation, contextual analysis must be given particular priority in addition to comparisons with other cases and previous phases of conflict.

Box 5: Basic rules of international humanitarian law in armed conflicts (ICRC, 1988)

1. Persons *hors de combat* and those who do not take a direct part in hostilities are entitled to respect for their lives and their moral and physical integrity. They shall in all circumstances be protected and treated humanely without any adverse distinction.
2. It is forbidden to kill or injure an enemy who surrenders or who is *hors de combat*.

3. The wounded and sick shall be collected and cared for by the party to the conflict which has them in its power. Protection also covers medical personnel, establishments, transports and equipment. The emblem of the red cross or the red crescent is the sign of such protection and must be respected.
4. Captured combatants and civilians under the authority of an adverse party are entitled to respect for their lives, dignity, personal rights and convictions. They shall be protected against all acts of violence and reprisals. They shall have the right to correspond with their families and to receive relief.
5. Everyone shall be entitled to benefit from fundamental judicial guarantees. No one shall be held responsible for an act he has not committed. No one shall be subjected to physical or mental torture, corporal punishment or cruel or degrading treatment.
6. Parties to a conflict and members of their armed forces do not have an unlimited choice of methods and means of warfare. It is prohibited to employ weapons or methods of warfare of a nature to cause unnecessary losses or excessive suffering.
7. Parties to a conflict shall at all times distinguish between the civilian population and combatants in order to spare civilian population and property. Neither the civilian population as such nor civilian persons shall be the object of attack. Attacks shall be directed solely against military objectives.

5. HIA and foreign policy processes

If the paper so far has focused on the analytical functions of HIA, this section considers its function in influencing policy makers. HIA as it has developed to date aims to meet a number of goals:

- Raise awareness among decision makers
- Help decision makers identify and assess impacts
- Identify ways to optimise and improve policies through evidence based recommendations
- Help affected stakeholders to participate and contribute to policy

HIA therefore involves an interaction between systematic analysis and governance processes, and the ability of a governance system to take HIA into account can be seen not just as an index of the value it places on health, but as a test of its democratic credentials and adherence to human rights and humanitarian standards. Indeed, such standards are one of the main levers practitioners of HIA have to place HIA on political agendas.

It is by no means the case at present that health effects are analysed systematically as part of foreign policy. Even within policy fields where health is supposed to be a priority, likely impacts are not always studied rigorously. Indeed, the debate about globalisation has shown that its impacts on health have been inadequately conceptualised, analysed and recognised in policy processes. Relatively explicit and systematic health impact assessments were attempted for a recent case of the use of force in international relations, the invasion of Iraq, but the

extent to which awareness was truly raised among the relevant policy makers is doubtful. So, an assumption of a linear relationship between research, awareness and policy response appears unrealistic (Overseas Development Institute - ODI - 2005).

This raises the question of who does HIA of foreign policy. Examples so far have originated outside official policy processes, but have sought to contribute to them. It might be possible to envisage a situation where HIA becomes an embedded explicit, meaningful, legal responsibility (as part of, or alongside, human rights impact assessment) on the part of policy makers. At present, this is not the case. Hence, HIA is still more likely to be undertaken outside official structures, with a view to influencing them. This section therefore considers some of the kinds of networking that may help the development of HIA of foreign policy.

If the goal of HIA is to influence policy processes, under what conditions can this happen? ODI (2005) suggests a number of mechanisms based on analysis of 50 case studies of research and policy in development (Box 6).

This programme also identified three broad domains shaping the influence of research. Political context is considered the most important, and relates, first, to political demand (to what extent is high level political commitment forthcoming?). Political demand can make it difficult to ignore findings; however, striking findings can also 'shake up the balance of political forces and enable movement'. The quality of the evidence is also important— it needs to be relevant, credible and well-communicated. The final domain is to do with the nature links between researchers and policy makers. Though open questions remain, these appear to be crucial, with long term commitment and a strategic approach to building and maintaining relationships important factors.

The ODI programme also shows that where research findings go outside the current wisdom, ideology or discourse of policy makers, or where they challenge powerful vested interests, they are much less likely to be incorporated. In these cases, HIA may imply a move from a more neutral research-policy interaction to embrace politics and social movement strategies that aim to reframe the terms of discourse and bring new interests into the political equation in order to achieve change (Tarrow, 1994). Hence HIA is potentially radical; indeed, it is the fact that it is positioned both in terms of science and politics that gives it its utility.

Box 6: How research can influence policy development and implementation

Expanding Policy Capacities

- Developing new talent for research
- Improving the knowledge of certain actors
- Providing support to develop innovative policy ideas

Broadening Policy Horizons

- Providing opportunities for networking/learning (locally and internationally)
- Introducing new ideas on the agenda, or stimulating public debate
- Stimulating quiet dialogue among decision-makers

Affecting Public Policy Regimes (i.e. strategy documents, work-plans, budgets, legislation, regulation, legal precedents)

- Modification of existing policies
- Fundamental re-design of policies
- Initiation of new policies

Affecting Practice (i.e. programs, approaches, funding levels, communication)

- Modification of existing practice
- Fundamental re-design of practice
- Initiation of new practice

HIA can help public health gain salience in foreign policy processes by addressing each of the areas highlighted by ODI. It can aim to generate political demand by highlighting to political constituencies the centrality of HIA to human rights and humanitarian declarations, and by making explicit health impacts that were either unperceived or not part of political debate hitherto. Through the development of more systematic templates, more rigorous methods and more effective public communication strategies, it may enhance the quality of evidence available on foreign policy issues. If it begins to develop these two features, HIA researchers may be better able to foster links with policy makers on a more stable long term footing.

Participation by potentially affected communities is a central element of HIA. ODI found that participation was also likely to facilitate the uptake of research in policy. However, the idea of participation has been subject to extensive critique (Cooke and Kothari, 2001, Bühler, 2002). The original idea supporting participation in policy making (particularly in international development) came out of a number of critiques of policy failure, around the key insight that policies have failed, or done more harm than good, or had avoidable untoward effects, because they have been made *for* communities, often by outsiders rather than *with* them. Hence, bad policy results where policy processes do not take local reality, wishes, or interests adequately into consideration. Participation is thus envisaged as a remedy to social exclusion, democratic failure, and bad policy. This has led to the rise in focus on ‘participation’ (as well as ‘empowerment’ and ‘consensus building’) in a number of policy spheres, founded on the principle that people should not be excluded from decisions that affect their lives (Bühler, 2002).

As Bühler discusses, such approaches have been the subject of severe criticism, on a number of grounds. Participation can mean depoliticisation, co-optation and incorporation, a means of attaching legitimacy to a pre-conceived course of action. Second, ‘experts’ may dominate and distort the process. Third, there may be an over-emphasis on formulae rather than substance (a risk with HIA itself). Fourth, participation may be used to reinforce existing patterns of authority; and fifth, participation may be dichotomised as ‘salvation’, and other approaches unreasonably maligned. Thus, ‘participation’ and its promise of change becomes an instrumental tool to ensure that things proceed smoothly for the initiators of policy. Finally, participation may over-emphasise the ‘local’, obscuring wider questions and power relations.

This critique raises profound issues that cannot be examined in full here. However, Bühler asks whether, if exclusion is indeed part of the problem, can participation still be part of the solution? Labonte and Spiegel (2003) suggest that global health research ought to prioritise, for example, research that represents concerns or questions defined by developing countries; research that ‘solidly’ engages civil society; and research that increases equity in knowledge capacities. Bühler suggests that participation needs to be thought of not just in terms of process, but of dignity and respect. For Perin and Attaran (2003), assessing the record of international health, find that:

policies, instead of reflecting needs of the recipient countries, have evolved in response to donors' ideologies...This lack of dialogue underscores most of the failures of international health and suggests the urgent need for a restructured aid process, in which policies and projects are not merely guided, but actually designed, by recipients.

Bühler (2002, p.15) therefore argues that:

dignified participation needs certain conditions: The ‘right’ degree of politicisation, a commitment to serious engagement, the recognition of the dignity of all participants, and procedures that ensure that both participation itself and any outcomes reached are real and effective.

Where these criteria cannot be secured, the meaning of ‘participation’ may be called into question.

How, then, can these concerns be integrated through the HIA process? HIA typically involves four stages (Lock 2005, see also Table 2). To these may be added the policy proposal stage, when details of policies may become known, and the post-reporting stage, when implementation is monitored, and findings fed back into new rounds of policy making. HIA in foreign policy faces the challenge of securing knowledge of new proposals in a timely fashion, as potentially controversial policies are often formulated in secret, as was the case with the initial stages of the Multilateral Agreement on Investment (eventually abandoned once details became more widely known) and planning of the war in Iraq (Woodward, 2004; Hersh, 2004). HIA of foreign policy therefore necessitates networking between parts of the public health and foreign policy communities that are interested in the public scrutiny of policy. At this stage, the main dimensions of participation may be considered.

Screening may utilise specific tools, such as the frameworks presented in Figures 2 and 3, to identify potential impacts. Participation also becomes relevant at the screening stage. This should involve communities likely to be affected by the policy under consideration. In some foreign policy situations, particularly involving security, this is likely to be challenging. Pre-existing links with academic and professional communities are likely to facilitate participatory screening. The CESR team that assessed potential health impacts of the war in Iraq did conduct fieldwork with the participation of Iraqi citizens, but report that their visit was managed by political minders. Roberts *et al* (2004) also demonstrated that it is possible to collect public health information during periods of violence, though with inevitable limitations. Scoping is also likely to be aided by participation. One question here is to do with

the extent to which the domestic scale is a relevant frame of analysis. For example, might there be beneficial or harmful feedbacks into the health of the domestic population through trade liberalisation? What might be the impact on the health or health systems of the home country of embarking on military interventions abroad?

Next, appraisal has key technical dimensions that depend on securing relevant expertise to ensure credible, rigorous assessments of health and foreign policy dimensions and their interactions. Here public health communities may again benefit from closer links with foreign policy analysis, and systematic application of scenario-based methods.

The influence and communication strategy assumes particular importance during the reporting phase, when foreign policy windows may be opening and closing in more or less predictable fashion. Here, it may be possible to tap into and align with other governance processes (such as parliamentary enquiries, hearings or debates) scrutinising foreign policy questions. Finally, HIA of foreign policy does not end with implementation; monitoring and reporting may help to sustain public health issues on the political agenda and feed into new rounds of policy making.

Table 2: Stages of HIA of foreign policy

Stage	Tasks	HIA in foreign policy
Policy proposals	Identify potential relevance to health	Consider potential dimensions of participation – foreign & domestic
Screening	Quick preliminary assessment of relevance to health	Screening tools, e.g. figures X and Y Participation of key actors Assess political demand, communication and influence strategy, links with policy makers
Scoping	Identify key questions and scope of assessment	Identify relevant geographical regions Ensure participation Identify technical expertise
Appraisal	Assess risks, hazards, opportunities	Consider alternative foreign policy scenarios
Reporting	Meet political timeframes	Target policy windows Influence and communication strategy
Post-reporting	Track impacts	Maintain focus Monitor implementation Feed into next rounds of policy making

6. Conclusions

This paper has considered how health impact assessment of foreign policy may be developed. It has suggested that HIA of foreign policy presents particular challenges, and ideas have been advanced on how they can be addressed. The discussion also suggests how HIA of foreign policy may be advanced along a number of lines. In relation to analysis, these include:

- Further development of conceptual (screening and scoping) and technical (appraisal) tools under the explicit integrative heading of HIA of foreign policy
- Identification of further pathways linking health and foreign policy
- Research exploring further the literature on HIA in relation to foreign policy
- Identification of case studies of HIA of foreign policy already completed
- Identification of better frameworks linking security policies and health impacts
- Further case studies of HIA of foreign policy under common analytical frameworks

In terms of HIA process, these include:

- Using HIA as a mechanism for greater networking between health and foreign policy communities
- Using HIA as a mechanism for greater networking between countries
- Increased dialogue between researchers, NGOs and funding bodies regarding the development of HIA of foreign policy

What might be the broader prospects for HIA of foreign policy? The two cases of economics and security are instructive in this regard, and indicate potential limits to HIA. Foreign economic policy has in some respects and some countries, shifted away from neoliberal orthodoxy in the last five years, in response to a mix of evidence and advocacy. In 2005, the UK government announced that it would no longer make development aid conditional on particular policy choices (such as privatisation) by recipient governments (Department for International Development, 2005). Though this movement was only achieved after huge effort, this indicates that some movement is possible. In Canada, assessments of the implications of trade agreements for Canada's own health system have been conducted, and were used to inform the Romanow Commission's official review of health policy. The further development and application of HIA may serve to entrench gains that have been made and support further progress.

The picture with security is perhaps less encouraging. On one level, some studies indicate that globally, human security has improved with the passing of the Cold War and major phases of decolonisation (Human Security Centre, 2005). But there are still major sources of insecurity associated with new terrorist movements, global security policies under the War on Terror, regional conflicts, state failure and competition for access to energy resources. Security policy is also the most resistant field to public scrutiny and participation. However, rather than encouraging pessimism, this may only increase the rationale for developing HIA by whatever means possible. HIA must be tried properly before its utility can be judged fully.

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Balancing health and trade policy: A health impact assessment of UK tobacco taxation

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List of Abbreviations

AFTA	ASEAN Free Trade Agreement
ASEAN	Association of Southeast Asian Nations
BAT	British American Tobacco
BTA	bilateral trade agreement
CAFTA	Central American Free Trade Agreement
CBI	Confederation of British Industries
CEPT	Common Effective Preferential Tariff (AFTA)
CY	calendar year
DTI	Department of Trade and Industry
EC	European Commission
ECOFIN	Council of European Finance Ministers
ECJ	European Court of Justice
EFTA	European Free Trade Association
EU	European Union
FTAA	Free Trade Agreement of the Americas
FCO	Foreign and Commonwealth Office
FCTC	Framework Convention on Tobacco Control
GATT	General Agreement on Trade and Tariffs
HIA	health impact assessment
HMC&E	Her Majesty's Customs and Excise
HMRC	Her Majesty's Revenue and Customs
HRT	hand rolling tobacco
JTI	Japan Tobacco International

JV	joint venture
MFN	most favoured nation
MP	Member of Parliament
MTA	multilateral trade agreement
NAFTA	North American Free Trade Agreement
NHS	National Health Service
NTB	non tariff barrier
NUKDP	non UK duty paid
PLI	Price Level Indicator
PM	Philip Morris
PMI	Philip Morris International
PPP	purchasing power parity
RJR	RJ Reynolds
RTA	regional trade agreement
RYO	roll your own
TFI	Tobacco Free Initiative
TMA	Tobacco Manufacturers' Association
TTC	Transnational tobacco company
UKDP	UK duty paid
USCEA US	Cigarette Export Association
VAT	value added tax
WTO	World Trade Organization

1. Introduction

This paper undertakes a health impact assessment (HIA) of UK trade policy on tobacco focusing on taxation. HIA offers a “conceptual idea and tool” for achieving “healthy public policy” which aims “to put health on the agenda of policy-makers in all sectors and at all levels, so they are aware of the health consequences of their decisions, accept their responsibilities for health and strengthen their links with the health sector on relevant issues” (Sukkunnoed and Al-Wahaibi, 2005). While similar types of analyses have been often used to inform public policy from an economic perspective, traditionally favouring promotion of the tobacco trade, to date an assessment of the UK’s trade policy on tobacco has not been carried out in terms of its public health impact.

The paper is structured according to the main stages of an ideal HIA process (Lock, 2005). It begins by discussing the relationship between trade policy, tobacco and health (screening). A review of UK tobacco taxation policy is then presented in order to identify the specific policies to be assessed (scoping). Drawing on available evidence, the paper then assesses the likely health impacts of selected UK tax policies relevant to the tobacco trade (appraisal). This includes consideration of crossborder and duty free trade, and the illicit smuggling of tobacco. The public health impact of estimated changes in tobacco consumption from a change in UK policy, and consequent health gains or losses, is provided. The paper concludes with policy recommendations for the UK on tobacco taxation that, it is argued, will yield significant health gains.

2. Screening: Trade in tobacco and public health

Trade agreements and tobacco

The importance of trade agreements to the broad determinants of health is increasingly recognised. Along with a substantial literature on the implications for access to medicines and trade in health services, the impact of trade liberalisation on tobacco production and consumption has received growing attention (Lee and Koivusalo, 2005; Smith, 2004; Campaign for Tobacco Free Kids, 2001; Bettcher and Shapiro, 2001). Measures contained within bilateral, regional and multilateral trade agreements began to be used from the 1980s to concertedly push for the liberalisation of trade in tobacco leaf and products. These efforts were led by the Office of the US Trade Representative and US Cigarette Export Association (USCEA) which effectively threatened sanctions against Japan, South Korea, Taiwan and Thailand, under Section 301 of the US Trade Act (1974), unless restrictions on tobacco imports were removed. The US government also successfully argued in 1990, under the General Agreement on Trade and Tariffs (GATT), that Thailand's measures were discriminatory if they were not also applied to domestic producers (Campaign for Tobacco Free Kids, 2002).

Trade liberalisation has since been used by the tobacco industry to argue for the further reduction or removal of duties and tariffs, and against stronger tobacco regulation. A range of multilateral trade agreements (MTAs) offer potential grounds for the liberalisation of the tobacco trade including the General Agreement on Trade in Services (GATS) in relation to advertising, Technical Barriers to Trade (TBT) in relation to labelling, and Agreement on Trade-Related Intellectual Property Rights (TRIPS) in relation to packaging and health warnings. While Article XX(b) of GATT states that member states are permitted to adopt trade restricting measures in order to protect public health, there remain uncertainty over the interpretation of this article, and the burden of proof required to demonstrate necessity. Without international case law to date, the public health community remains concerned that health protection remains secondary to trade promotion under such agreements (Callard, Collishaw and Swenarchuck, 2001; Callard, Chitanondh and Weissman, 2001).

These concerns appear warranted given a number of regional trade agreements (RTAs) which include tobacco under tariff reduction schedules. The ASEAN Free Trade Agreement (AFTA), for example, plans to cut all tariffs among member states to 0-5% by 2008.¹ This includes tariffs on agricultural products classified as "sensitive" which will be similarly reduced by 2010, under its Common Effective Preferential Tariff (CEPT) scheme. The reclassification of tobacco from the "excluded" to "sensitive" category made it eligible for tariff reductions and, in 2003, import tariffs on tobacco and tobacco products were cut to 5% (compared to non-ASEAN countries of 22.5% for cigarettes and 45-60% for tobacco and related products) (Maneerungsee, 2005). Moreover, tariff differentials between members and non-members have been undermined by joint ventures (JVs) between transnational tobacco companies (TTCs) and regional counterparts which enable exports to ASEAN countries to be exempted

1. The ten member countries of ASEAN are Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.

from higher rates of tariff (Deboonme, 1999; *New Straits Times*, 2001). Trade officials see the removal of tobacco from AFTA provisions as unlikely. However, whether tobacco should be included under tariff reduction plans remains keenly debated. WHO argues that “[t]here are a number of products that are excluded from free trade deals, such as guns, and we think tobacco should come under this category” (Fishburn, 2004).

There are fears that RTAs will also be used to prevent stronger regulation of tobacco. Under the Central America Free Trade Agreement (CAFTA), tobacco control measures such as warning labels, plain packaging rules and advertising regulations could be found to violate trade rules. As US Congressman Henry Waxman and Congresswoman Lois Capps argue, “CAFTA and all other trade agreements should be crafted to ensure that they do not undermine life-saving tobacco control measures. This can be achieved by providing a specific exclusion of tobacco products...” (Capps, 2005). This prospect was also raised under the North America Free Trade Agreement (NAFTA) when Philip Morris (PM) threatened to sue the Canadian government over proposals to ban misleading descriptors (“light”, “mild” and “low”).

Bilateral trade agreements (BTA) have also been important to the tobacco trade, beginning with pressure exerted by the US trade representative on Asian countries cited above. Since the early 1990s, this trend has accelerated. For example, in return for support for China’s efforts to gain World Trade Organization (WTO) membership, the US government required the Chinese government to sharply reduce tariffs on tobacco imports (Lee, Gilmore and Collin, in progress). The US-Singapore Free Trade Agreement (2003) eliminated tobacco tariffs by Singapore (Shaffer, Brenner and Houston, 2005). BTAs will become increasingly influential as multilateral trade negotiations stall, potentially allowing pro-tobacco advocates to exert more direct leverage bilaterally over individual countries.

From a public health perspective, there is clear evidence that trade liberalisation, when applied to tobacco, leads to adverse health impacts. By definition, trade agreements seek to facilitate trade by minimising tariff and non-tariff barriers (NTB). Reducing tariffs, for example, results in lower prices and thus greater affordability and higher consumption of tobacco products:

Reductions in the barriers to tobacco-related trade will likely lead to greater competition in the markets for tobacco and tobacco products [and] reductions in the prices for tobacco products. Given the inverse relationship between price and consumption...cigarette smoking and other tobacco use will likely increase under this scenario as tobacco markets become more open. As a result, the death and disease from tobacco use will also increase (Taylor, Chaloupka, Guindon and Corbett, 2000).

These expected impacts are supported by a growing body of evidence. World Bank research found that reduced tariffs in the above cited Asian countries resulted in a 10% rise in smoking rates above what it would have been without trade liberalisation. Increases within certain population groups, such as teenage males (18.4% to 29.8% in one year) and teenage females (1.6% to 8.7%) in South Korea, was even starker (Taylor, Chaloupka, Guindon and Corbett, 2000). Between 1985 and 2001, world cigarette exports more than doubled, from 354 to 922 billion sticks (Fairclough, 2001).

To prevent trade policy taking precedence over the protection of public health, the 11th World Conference on Tobacco or Health (2000) adopted a resolution to “work vigorously to exclude and remove tobacco and tobacco products from bilateral and multilateral trade agreements that would have negative public health consequences” (11th World Conference on Tobacco or Health, 2000). As trade negotiations have proceeded at various levels, public health advocates have argued for the exclusion of tobacco. For example, the Doctors’ Manifesto for Global Tobacco Control has been signed by 130 national medical associations supporting exclusion of tobacco from trade agreements (BMA, 2002). The key argument is that tobacco is not a normal “good” but, like dangerous chemicals and firearms, a “bad” requiring its own set of regulations. As Weissman writes,

There is no legitimate purpose for inclusion of tobacco products in trade agreements, which are designed to facilitate trade and remove tariff and nontariff barriers to commercial transactions – an inappropriate goal for tobacco products, consumption of which is harmful (Weisman, 2003).

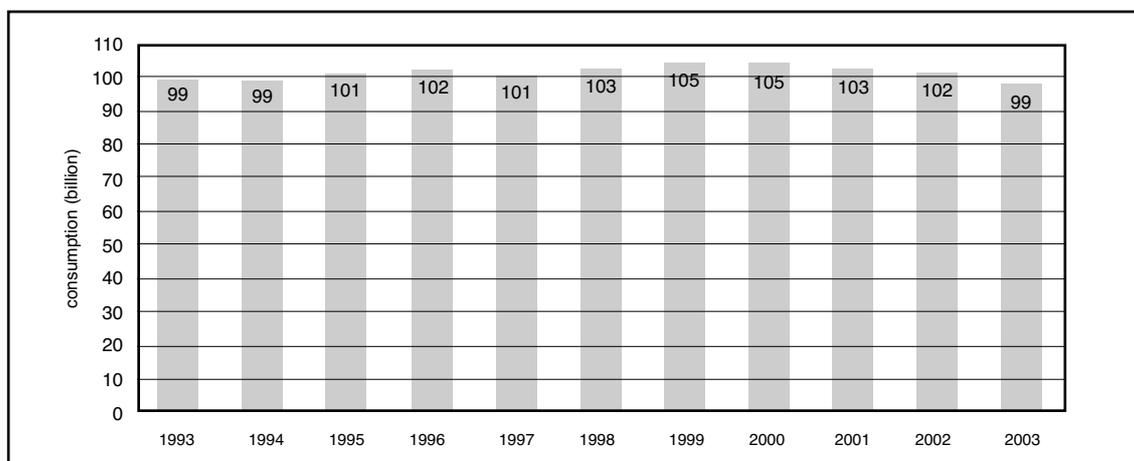
In contrast, the tobacco industry has criticised arguments to set tobacco aside from trade agreements. Then Chairman of British American Tobacco (BAT) Martin Broughton stated,

...I find this mindset rather strange. It suggests that globalisation brings growth and prosperity, but that growth and prosperity contributed by the tobacco industry must not be allowed to count. It suggests that a level playing field is a sound goal in international trade, yet uniquely, must not extend to tobacco. It seems imbued with the notion of the tobacco industry as a pariah, to be excluded from the normal processes of regulatory debate and policy formation (Broughton, 2001).

The company’s position on trade policy is that BAT Industries “strongly support the principles of more liberal and fairer global trade and the rules-based international trade regime.” While it supports the WTO as playing a central role in such a regime, the company believes it should “retain its focus on trade issues” and leave other organisations “to address socio-political issues” (BAT, 2004a).

The UK tobacco industry

The UK is a major player in the global tobacco trade both as an importer and exporter. According to industry sources, total UK tobacco consumption remained largely unchanged from 1993-2003 (Figure 1). In 2004, annual sales were equivalent to 61 billion cigarettes and 3.6 million kilograms of smoking tobacco. It is forecast that sales will increase annually from 2004-2009 by 2% on average to around £15 billion (2004 prices) in total expenditure per year (Milenkovich, 2005). This makes tobacco by far the largest fast-moving consumer good (FMCG) in the UK. Cigarettes comprise most of this consumption, followed by the roll your own (RYO) or hand rolling tobacco (HRT) market with 5.5 million regular smokers and around 1 million dualists (cigarette and RYO smokers). The UK cigar market is worth around £500 million, with consumption in 2002 of around 900 million cigars. Pipe smoking continues to decline, with around 400,000 pipe smokers in the UK consuming around 600-675 metric tons of tobacco in 2002 (£75 million).

Figure 1: TMA estimate of total UK tobacco consumption (1993-2003)

Note: Graph shows cigarette and cigarette equivalent of HRT consumption.

Source: Tobacco Manufacturers Association (2004a), "Submission to the Treasury Sub-committee, Excise duty fraud," 8 November 2004. Available at <http://www.the-tma.org.uk/files/21691.pdf> (accessed 10 January 2006).

The majority (e.g. 87% of cigarettes) of tobacco products consumed in the UK are manufactured domestically (Table 1). The UK tobacco industry is dominated by three companies: Gallaher, Imperial Tobacco and British American Tobacco (BAT), the latter operating as Rothmans (UK). All three predominantly manufacture cigarettes, but also produce RYO tobacco, pipe tobacco, and cigars for both the UK and export market. Gallaher and Imperial Tobacco dominate the domestic market (80% in 1998), with reported operating profits of £881 million and £505 million in 2003 respectively (Gallaher Group plc, 2003; Imperial Tobacco Group plc, 2003). The rest of the UK market is divided between BAT (14%) and other companies (6%). To produce their products, the UK tobacco industry imports all of its tobacco leaf which totalled 94,000 tons in 2002. The UK industry sources its leaf worldwide, with Brazil, Zimbabwe, China, India, US and Italy accounting for 75% of imports in 2002.

Table 1: Quantities of tobacco released for consumption in the UK (2001-2004)

	2001	2002	2003	2004
Cigarettes				
Home produced	47,689	49,574	49,096	48,166
Imports	6,828	6,514	4,856	4,454
Total (millions of sticks)	54,517	56,088	53,952	52,620
Other Tobacco Products				
Cigars	1,019	969	902	826
Hand rolled tobacco	2,825	2,864	2,893	3,052
Other	750	688	589	549
Total (000 kilos)	4,595	4,522	4,384	4,428

Source: HM Revenue and Customs, *Tobacco Bulletin*, May 2005.

The UK is also a major import market for tobacco products. Legal (duty paid) cigarette imports totalled 10 billion sticks in 2002, with the main sources being Germany (60%) and US (17%). Total tobacco imports were worth £338,144,000 in 2004 (UK Department of Trade and Industry, 2005). However, total number of imported cigarettes declined from 2001-2004 by 35%. As described on pages 73-81, it is believed that the duty not paid (DNP) sector, both legal and illegal, has grown rapidly since the early to mid 1990s. As stated by the US Department of Agriculture, “true [UK] expenditure on tobacco products is significantly higher than this figure due to the importance of the non-duty paid sector” (US Department of Agriculture, 2003) estimated at around 25% of cigarettes consumed. Around 20 billion sticks are believed to have been illegally imported in the UK in 2002 (US Department of Agriculture, 2003).

Table 2: UK tobacco imports by five main source countries, 2003-2004 (£ 000s)

COUNTRY	IMPORTS 2003	IMPORTS 2004
Germany	124,640.0	131,207.0
Netherlands	47,260.4	43,920.6
Brazil	38,298.1	29,522.5
Portugal	34,703.5	33,009.6
Zimbabwe	25,377.5	8,182.0

Source: Based on UK Department of Trade and Industry (2005), “Exports of alcoholic beverages and tobacco products in 2003-2005, Areas and top 5 countries,” London.

The UK is one of the world’s largest exporters of tobacco products. Un-manufactured tobacco is exported only in small amounts. For example in 2002, 13,000 tons were exported, with France and Ireland accounting for 55% of the market. Finished tobacco products, mainly cigarettes, comprise almost all of UK tobacco exports. In 2002, the UK produced around 133 billion cigarettes, with exports worth £920 million. In 2003, 130 billion sticks were produced, with over half exported. Total exports in 2004 of tobacco were £1043 million, an increase of around 13% over 2003 (UK Department of Trade and Industry, 2005). The main markets for UK tobacco exports were the Far East, Middle East and Eastern Europe (US Department of Agriculture, 2003). In 2003 the UK enjoyed a trade surplus in tobacco of £534 million. This declined to a surplus of £427.4 million in 2004.

Table 3: UK tobacco imports and exports 2003-2004 (£ 000s)

AREA	IMPORTS 2003	IMPORTS 2004	EXPORTS 2003	EXPORTS 2004
European Community	246,766.5	235,085.6	492,078.8	462,522.0
Western Europe excluding EC	1,522.9	445.7	18,811.1	17,623.0
Eastern Europe	2,373.8	706.7	45,026.7	32,957.5
North America	17,017.9	11,250.4	5,811.7	6,047.3
Latin America & Caribbean	54,720.5	42,032.9	4,854.7	3,762.9

Middle East & North Africa	1,066.3	16.6	141,900.0	113,688.7
Sub-Saharan Africa	42,069.3	21,943.2	131,000.1	67,545.9
Asia and Oceania	27,439.9	26,661.8	87,312.8	61,364.4
TOTALS	392,977.1	338,142.9	926,895.9	765,511.7

Source: Based on UK Department of Trade and Industry (2005), “Exports of alcoholic beverages and tobacco products in 2003-2005, Areas and top 5 countries,” London.

UK tobacco exporters are led by BAT which exports the vast majority of its products. Outside of its operations in the US, Brazil and Germany, BAT runs its global business from the UK. Total volume of cigarettes produced in 2004 by all BAT companies was 853 billion in 2004, making it the second largest (after Philip Morris) transnational tobacco company (TTC) in the world with 16% of the global market (BAT, 2004b). Imperial Tobacco, the world’s fourth largest tobacco company, enjoys sales in more than 130 countries and a top three position in over 20 markets. Gallaher sold 170 billion cigarettes in 2004, with its brands available in some 71 countries across Europe, Africa and Asia.

UK policy on the tobacco trade

The UK government’s position to date on the tobacco trade has largely been driven by economic, rather than public health, considerations. As the world’s second largest cigarette exporter, the UK enjoys a substantial tobacco trade surplus totalling £534 million in 2003 (US Department of Agriculture, 2003). Economic arguments have thus been used to rationalise and, until 1999, explain active government support for the promotion of the tobacco trade. Indeed, internal documents of the tobacco industry describe a close working relationship between the Department of Trade and Industry (DTI) and the tobacco industry on export promotion. For example, upon receiving Thailand’s notification under the TBT agreement of proposed technical regulations in 1996, DTI official David Yuill wrote to David Hare, Director of Trade Affairs of the Tobacco Manufacturers Association (TMA) about whether they “could have an effect on UK export opportunities.” He requested that Hare “review these documents and let me have any comments particularly if you consider there are grounds for the UK to object/seek changes to the proposal” (Yuill, 1996). More generally, senior industry executives have regularly been members of high-level trade delegations of the UK government, and have made use of the auspices of Foreign and Commonwealth Office (FCO) facilities and contacts to build operations abroad, notably in so-called “emerging markets” (Wilson, 1993; Herter, 1993).

Amid criticism by the public health community of the UK government’s role in tobacco trade promotion, and following the adoption of a directive to all diplomatic posts in 1998 by the US government stating it would no longer promote the sale or export of tobacco and tobacco products abroad, in June 1999 the UK government adopted a similar policy which states:²

2. US Public Health Service, “U.S. Tobacco Exports Fact Sheet.” The directive also states that the government supports tobacco control efforts by foreign governments, and specifically directs diplomatic personnel to facilitate those efforts. Yet tobacco exports are specifically exempted from federal laws and regulations concerning the export of potentially harmful products. The federal government has no regulations or laws governing the packaging or advertising of cigarettes produced domestically for export.

Posts should no longer directly promote products containing tobacco, whether through advertising or through publicly associating HMG [Her Majesty's Government] with their sale, especially where this might be misconstrued as some form of government endorsement or approval of them...Posts should not inter alia be associated in any way with the promotion of the tobacco industry, for example by accepting advertisements for UK or local tobacco products in publications issued by the Post, or sponsorship from tobacco companies for their activities...Nor should they attend or otherwise support receptions or high profile events – especially those where a tobacco company is the sole or main sponsor (UK Foreign and Commonwealth Office, 1999).

In practice, however, the DTI has maintained close links to the tobacco industry through staff secondments, joint activities and “regular meetings with officials” (BATCo, 31 January 1995). Faced with stronger regulation such as an advertising ban, ingredients disclosure, labelling and tar levels, the industry has made regular representations to government, arguing that such measures would adversely impact on UK trade. For example, the proposed EU ban on the sale of cigarettes with over 10 mg of tar, and of descriptors such as “light” and “mild” including those exported outside of the EU, were met with calls by the Tobacco Manufacturers' Association (TMA) for its members to write en masse to the DTI. The TMA advised that such regulations would amount to “a ban on exports” and the minister should be informed that members would consider “the relocation of production outside the EU” (Ogden, 2000). The TMA added that

DTI thinking is currently much influenced by the BMW/Rover debacle in that there is a growing concern to avoid the closure of any manufacturing base which might result in significant job losses and consequent damage to the local economy (Ogden, 2000).

The Tobacco Workers Alliance, in turn, wrote to Stephen Byers, Minister of Trade and Industry arguing that

the proposed ban of such exports [of high tar cigarettes] would serve only to damage the competitiveness of EU manufacturing locations especially those within the UK and would result in the loss of thousands of British jobs. The current volume of exports from UK manufacturers represents over 60% of all UK production, for example, almost all British American Tobacco's UK production is destined for markets outside the EU, they currently employ over 2000 people, it is jobs such as these that will not survive (Tobacco Workers Alliance, 2000).

The then Minister of Public Health Yvette Cooper upheld the ban on ethical grounds: “If it is not good enough for the UK market then it is not good enough for other countries outside the EU” (BATCo, 26 October 2000). Nonetheless, despite the 1999 policy guidelines on the government's non-promotion of the tobacco trade, representation by the tobacco industry on UK trade delegations continues. For example, in September 2005 it was reported that BAT Chairman Jan du Plessis was among a 50-strong business leaders contingent accompanying the Prime Minister on a 4-day visit to India and China (*India Daily*, 2005).

Overall, UK policies on the tobacco trade demonstrate clear tensions between the policy goals of maximising the economic benefits to the UK from the trade, and stronger regulation of the trade to protect public health. UK policies have largely reflected the former, thus enabling and promoting the tobacco trade. Justification has been based on two arguments: first, that the

economic benefits from the tobacco industry outweigh the resultant health costs to the UK; and second, the net benefits arguments is especially true in relation to UK tobacco exports which externalise health costs outside of the UK. The remainder of this paper critically examines these two arguments more closely.

3. Scoping: UK policy on tobacco taxation

There are a range of policy measures related to the tobacco trade that HIA could be applied to. It is beyond the scope of this paper, and currently available data, to address the full range of these policies which include regulation of labelling and cigarette composition, advertising and promotion, and agricultural subsidies.³ This paper focuses on tobacco taxation policy, a policy reviewed annually by the government and the source of ongoing contention between economic and health interests.

Duty paid tobacco

For governments throughout the world, various forms of taxation (Box 1) are among the most effective policy instrument for influencing the demand and supply of tobacco and tobacco products. In the UK, there are three principal forms of tobacco taxation: value added tax (VAT), variable *ad valorem* excise duty (levied in proportion to the final retail price), and fixed specific excise duty (levied at a fixed amount per 1000 pieces or grams). Responsibility for setting the rates of tobacco taxation lies with the Treasury, while the collection of taxes is carried out by HM Revenue and Customs (HMRC), formed in 2005 with the merger of the Inland Revenue and HM Customs and Excise departments.

Box 1: Types of tobacco taxation

import tariff – A tax levied on tobacco and tobacco products imported from abroad where no exemption from such tax, such as under a trade agreement, is available.

excise duty or tax – An excise duty or tax is one imposed on the manufacture and distribution of certain non-essential consumer goods. Formally known as Tobacco Products Duty, excise tax is levied on tobacco produced for sale within a country or imported and sold in that country. The following tobacco-based goods are subject to excise duty: cigarettes, cigars, cigarillos, cheroots, hand-rolling tobacco, pipe tobacco and chewing tobacco. Snuff and “herbal” smoking products are not liable.

specific excise tax – A type of excise tax or duty imposed as a fixed amount per given number of pieces (e.g. cigarette sticks) or weight.

3. The issue of subsidies to EU tobacco farmers is critical to future trade policy. A programme to phase out subsidies is due to come into effect in 2006. In October 2005 a committee of the European Parliament voted to scrap the €1 billion of subsidies to some 80 000 tobacco farmers, largely based in Greece and Italy. The farmers receive 20 times the subsidy paid to grain farmers, with tobacco as the most heavily subsidised crop per hectare. In addition, tobacco farming is believed to cause environmental damage through the heavy use of fertilisers. The UK favours the ending of this subsidy. The issue will now be debated by the European Parliament and voted on by EU members. See “Vote threatens EU tobacco subsidy,” BBC News, 6 October 2005. Available at <http://news.bbc.co.uk/1/1/europe/4314366.stm>

ad valorem excise tax – A type of excise tax or duty imposed as a proportion of the final retail price of the tobacco product.

value added tax – A form of tax in Europe on goods produced for sale. VAT is applied at each stage of the production of a commodity and is charged only on the value added at that stage. In the UK, VAT is levied at 17.5%.

Sources: “Tobacco Duty” (2005) Available at [www.politics.co.uk/issues/tobacco-duty-\\$3196400.htm](http://www.politics.co.uk/issues/tobacco-duty-$3196400.htm) (accessed 15 August 2005); and Bozicevic I., Gilmore A., Oreskovic S. (2004), *The Tobacco Epidemic in South-East Europe, Consequences and Policy Responses*. HNP Discussion Paper, Economics of Tobacco Control Paper No. 18, Washington DC: Health, Nutrition and Population Division.

UK policy is subject to three EU directives on tobacco taxation which came into force in January 1993 which provide a common structure (product definitions and means of taxation) for excise duty on tobacco products; and minimum rate levels, above which member states are free to set their national rates at levels they consider appropriate according to their own national circumstances. Under these directives, EU member states are permitted to set their overall levels of excise duty which are in two forms: *ad valorem* (imposed as a proportion of the final retail price of the tobacco product) and specific (imposed as a fixed amount per given number of pieces such as cigarette sticks or weight). It is notable that *ad valorem* tax tends to lead to price differentials between cheaper and more expensive brands, with this differential increasing as the rate of *ad valorem* increases.⁴ Specific excise duties, in contrast, do not have this multiplier effect, reducing price differentials and thus removing very cheap brands from the market (Gilmore and McKee, 2002). The EU directives are a political compromise between northern European tobacco-manufacturing countries, which generally favour specific taxes because they tend to benefit the exchequer, and southern tobacco-producing European countries (notably Greece and Italy) favouring *ad valorem* taxes which protect lower priced brands and thus home-grown tobaccos. The directives stipulate that EU member states must set an overall excise duty of at least 57% of the final retail selling price, consisting of a combination of *ad valorem* and specific (5-55%) excise duty. Under the directives, EU member states must also levy a minimum rate of value added tax (VAT) of 13.04%. The UK rate of VAT is currently 17.5%. The three taxes together (*ad valorem*, specific and VAT) must result in a minimum taxation rate of 70%.

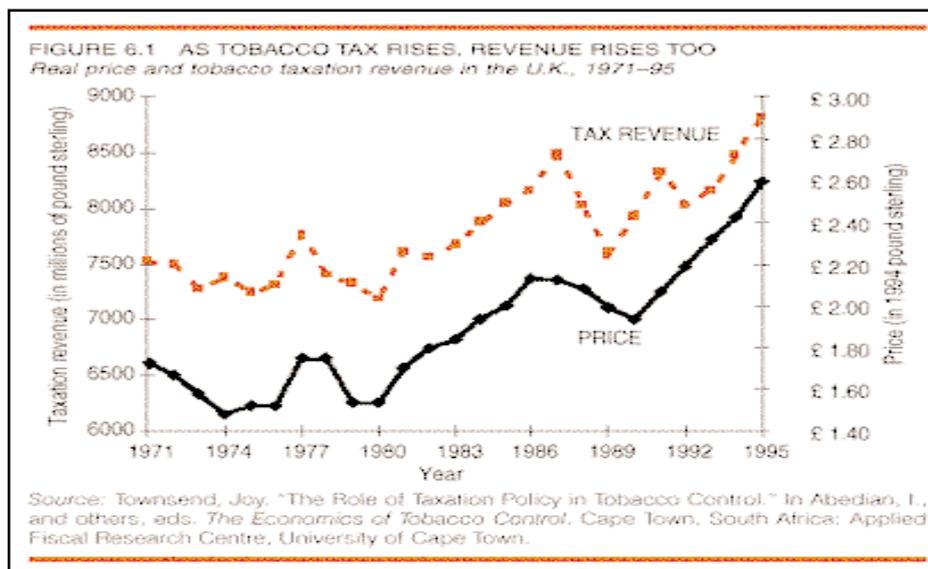
Since the adoption of the directives, there have been price increases in tobacco across a number of EU countries. However, because of the permitted variation in how *ad valorem* and specific excise duties are combined, the directives have allowed large price differentials among member states and the availability of low-cost brands (Gilmore and McKee, 2002). In 1995, the European Commission (EC) undertook a review of the 57% rule, based on concerns that widening price differentials were not in the interest of the internal market. However, supported by extensive tobacco industry lobbying, the revised taxation directive of

4. For example, a 10% *ad valorem* tax on a £1.00 and £3.00 pack of cigarettes would result in end prices respectively of £1.10 and £3.30 (£2.20 price differential). If the *ad valorem* rate increased to 20%, the end prices respectively would be £1.20 and £3.60, with a larger price differential (£2.40).

1999 allowed even greater flexibility by EU members in setting taxes (Joosens, 1996a; Joosens, 1996b). This did little to reduce price differentials within Europe. This situation is made even more complex by the admission of ten accession countries in 2004⁵ which have been granted until 2010 to comply with the EU tobacco tax directives (Gilmore and Zatonski, 2002). EU legislation provides for a review of the structure and rates of excise duties on tobacco every four years, with the Commission obliged to make regular reports on tobacco taxation. The next report, due in 2006, is expected to consider the raising of minimum levels of taxation to take account of the Framework Convention on Tobacco Control (FCTC) (EU, 2005). At the same time, continued disagreement between northern and southern European countries over *ad valorem* and specific excise duties suggest that this will be difficult to achieve (Gilmore and McKee, 2002). The issue of price differentials within the EU, in relation to tobacco smuggling, is discussed below on page 74.

Within the parameters of the EU directives, successive UK governments since the early 1990s have favoured the raising of tobacco taxes at or above the rate of inflation. UK policy has been influenced by a combination of economic and health considerations. Economically, tobacco has been a substantial source of tax revenue (Figure 2). During the 2002-2003 fiscal year, the government earned £8.1 billion (excluding VAT) in tobacco duties representing around 2.2% of total tax revenue.

Figure 2: Real price and tobacco taxation revenue in the UK, 1971-95



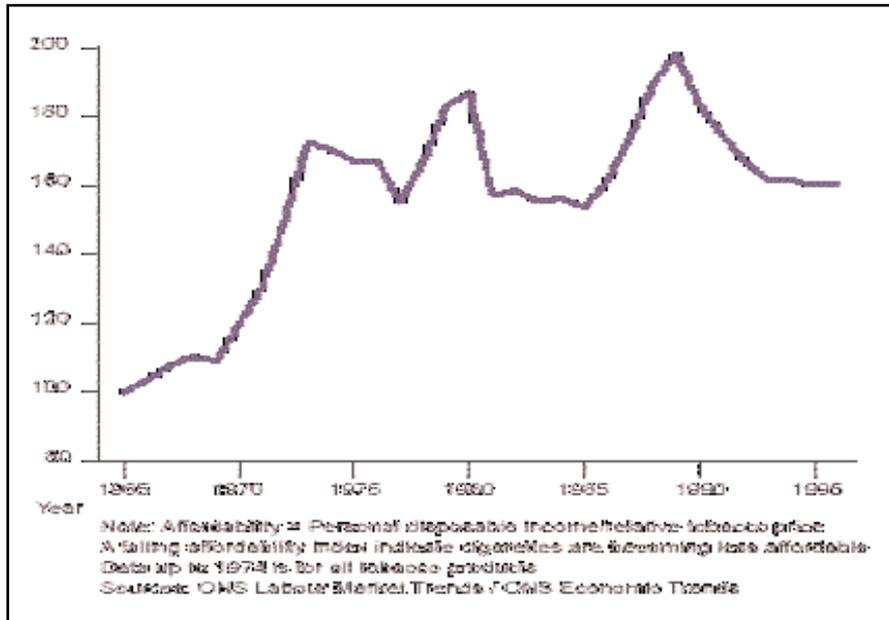
Source: Townsend J. (1998) "The role of Taxation Policy in Tobacco Control" in Abedian I. *et al.* eds. *The Economics of Tobacco Control*. Cape Town: Applied Fiscal Research Centre, University of Cape Town.

As well as raising substantial revenues for HM Treasury (Figure 1), the policy rationale for maintaining high and increasing rates of tobacco taxation has been public health (UK

5. [The 2004 accession countries are Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

Department of Health, 1998). Raising tobacco taxes, and therefore prices, has been used to reduce consumption rates (see Section 4.0). Blecher and van Walbeek observe that the average annual percentage change in the relative income price of cigarettes between 1990 and 2001 in the UK was 2.5% (13th highest rate in the world) (Blecher and van Walbeek, 2004). This resulted from tax increases at least 3% above the rate of inflation from 1992-97, and 5% above the rate of inflation from 1997-1999. Research shows that these tax increases reversed a trend in the increasing affordability of cigarettes since the late 1980s (Figure 3).

Figure 3: The affordability of cigarettes in the UK, 1965-1997



Source: As cited in UK Department of Health (1999), *Smoking Kills, A White Paper on Tobacco*. London: HMSO. Available at <http://www.archive.official-documents.co.uk/document/cm41/4177/contents.htm> (accessed 16 January 2006).

Table 4 provides a summary of UK tobacco tax rates from 1996-2005. How tax rates are applied to different sources or forms of import into the UK for the 2005-06 fiscal year, is presented in Table 5.

Table 4: UK tobacco tax rates, 1996-2005

Date tax rise announced	Date tax rise introduced	Specific excise tax rate (levied per 1000 cigarettes)	Ad valorem excise tax rate (levied on retail price)	Value Added Tax
November 1996	November 1996	£65.97	21%	17.5%
July 1997	December 1997	£72.06	21%	17.5%
March 1998	December 1998	£77.09	22%	17.5%
March 1999	March 1999	£82.59	22%	17.5%

March 2000	March 2000	£90.43	22%	17.5%
March 2001	March 2001	£92.25	22%	17.5%
April 2002	April 2002	£94.24	22%	17.5%
April 2003	April 2003	£96.88	22%	17.5%
March 2004	March 2004	£99.80	22%	17.5%
March 2005	March 2005	£102.39	22%	17.5%

Source: Compiled from ASH UK (2006) "Tobacco Tax Calculator". Available at <http://www.ash.org.uk/html/smuggling/html/cigtax.html> (accessed 10 January 2006).

Table 5: UK tax rates on cigarettes by product origin (from March 2005)

	import duty	value added tax	ad valorem excise tax	specific excise tax
Within EU				
purchased from within UK	N/A	UK rate of 17.5% of price including other taxes	22% of retail price	UK rate of £102.39 per thousand cigarettes
cross border sales ⁶	N/A	rate of EU state where purchased	rate of EU state where purchased	rate of EU state where purchased
internet sales ⁷	N/A	UK rate of 17.5% of price including other taxes	22% of retail price	UK rate of £102.39 per thousand cigarettes
gifts ⁸	N/A	N/A	rate of EU state where purchased	rate of EU state where purchased
Outside EU				
general sales	22% of retail price	N/A	22% of retail price	UK rate of £102.39 per thousand cigarettes
duty free sales ⁹	N/A	N/A	N/A	N/A
internet sales ⁷	22% of retail price		22% of retail price	UK rate of £102.39 per thousand cigarettes
gifts	N/A	N/A	N/A	N/A

UK policy on type and level of tobacco taxation has led to price levels which are the second highest in the EU (after Norway). A comparison of price level indices shows that UK tobacco prices are more than double the EU average. At current rates, the price of cigarettes is considerably higher in the UK (around £4.74 per pack of 20 cigarettes) than most of the rest

of Europe, estimated by the TMA at around £2.40 per pack (see page 76 below). Currently taxes account for around 84.5% of the retail price of a pack of 20 premium brand cigarettes.

Crossborder and duty free trade

As shown in Table 5 the purchase of tobacco as cross border or duty free sales exempt of UK excise and value added taxes is permissible. **Cross border shopping** concerns the legal right of all EU citizens to buy excise goods (tobacco and alcohol) in other member states, pay the excise duty in the other member states, and to bring these products home without any formalities and without having to pay taxes a second time provided that the goods are not for commercial use and that they transport the goods themselves (EU, 2004). Prior to 1992 individuals were permitted to import a limited amount of such tax paid goods (e.g. 200 cigarettes). The adoption of a directive by the European Council of Ministers in 1992 removed such allowances as long as goods are for personal use only. However, given reservations by the UK government about the removal of all limits on alcohol and tobacco, it was agreed that each member state could set indicative levels of alcohol and tobacco purchases to assist Customs officials in distinguishing between commercial and genuinely private importations (Council Directive, 1992). These indicative levels were set at 800 cigarettes, 400 cigarillos, 200 cigars and 1 kilogram of smoking tobacco (Seely, 1999).

Price differentials among EU member states, permitted to emerge under EU tobacco taxation directives, led to a substantial growth in crossborder shopping by UK citizens. Around half of the non-UK duty paid cigarettes arrives from Western Europe. As the practice increased, illegal trade began to flourish alongside known as “bootlegging” (see page 74 below). Seizures by HM Customs & Excise of goods, and at times the vehicles used to transport them, of those suspected of importing goods for commercial purposes, began to increase. Concerned with the impact of this enforcement on legitimate trade, and the EU single market, the European Commission requested information on UK policy in 2001, further clarification in 2002, and

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6. These rates apply to goods purchased for personal consumption or as gifts for other people. See below for limits on amounts purchased for such purchases. Rates do not apply where individuals receive or will receive payment for them (e.g. where you obtain goods for a friend who will give you the cost price for them). For goods above the tobacco limits, UK rates of excise duty on those goods must be paid.
 7. Under EC Directive 92/12/EEC, tobacco dispatched by a vendor in one member state to a private individual in another forms a commercial transaction and is liable to duty in the member state of destination. There are thus no allowances for exemption from UK taxes for internet cigarette sales. All UK VAT and excise duty must be paid by the vendor before goods are shipped.
 8. There are no statutory reliefs for tobacco goods posted as gifts from other EC countries. However, HMRC will not normally make additional charges provided that the good is a bona fide gift sent from one private person in another EC country to a private person in the UK; intended for personal use and not sold to others; must not have been paid for directly or indirectly; no commercial or trade element to the contents of the consignment; and of an occasional nature (e.g. birthday, anniversary). Purchase of cigarettes from an internet company in another EU country to send to a family member or friend as a gift does not qualify for relief. There are concessions for tobacco sent from outside the EU as “gifts” providing that the consignment is of an occasional nature; value does not exceed £45 (£36); correctly declared to Customs; sent by a private person abroad to a private person in the UK; for personal use by recipient or their family; no commercial or trade element; and must not be paid for directly or indirectly.
 9. Under the Excise Goods (Personal Reliefs) Order 1992, when traveling from a non-EU country (including the Canary Islands, the Channel Islands and Gibraltar), the following amounts can be brought into the UK for personal use without paying UK tax or duty: 200 cigarettes; or 100 cigarillos; or 50 cigars; or 250g of tobacco. Goods purchased above these limits are subject to rates of duty applicable to imported goods from outside of the EU.

then a warning to the UK government in July 2004 “to amend its policies relating to excise duties and crossborder shopping for tobacco and alcohol” (European Commission Representation in the United Kingdom, 2002; EU, 2004). Chief Executive of the TMA Tim Lord, commenting on the EU warning, stated:

This request from the Commission highlights the problem of the high tax burden on tobacco products and the fact that there are significant differences between the rates of duty applied by Member States. Until the Government addresses the root cause of the problem, i.e. the UK's high tobacco tax regime, smuggling will continue despite the best efforts of HM Customs & Excise to halt it (Tobacco Manufacturers' Association, 2004b).

The government subsequently increased the permissible levels for tobacco to 3200 cigarettes, 400 cigarillos, 200 cigars and 3 kilograms of smoking tobacco.

Tobacco products of designated amounts can also enter the UK duty not paid in the form of **duty free** sales. Duty free sales have grown substantially because of the increase in international travel. In 1996 around 45 billion cigarettes were sold through duty free outlets worldwide (Joosens, 1999). In 1991 the Council of European Finance Ministers (ECOFIN) agreed that duty free sales on journeys within the EU would be phased out by 1 July 1999¹⁰ as part of the harmonisation of fiscal structures and functioning of the internal market (EU, 1999). With the EU accounting for 47% of world duty-free tobacco sales, this policy change had a substantial economic impact. Worldwide duty free sales halved, from US\$2.9 billion in 1999 to US\$1.5 billion in 2000 (*Tobacco Journal International*, 1999). Duty free sales have continued to be permitted on journeys to countries outside of the EU, with allowances set at 200 cigarettes, 100 cigarillos, 50 cigars or 250 grams of tobacco.

The illicit smuggling of tobacco products

The illicit smuggling of tobacco products is a substantial problem worldwide with around one-third of internationally traded cigarettes (355 billion per year) eventually sold illegally with the avoidance of duty. The UK has the largest cigarette smuggling problem in the EU, with a dramatic rise in tobacco smuggling from the early 1990s. According to Joosens, smuggled cigarettes rose from 3% of the market in 1997 to about 20% of the market by 2002 (Joosens and Raw, 2002). Similarly, ASH cites trade and government figures putting the illicit market at between 20-30% of the total tobacco market by the late 1990s (ASH UK, 2004a). This includes around 80% of the hand rolling tobacco market (*The Economist*, 2000).

It is important to distinguish between two main types of illicit activity: bootlegging and large-scale freight smuggling. **Bootlegging**, sometimes referred to as “white van trade”, is the relatively small scale exploitation of price differentials by legally buying in low tax countries, and importing purchases into a high tax country without paying required duties with the intent of illegally selling on the black market. ASH UK states that this accounts for 20% of the illicit trade. Lower tobacco taxes in France and Belgium, for example, has led to a flourishing bootleg trade across the English channel (ASH UK, 2004a). The bulk of illicit tobacco products, however, arrives in the UK via **large-scale freight smuggling** in containers

10. EC Directive 92/12/EEC and Directive 77/388/EEC

(holding up to 10 million cigarettes) under the control of highly organised criminal networks. As described by ASH UK,

After leaving the factory or bonded warehouse with documents showing they are bound for a legitimate market, they then go through a series of paper transactions that are difficult to follow. Ultimately, the paper trail leads investigators to non-existent or shell companies, with the cigarettes having “disappeared” into the black market. Sometimes the scheme involves forged transit documents and tax stamps, in other cases, corrupt customs agents or other officials are involved (ASH UK, 2004a).

While there is broad agreement about the substantial scale and impact of tobacco smuggling in the UK, there is stark disagreement about the cause of the problem and thus the policy measures to address it. The tobacco industry has long maintained that the problem of widespread duty evasion is due to price differentials caused by relatively high UK tobacco taxes. As stated by the Imported Tobacco Products Advisory Council, “The problem of smuggling could be resolved at a stroke by reducing excise levels on tobacco products to about halfway towards the levels in Europe” (*Tobacco Duty*, 2005). Similarly, in a 2000 memorandum to the House of Commons Treasury Committee,¹¹ the Tobacco Manufacturers’ Association stated that “Every increase in UK tobacco taxation which is not matched, as it is not and is unlikely to be, by increases in taxes and prices in other countries, provides an even greater incentive to smugglers.” The TMA warned that, amidst “failure of the Single Market being accompanied by tobacco tax harmonisation,” the UK government’s high tobacco tax policy would work “perversely against all the Government’s professed policies” to raise tax revenues, protect public health, maintain law and order and support economic activity (UK House of Commons Treasury Committee, 2000). This view is supported by such groups as the Tobacco Alliance (representing 26,000 small retailers) and its offshoot, Retailers Against Smuggling, which has argued for an end to the automatic real increases in tobacco duty (Willman, 1999; BBC News, 2005).

Under the EU directives on tobacco taxation discussed on page 69 substantial price differentials have emerged among member states. In a 2003 comparative survey of price levels across EU, European Free Trade Association (EFTA)¹² and candidate countries, Eurostat found the UK ranked second highest in the price level indicator (PLI)¹³ for tobacco (Table 6).

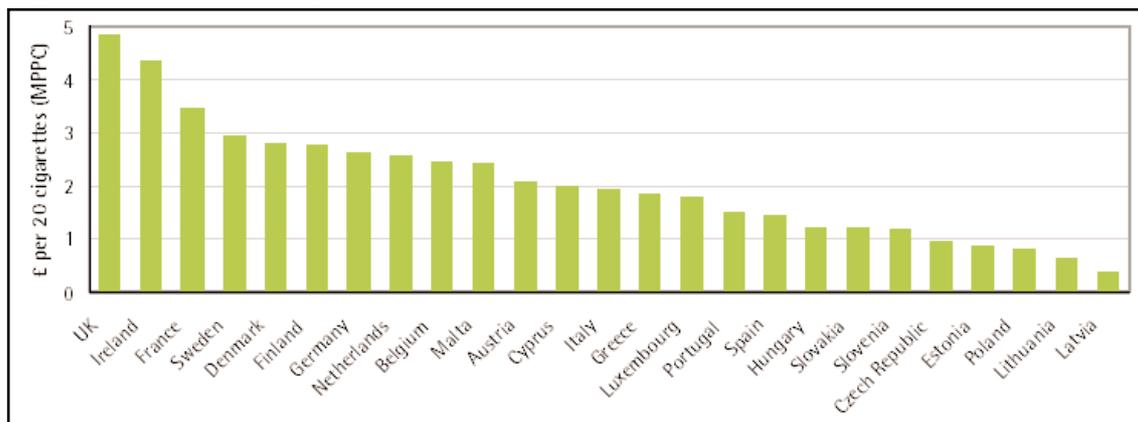
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11. The remit of the Treasury Committee, as determined by the House of Commons, is to examine the expenditure, administration and policy of HM Treasury, the Board of the Inland Revenue, the Board of HM Customs and Excise, and associated public bodies, including the Bank of England and the Financial Services Authority.
 12. The member countries of EFTA are Iceland, Norway, Switzerland, and Liechtenstein. Liechtenstein is not included in this Eurostat survey.
 13. The PLI is calculated as a ratio between Purchasing Power Parities (PPPs) and exchange rates for each country in relation to the EU average. The indicator provides a comparison of the country’s price levels with respect to the EU average. If the indicator is >100, then commodity is relatively expensive and if <100 then the commodity is relatively inexpensive.

Table 6: Price Level Indices for tobacco by selected EU and accession countries (2003)

COUNTRY	PLI
Norway	232
UK	206
Ireland	184
Sweden	127
France	125
Belgium	108
Germany	104
Netherlands	96
Spain	73
Poland	35
Romania	21

Source: Compiled from Eurostat (2004), "Eating, drinking, smoking – comparative price levels in EU, EFTA and Candidate Countries for 2003," European Communities, Luxembourg, June.

Similarly, a 2004 comparison by the TMA of the price of 20 cigarettes across the EU finds the UK with the highest price (Figure 4).

Figure 4: Price of 20 cigarettes across the EU (October 2004)

Source: Tobacco Manufacturers Association (2004), "Submission to the Treasury Sub-committee, Excise duty fraud," 8 November 2004. Available at <http://www.the-tma.org.uk/files/21691.pdf> (accessed 10 January 2006).

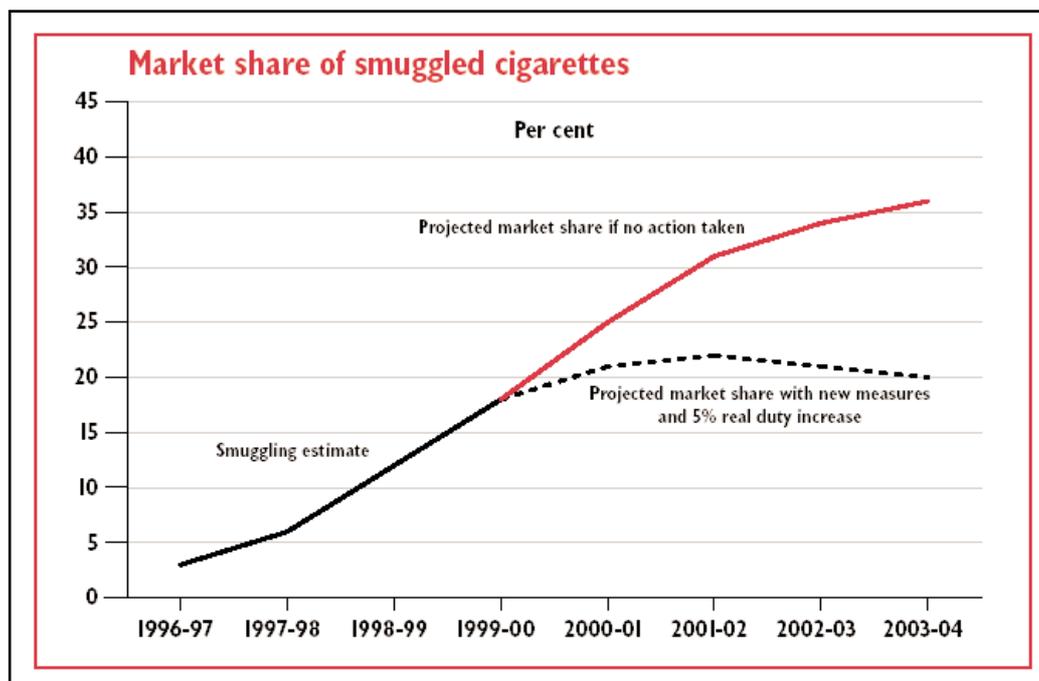
There is also clear evidence that lost tax revenues to the UK from tobacco smuggling are substantial. The cost of tobacco smuggling to the Treasury in lost tax revenues is estimated at £2.5-£3 billion annually (30% of the VAT and excise duty collected). Additional losses to

independent retailers in lost sales were around £1.2 billion in 1999 (ASH UK, 2004a). Public support for tobacco industry arguments attributing the smuggling problem to “excessive” taxation is reported in research commissioned by the Tobacco Manufacturers Association (TMA) in 1996. Describing “pro-active” efforts by the industry to promote the message that “The retailer and the government are being damaged by the effect of differential taxes,” it was reported that public perceptions of the smuggling issue reflect a “healthy favourability rating” for the industry (Carma International Limited, 1996). Citing TMA-funded research by consultancy firm DTZ Pineda, a report by the International Tax and Investment Centre and Oxford Economic Forecasting also concludes that “Excise tax rates on cigarettes need to be set at rates consistent with those in neighbouring countries – this is essential to reduce incentives for smuggling and cross-border trading” (International Tax and Investment Center/Oxford Economic Forecasting, 2003).

Recognising that fraud and smuggling posed a serious threat to the government’s health and revenue objectives, Chancellor Gordon Brown announced in his budget speech of 1999 a range of measures to address tobacco smuggling including:

- a national network of container x-ray scanners to help detect shipments of smuggled tobacco hidden in commercial freight;
- compulsory marking of UK duty-paid cigarettes and tobacco to make identification of smuggled tobacco easier;
- new offences and penalties for those smuggling, handling or selling untaxed tobacco (HM Treasury/HM Customs and Excise, 1999).

Shortly afterwards, an independent evaluation was commissioned from Martin Taylor (afterwards Chairman of WH Smith until retiring 2003) of tobacco smuggling and the proposed measures needed to tackle it. In his unpublished report, Taylor recommended measures to increase detection, increase the risk or reduce the reward of smuggling, and act on public opinion. Building on this report, the government announced its Tackling Tobacco Smuggling strategy in March 2000 which aimed to reverse trends in the growth of tobacco smuggling by 2003 (HM Customs and Excise/HM Treasury, 2000). The strategy included investment of £209 million for 1000 front-line staff and investigators, and a national network of x-ray freight scanners designed to detect bulk consignments of smuggled tobacco (HM Revenue & Customs, 2002). In 2002, the government announced that the growth in cigarette smuggling had been stopped for the first time in a decade by seizing 5 billion contraband cigarettes, cutting cross-Channel smuggling (i.e. bootlegging) by 25%, and breaking up 83 organised crime gangs involved in large-scale smuggling and supply of excise goods (Figure 5) (HM Customs and Excise, 2002).

Figure 5: Market share of smuggled cigarettes in UK (1996/97-2003/04)

Source: HM Customs and Excise/HM Treasury (2000), *Tackling Tobacco Smuggling*. London, March. Available at <http://www.hm-treasury.gov.uk/media/6A1/17/433.pdf> (accessed 9 January 2006).

While recognising the contribution of the strategy to stemming the growth in tobacco smuggling, the tobacco industry has continued to argue for reduced taxes as the main cause of the illicit trade. In its 2004 submission to the Treasury Committee, for example, the TMA stated:

We believe that despite the enforcement policies of HMC&E and the measure of success that TTS [Tackling Tobacco Smuggling] has delivered, the UK's high level of NUKDP [non UK duty paid] tobacco consumption will continue unless the fundamental reason for this unacceptable situation – the high level of UK tobacco tax – is addressed (Tobacco Manufacturers' Association, 2004a).

Recommending the government “[r]eturn UK price differentials with Europe to mid-1990 levels – this would require tax reductions of £1 for 20 cigarettes and £4 for 50g HRT,” the TMA did “not believe that the necessary tax cuts would see any significant change in the level of overall tobacco consumption or in the Treasury’s revenue take, they would simply move the majority of NUKDP consumption back to the UKDP [UK duty paid] sector (Tobacco Manufacturers’ Association, 2004a).”

Public health research on the relationship between tax rates and smuggling, however, challenges the recommendations of the tobacco industry. International evidence of smuggling shows that it is actually more common in countries where prices are low, particularly those with poor border controls and good distribution networks for illegal products (Merriman, Yurekli and Chaloupka, 2000; Joosens and Raw, 2002). Research does show that the increased availability of duty not paid tobacco products does have an adverse effect on the ability of the government to use the price mechanism to deter consumption (Gruber, Sen and

Stabile, 2003; Townsend, Griffin and Fernandez, 2004). As stated by a 2004 government working paper on *The Demand for Tobacco Products in the UK*, “had it not been possible to buy smuggled goods or goods at French and Belgian prices, the rise in the domestic price would not have decreased demand by as much” (Cullum and Pissarides, 2004).

While recognising that price differentials among EU member states contribute in part to the smuggling problem, public health advocates cite growing evidence of the complicity of tobacco companies themselves in the contraband trade. Tobacco companies have consistently denied involvement in smuggling activities, claiming to work closely with government to combat such activity (Box 2). However, internal documents of the tobacco industry released as a result of US litigation from the mid 1990s suggest otherwise. Reports by investigative journalists, cases brought against tobacco companies, and a growing body of scholarly literature describe how companies have knowingly oversupplied certain markets, aware that the goods would be illegally exported onwards by smugglers (International Consortium of Investigative Journalists, 2001; Bonner and Drew, 1997; Collin, LeGresley, MacKenzie, Lawrence and Lee, 2004; Gilmore and McKee, 2004; and Lee and Collin, submitted). These highly organised and large-scale activities operate throughout the world including Europe.

Box 2: Public statements by major tobacco companies on tobacco smuggling

We are totally opposed to smuggling and are committed to working with governments and customs and excise authorities to tackle smuggling and counterfeit activities. Smuggling benefits no one but the criminals involved, creating a market that is uncontrolled, untaxed in the UK and unaccountable, and which also threatens the livelihoods of tobacco retailers struggling to maintain a legitimate business.

Imperial Tobacco Limited

Gallaher deplores smuggling and has a long history of co-operation with Customs & Excise. Gallaher not only supports and endorses the “policing” measures that have been introduced by UK Customs to address the smuggling issue, but has also taken steps on its own initiative to try to ensure that the company’s products are not smuggled back to the UK.

Gallaher Group plc (2002)

Illicit trade in cigarettes, whether genuine or counterfeit, harms legitimate tobacco manufacturers by disrupting the market and unfairly competing with legitimate products. Sellers of illegitimate product benefit from significant “competitive advantages” – the most significant of which is that their products are able to be sold more cheaply, because they do not pay either import duties or excise or other relevant taxes.

Philip Morris International (2003)

Smuggling is a major global problem for manufacturers of many goods, including computers, electrical goods, cars, watches, wines and spirits, perfumes and tobacco. It is caused by tax differentials, weak border controls, and import restrictions and bans, and only governments can tackle it effectively. Smuggling damages our business, and we would like every market to be entirely rid of it. British American Tobacco companies do not smuggle and we do not condone smuggling.

British American Tobacco (accessed 2005)

The root cause of contraband is high taxation. The potential profit for the smuggler is the difference between the cost of the product with all taxes paid and the untaxed product. Increasing taxation increases the incentive for criminals to begin participating in the contraband tobacco market. In the EU, taxes on cigarettes represent between 70% and 80% of the retail sales price.

Japan Tobacco International (accessed 2005)

In the UK, following evidence presented to the House of Commons Select Committee on Health in 1999-2000 of BAT's involvement in large-scale smuggling, in 2000 the DTI announced an inquiry would be held under Section S.447 of the Companies Act 1985. In 2003, after four years of investigation Patricia Hewitt, then Minister of Trade and Industry, reported that "The investigation has been completed. It has not uncovered material indicating a basis for launching a criminal investigation and the Department does not propose to take the matter further" (UK Department of Trade and Industry, 2004). Despite criticism by public health advocates of the closed nature of the investigation, the process and findings of the investigation remain unpublished to date. Internal industry documents reveal numerous meetings between BAT senior executives and DTI officials in 2000, prompting media reports of undue industry influence within the DTI and a resultant downgrading of the inquiry (BATCo, 27 June 2000; Evans, Leigh and Maguire, 2004).

It is also notable that in 2000 the UK did not join 10 EU member states¹⁴ in a court action against PMI, RJR and JTI on charges of complicity in smuggling huge quantities of cigarettes from eastern Europe into the EU, resulting in hundreds of millions of euros in lost tax and customs revenue annually (Osborne, 2003). The UK was a key destination for this contraband. One outcome of this legal action, which remains ongoing, has been a 12-year agreement between the EU and PMI. PMI agreed to pay US\$1.25 billion (£674 million) to the 10 litigating countries, to combat contraband and counterfeit cigarettes, in return for an end to litigation. Criticising the UK government's decision not to participate in the joint action, ASH UK Director Deborah Arnott stated, "We are the victims of some of the highest levels of smuggling in Europe, with tax unpaid on one in four cigarettes consumed in this country. Our citizens need the protection of this agreement, and our government must sign up to it as soon as possible. We also call on the government to re-open negotiations with BAT, Gallaher and Imperial immediately and to accept nothing less than the terms of the Philip Morris agreement with the European Commission" (Tran, 2004).

While tobacco companies so far have not been convicted of criminal liability for large-scale tobacco smuggling, it is now widely acknowledged that efforts to tackle the availability of contraband require policy measures aimed specifically at manufacturers. For example, in 2004 PMI agreed to a number of measures such as far-reaching product tracking procedures, closer monitoring of sales to ensure volumes are "commensurate with legitimate market demand," and unspecified payments to the EU "in the event of future seizures in the EU of

14. The countries party to the court action are Belgium, Finland, France, Germany, Greece, Italy, Luxembourg, the Netherlands, Portugal and Spain.

its genuine products above defined quantities” (European Commission, 2004). The UK has remained outside of the EU-PMI agreement, instead agreeing Memoranda of Understanding (MOU) between HMC&E and Gallaher, Imperial Tobacco and BAT. These agreements remain voluntary, relying on the goodwill of the companies and containing no tracking and tracing procedures, or requirements to pay seizure payments (ASH UK, 2004b).

Amid the ongoing emergence of evidence of industry complicity in contraband in the UK and elsewhere, and an investigation by the Health Select Committee of allegations that Member of Parliament (MP) and BAT Director Kenneth Clarke gave false evidence to Parliament about the activities of the company in 2000, in December 2005 Chancellor Gordon Brown announced planned anti-smuggling legislation to be introduced in the 2006 budget (White and Leigh, 2005). New measures include “enhanced agreements between HMRC and tobacco manufacturers, which will further restrict the availability of tobacco to smugglers” (HM Revenue & Customs, 2005). Of particular note are reports that tobacco manufacturers

will effectively be held responsible for ensuring that their products do not end up in the hands of criminal gangs, which then smuggle them back into Britain. If the scheme is modelled on a similar one in use on the Continent [agreement between 10 EU states and PMI], fines of about £5 million would be levied on every container of ten million smuggled cigarettes intercepted by Customs. At current levels of smuggling, that could land the industry with a total annual bill of more than £350 million (McGhie and Atkinson, 2005).

4. Health impact assessment of UK tobacco taxation policy

The level of taxation levied on tobacco and tobacco products in the UK remains a perennial subject of intense policy debate. Each year pro- and anti-tobacco advocates seek to influence tax levels set by the Treasury in the annual budget. The above analysis suggests that UK policy has been frequently defined by economic and trade interests, either to protect and promote the interests of the tobacco industry, or to raise revenues for the government. Moreover, domestic tax policy has been invariably influenced by the EU single market, in particular, the lack of agreement among EU member states over type and rate of excise tax. This has allowed significant price differentials to emerge among EU member states.

In the 1999 white paper *Smoking Kills*, the UK government made commitments to reducing smoking prevalence, in large part, through increases in tobacco taxation in real terms:

2.16 The Government has committed itself to increases in tobacco taxation. As incomes tend to rise significantly each year, the only way to reduce affordability is to put tobacco tax up by more. The last Government said in 1993 that it would increase tobacco duty by at least 3 per cent in real terms each year. But we believe it is right to go further.

' the price of a typical packet of 20 cigarettes at the end of 1998 is about 55p higher than at the end of 1996'

2.17 In our first Budget, in July 1997, the Chancellor announced that, in future, tobacco duties would be increased on average by at least 5 per cent in real terms a year. Tobacco duties rose by just over 5 per cent in real terms on both 1 December 1997 and again on 1 December 1998.

The price of a typical packet of 20 cigarettes at the end of 1998 is about 55p higher than at the end of 1996 (UK Department of Health, 1999).

However, rapid rises in the availability of legal and illegal duty not paid tobacco products led to pressure on the government to reduce tax increases. For example, BAT has lobbied for “EU excise harmonisation (as opposed to tax harmonisation), with countries converging to a [the lower] French/German level of excise on tobacco products” (BATCo, 11 May 2000). Declines in overall tax revenues from duty paid products added to concerns (Figure 2). Consequently, since 2001 taxes have been raised only at the rate of inflation, making cigarettes more affordable as a proportion of disposable income (*The Economist*, 2005; ASH UK, 2004c). In the 2004 white paper *Choosing Health: Making healthy choices easier*, the linking of cigarette duty and DNP tobacco is again made by the government:

Over the past two decades, establishing and maintaining a high level of tax on cigarettes – as has been the policy of successive governments – has been shown to help reduce smoking prevalence. Cigarette duty was subject to a sustained period of real terms increases during the 1990s, and has been held at the present high level in real terms since 2000-01. Compared to many other countries, the UK has high duties on tobacco products and high priced cigarettes.

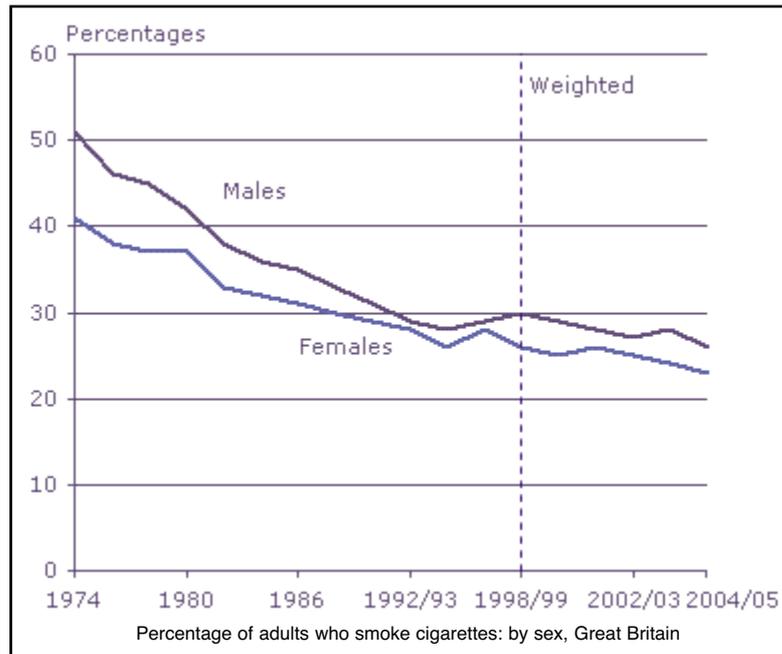
However, an increase in the availability of cheaper, illegally smuggled cigarettes and handrolling tobacco has meant that some smokers have been able to bypass higher prices, undermining the impact of price on smoking prevalence rates and meaning that further real increases in duty would be likely to be of limited effectiveness (UK Department of Health, 2004).

The potential role of taxation policy and price increases to reduce smoking prevalence, within the context of increased availability of duty not paid tobacco products, can be considered through a health impact assessment approach. Previous analyses of UK tobacco taxation policy confirm that price increases are an effective policy instrument for achieving health gains. During the middle of the twentieth century, the UK had the highest rates of tobacco-related diseases in the world. However, smoking prevalence declined between 1962-2000 from 57% for men and 42% for women, to 27% for men and 25% for women, along with a halving of average consumption of cigarettes between 1972 and 2000. While wider public recognition of the health risks of smoking has been a clear factor in this trend, research suggests the introduction of various tobacco control measures, led by increases in tobacco taxes, has played a key role (Townsend, Griffin and Fernandez, 2004).

Since the late 1990s, declines in smoking prevalence in the UK have slowed and even risen within some social groups. In 2004-05, 25% of adults aged ≥ 16 years in the UK smoked, a slight decline since 1998-99 of 28% (Figure 6). Smoking was most common for adults aged 20-24 (32%) and 25-34 years (31%), compared with adults aged ≥ 60 years (14%). The gap between men and women has narrowed over the past three decades, from 51% of men and 41% of women in the 1960s, to 26% of men and 23% of women today. Importantly, smoking prevalence is notably higher in social classes IV and V, at 42% of male unskilled workers compared to 15% of professional males (social class I). Differences in smoking prevalence rates account for more than half the difference in male mortality between the top and bottom social classes (*The Economist*, 2004). In July 2004, the government set a target to reduce

overall smoking prevalence rates in England to 21% or fewer by 2010, with a reduction from 32% to 26% or less among manual occupation groups (UK Department of Health, 2004).

Figure 6: Smoking prevalence in the UK, 1974 to 2004-05



Source: National Statistics Office (2005), "Cigarette smoking, Slight fall in smoking prevalence," 15 December. Available at <http://www.statistics.gov.uk/cci/nugget.asp?id=866> (accessed 10 January 2006).

The influence of tobacco taxes (and thus price) on consumption is measured by elasticity of demand. According to the World Bank, the demand for tobacco in high-income countries is *price inelastic*, meaning that a price increase of 10% per pack reduces demand (tobacco consumption) by an average of 4% in high-income countries (price elasticity = - 0.40) (de Beyer, 2001). For the UK, price elasticity of demand for cigarettes from 1972-1990 was -0.50 for adult men and -0.60 for adult women (Townsend, Roderick and Cooper, 1994). For unskilled manual workers (social group V), price elasticity was greater at -1.0 for men and -0.90 for women. This means that this group will be more sensitive to tax increases price changes and the decline in demand will be greater. Using data to 2000, price elasticity of demand is estimated between -0.15% to -0.65%, depending on gender, age and socioeconomic group. For example, price elasticity for all adults is estimated at -0.40 (-0.35 for adult men and -0.45 for adult women). For male unskilled manual workers (social class V), elasticity is -0.70 (Townsend, Griffin and Fernandez, 2004). Importantly, demand for tobacco also tends to be *income elastic* meaning that consumption increases with a rise in income. Therefore, tobacco taxation policy must keep pace with both price inflation and increases in real income (Jha and Chaloupka, 2000).

Applied to the government's aim to reduce tobacco consumption, Townsend estimated in 1993 that real price rises amounting to 5.25% increase annually above inflation (assuming price elasticity of -0.85) would be needed to meet the government's target of reducing adult smoking prevalence to 20% by 2000 (or 7.1% annual increase if price elasticity equalled -0.5). In turn, this would avert some 19,000 premature deaths annually by 2000 and 50 000

from 2017 (Townsend, 1993). Similarly ASH estimated that, given 120 000 tobacco-related premature deaths in the UK annually, and based on a price elasticity of -0.3, the 5% increase in tobacco taxes in real terms (4% price increase) in 1999 resulted in a reduction of 1200 tobacco-related deaths (ASH UK, 1999). Among pregnant women, Evans and Ringel found that smoking declines and average birth weights rise in the US when excise taxes are increased (Evans and Ringel, 1999).

This paper recommends that the UK government increase tax rates at least equal to, and preferably above, the rate of inflation. Table 7 provides estimates of the number of tobacco-related deaths that would be averted by various % increases in tobacco tax rates at different price elasticities.

Table 7: Estimated tobacco-related deaths averted by % increases in tobacco prices in real terms

% price increase in real terms	P = -0.30
0%	0
3%	1,080
4%	1,440
5.25%	1,890
7.1%	2,556

Note: It is assumed that the base total tobacco-related deaths in the UK is 120,000 (2004).

However, in order to enable increased tobacco taxes to achieve health gains, three issues must be taken into careful account. First, excise taxes should be focused on specific excise duties (levied at a fixed amount per 1000 pieces or grams) which affect all brands regardless of price level. This discourages the practice of “trading down” to cheaper brands, especially among lower socioeconomic groups, to avoid price increases.

Second, tax and price increases must take place alongside more effective measures for tackling the availability of legal and illegal DNP tobacco products. It is only within a market supplied primarily by duty paid tobacco that the price mechanism is effective for reducing tobacco consumption (Townsend, Roderick and Cooper, 1994). The opportunity to purchase DNP tobacco products legally through crossborder and duty free sales, therefore, directly undermines public health goals. The government’s decision in 2004 to increase indicative allowances, from 800 to 3200 cigarettes, is a particular concern. As argued by ASH UK,

The government should not uncritically accept the right of consumers to undertake cross-border shopping for tobacco (for personal use) when there are markedly different tax regimes within the European Union. In our view, certain products liable to differing excise duties should remain outside the more general framework of free trade within the European Union. UK duties could be paid on all cigarettes imported into the UK above a notional maximum allowance of 800....Open borders between different excise regimes create inevitable pressures for tax

harmonisation and loss of control over the use of excise taxes for health policy (ASH UK, 2003).

In March 2005, ASH UK argued that “The UK should lobby other EU countries to argue for the indicative limits for tobacco to be turned into fixed limit, and be reduced to 200 cigarettes, with commensurate reductions for other tobacco products” (ASH UK, 2005).

The even greater problem of tobacco smuggling requires far greater attention within the context of both UK public health and trade policy. Smuggling impacts on the ability to use tax and price increases to reduce smoking prevalence by reducing the price elasticity of demand by making cheaper (illegal) alternatives to duty paid tobacco products (Merriman, 2001; Gruber, Sen and Stabile, 2003). Townsend *et al.* estimate that cigarette consumption was 12.5-15% higher than it would have been without smuggling. For men, consumption was 17.5-30% higher, and up to 40% higher for some socioeconomic groups (social class IV). At existing rates of smoking, the health impact in the long run would be to increase deaths from smoking by 15,000 to 18,600 annually (Townsend, Griffin and Fernandez, 2004).

In addition, smuggling has been used by the tobacco industry to exert political leverage on governments to prevent further increases and even to reduce rates of tobacco taxation. Arguing that smuggling is caused by price differentials, the tobacco industry has argued for the UK to align itself with lower tax rates of other EU member states. As described above, however, such arguments are not supported by available evidence. The vast majority of this illicit trade takes the form of large-scale freight, and is carried out by highly organised criminal organisations. Industry documents suggest complicity by TTCs in this global trade. The focus of government policy should thus be on more effective anti-smuggling measures in the UK and throughout the EU, with particular attention to TTCs. As such, tobacco is a law and order issue, not a tax policy issue. Thus, tackling smuggling alongside increases in tobacco taxes will lead to substantial health gains. As Merriman writes, “[i]ncreased cigarette taxes can result in increased smuggling unless counter measures are taken, but the increase in smuggling is less than the decline in legal consumption (Merriman, 2001).

Third, UK tobacco taxation policy is unavoidably influenced by regional and multilateral trade policies. UK membership in the EU remains a potential source of tension between the desire to promote the single market and the need to protect and promote public health. As Gilmore and McKee write,

Policies on tobacco pursued by individual governments in Europe cannot be seen in isolation from those being pursued by the European Union (EU). Many aspects of the production, marketing and taxation of cigarettes are already regulated by European law... (Gilmore and McKee, 2002)

Despite the gradual expansion of EU competence in the field of public health, culminating with Article 152 of the Treaty of Amsterdam, Gilmore *et al.* note that:

it remains effectively impossible to implement harmonizing legislation purely for public health purposes....[Consequently] most tobacco and alcohol control laws have been enacted as internal market measures under Article 100a (now Article 95) using the argument that differing national legislations must be synchronized to enable the smooth running of, and

facilitate the free movement of goods and services within, the internal market (Gilmore, Osterberg, Heloma, Zatonski, Delcheva and McKee, 2004).

The problem is that, as long as the Treaty of Amsterdam prevents the passage of harmonizing legislation for public health purposes alone, what is needed to protect public health may be considered disproportionate to what is needed to facilitate the internal market. The decision by the European Court of Justice (ECJ) in 2000 to annul the EU's first comprehensive ban on direct and indirect tobacco advertising and sponsorship (98/43/EC), for example, was taken on the basis that the ban regulated, rather than facilitated, the movement of goods. The decision demonstrates "the legal subordination of public health to harmonisation of the single market (Gilmore and McKee, 2002)", a situation that requires changes to the treaty itself. More encouraging was the unsuccessful challenge by the tobacco industry of the 2001 tobacco products Directive (2001/37/EC) which showed that the ECJ does take account of public health concerns (Gilmore and McKee, 2002). There remains uncertainty, in short, over how the EU will balance trade and health policy in relation to tobacco.

Within these parameters, the UK can push for higher tobacco taxation across the EU under existing directives. As described by ASH UK, when reviewed in 2006, the UK government should support the following under EU directive 2002/10/EC:

- An increase in the maximum specific tax limits of 55% for cigarettes to 60%. This is to ensure that the UK can continue to use the flat rate specific tax increases to decrease the differential between high and lower priced tobacco products.
- An increase in the minimum rates of tax for HRT from 36% of the retail selling price inclusive of all taxes to 40%, to reduce the tax differential between the UK and other Member States.

5. Conclusions and recommendations

In summary, tobacco taxation offers a clear intersection between public health and trade policy. The divergent interests involved have contributed to intense policy debate annually over appropriate types and level of taxation. It has long been argued by the tobacco industry that the economic benefits generated by the industry (i.e. tax revenues, export earnings) outweigh the costs to society from tobacco-related disease and death. For example, the UK is the world's second largest exporter of tobacco products, representing a trade surplus of £427.4 million in 2004. The industry argues that it is "a major contributor to national economies throughout the world, with leaf growing, tobacco manufacture and distribution providing direct employment while tobacco taxation is a source of revenue to Governments" (BATCo, 1994). Such economic arguments have been used as rationale for UK policies that facilitate the trade of tobacco including:

- the harmonisation of tobacco taxation in line with three EU directives from 1993;
- the treatment of tobacco within regional and multilateral trade negotiations as other agricultural products;
- the provision of subsidies through the EU to tobacco farmers; and

- the limiting of EU competence in tobacco regulation to measures consistent with the internal or single market.

UK trade policy on tobacco has thus been defined by arguments that the industry generates economic benefits that outweigh its costs. Moreover, given that the UK is a major exporter of tobacco products, it has been assumed that much of the adverse health impacts associated with tobacco-related diseases are externalised.

This paper critically examines UK tobacco trade policy in terms of its health impact assessment. There is substantial evidence that trade liberalisation promotes the production and consumption of tobacco, with adverse public health consequences. A variety of policy measures to regulate the tobacco trade have been adopted by the UK government including:

- phasing out of duty free sales within the EU in 1999;
- ending of UK government offices for tobacco export promotion in 1999; and
- banning of the export of cigarettes above 10 mg of tar in 2000.

Focusing on the issues of taxation, this paper considers how higher tobacco taxes and prices influences demand for tobacco products and consequent health gains. While the UK maintains high levels of tobacco taxation relative to other EU member states, the availability of legal and illegal DNP tobacco products undermine price elasticity of demand.

This paper concludes that measures to further liberalise trade in tobacco will be harmful to the UK's commitment to reduce smoking prevalence to 21% by 2010. It is recommended that the UK support the following policy measures:

- the raising of excise duties and other taxation on tobacco and tobacco products at or above the cost of living indices;
 - increases should be on specific excise tax element as far as possible; and
 - increases for HRT and cigars should be in line with cigarettes to discourage trading down.
- the changing of the indicative limit for crossborder shopping to a fix limit of 200 cigarettes, with commensurate reductions for other tobacco products;
- the phasing out of duty free allowances for purchases brought from outside of the EU;
- the exemption of tobacco and tobacco products from all trade negotiations at bilateral, regional and multilateral levels which are intended to reduce or remove import duties and other tobacco taxes;
- the increasing in the maximum specific excise tax limits permitted under existing EU directives, and increase in minimum rates of tax for HRT;
- the adoption of comprehensive measures, coordinated through commitments to the FCTC, to address tobacco smuggling focused on large scale freight smuggling.

On the role of HIA as an analytical approach, this case study succeeds in drawing more

explicit attention to the precise health impacts of a change in taxation policy from a decision taken outside of the health sector. More detailed and comprehensive assessments could be usefully undertaken as a precursor to the Treasury's annual deliberations. Whether HIA could, in turn, lead to more health sensitive policies on tobacco taxation is unclear. The review of existing data on price elasticity of demand, UK tobacco taxation and deaths from tobacco suggests that more mileage could be gained from such analyses. A more comprehensive assessment of health impact, by different tax levels, population groups and tobacco products, would offer a clearer basis for arguing in favour of health protection.

At the same time, HIA alone is unlikely to be sufficient to change UK government policy. The tobacco industry has long argued that the economic benefits accruing to the UK from its activities have significantly outweighed any resultant health and other social costs. The UK government's policies on tobacco control over the past three decades have reflected efforts to balance economic and health interests, with the former continuing to exert considerable influence. HIA contributes to a more explicit accounting of the health impacts of a specific taxation policy, shaped by both economic (i.e. generation of tax revenues) and health (i.e. reducing demand for tobacco products) considerations. The further translation of estimated health impacts into economic impacts may be necessary to appeal more directly to the concerns of policy makers focused on trade and investment, economic growth and public finances. World Bank estimates of the net costs to national economies of the tobacco industry suggest that there is considerable mileage still to be gained from directly challenging the economic arguments put forth by the tobacco industry (Jha and Chaloupka, 2000).

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