RESEARCH NOTE

Understanding developed country efforts to promote foreign direct investment to developing countries: the example of the United Kingdom

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Developed countries often suggest that developing countries attract more investment to promote development. In this respect, the Government of the United Kingdom employs home country measures (HCMs) to promote foreign direct investment (FDI) to developing countries. HCMs include support for risk reduction, technical assistance to improve the host country investment climate and home country market access. So far, there has been little analysis of the effectiveness of HCMs. This article categorizes HCMs and then identifies key HCMs utilized by the United Kingdom. It then provides a preliminary analysis of their effectiveness. The article finds that country specific investment-related aid is useful in facilitating FDI (apart from its other functions), but further analysis should examine under what conditions this is most effective, as well as developmentally relevant. However, while political risk insurance has been provided for projects in popular FDI destinations, there is no evidence that it stimulates additional FDI, a finding which is consistent with private sector views discussed. Finally, we argue that there is considerable scope for further research both in finding new and better measures of HCMs and in widening the scope to other countries and understanding broader implications for development.

Key words: foreign direct investment, home country measures, risk insurance, the United Kingdom

1. Introduction

Developed countries often desire that developing countries attract more investment (this was a theme in the G8 Summit under the presidencies of the United Kingdom in 2005 and Germany in 2007). This includes the United Kingdom which wishes to increase foreign direct investment (FDI) in developing countries to promote both development in host countries and improve the competitiveness of United Kingdom firms. In this context, there

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is a need to examine whether and how *home* countries can affect the level of FDI in developing host countries using home country measures (HCMs).[2]

FDI has been rising in importance for developing countries over the past few decades (for data see UNCTAD's annual *World Investment Report*). Private external finance to developing countries has surpassed official aid for some years. In addition to a stable source of external finance, FDI can offer technology, management skills and higher wages. Though FDI has increased substantially, only a small percentage of FDI reaches poorer developing countries. While this is partly because of their smaller market size, the challenge for HCMs is to encourage firms and to create appropriate conditions so that more and better FDI flows into developing countries.

HCMs are much less discussed than other factors affecting FDI, such as host country policies and international agreements. This is surprising as many OECD governments have realized that outward FDI can be beneficial to home country development. The Government of the United Kingdom regards the promotion of FDI as a win-win proposition and has stepped up its efforts to promote FDI to developing countries. As a result, it is no longer a simple task to describe comprehensively HCMs adopted by the United Kingdom. The approach we take in this article is to identify various United Kingdom HCMs and classify them on the basis of how they can affect FDI (supporting host country fundamentals, reducing economic risk, reducing political risk, providing information on investment opportunities and others).

Of course, we should understand that the ultimate goal of United Kingdom aid policy is not the promotion of FDI, but poverty reduction in developing countries. However, aid might help create the conditions for economic development and hence promote investment (both domestic and foreign) in developing countries. In a similar vein, other countries' HCMs might also result in stimulating United Kingdom FDI.

The rest of this paper is organized as follows. We provide a theoretical background in section two, and then quantify trends in United Kingdom HCMs in section three. The effectiveness of HCMs is discussed in section four. Section five concludes and suggests avenues for further research.

[2] This term has been used, for example, in UNCTAD (2001).

2. Theoretical background

There is no generally accepted definition or standard classification of HCMs. Kline (2003) argues that HCMs include laws, regulations, policies and programmes in home countries that affect outflows of FDI. He describes the scope on the basis of several categories, as discussed in more detail in UNCTAD (2001). CUTS (2003) provides a similar list of six categories.

In this article, we define the scope of HCMs on the basis of how HCMs affect motivations for FDI in theory rather than on the basis of the governmental actors who design, and in some cases fund, HCMs. Generally, there are many factors that affect investment in developing countries (Dunning, 1993). First, the general economic environment on the demand side (size and growth prospect of market) and on the supply side (skills, infrastructure, financial and technological development) which make investment projects viable. Second, the regulatory framework within which investment takes place affects investment decisions (e.g. protection of property rights). Third, specific factors can affect particular projects (availability of project finance, technical assistance, provision of specific information etc.). On this basis, we can delineate the following four categories:

a. *Support for economic fundamentals and governance structures in host countries.* Aid can enhance the governance structures and economic fundamentals required for successful investment projects. Some forms of aid are aimed at raising economic growth and reducing poverty through investment in infrastructure, macroeconomic stability, private sector development and human resource development (so-called FDI- or investment-related aid, untied). Increased growth (prospects) and improved fundamentals can make individual projects potentially more profitable in developing countries, helping to attract FDI.[3]

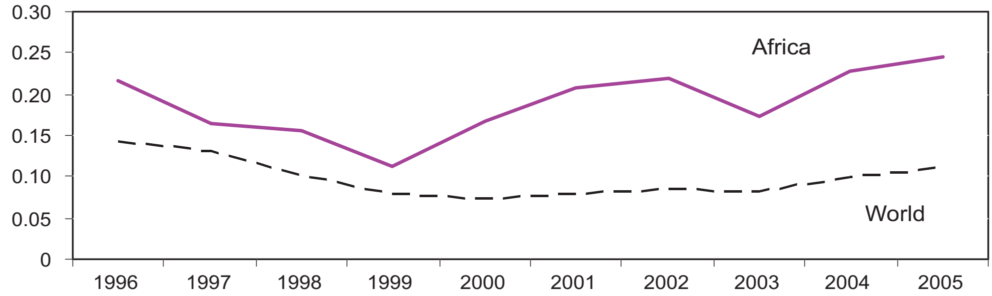
b. *Support for reducing economic and political risks of investment projects*. HCMs may reduce the risks associated with investment in developing countries. We should distinguish between two broad categories of risks, i.e. *economic* and *political* risks (Moran, 2001). *Economic risks* arise from uncertainties in costs and benefits of

[3] There is a heated, more general debate as to whether aid promotes growth and investment, and if so, under what circumstances (Hansen and Tarp, 2001).

investment projects. Uncertainty can have significant negative effects on investment, especially when it involves large sunk and irreversible costs and there is the option to delay the investment until further information becomes available (Dixit and Pindyck, 1994). Collier and Pattillo (2000) argue that a major impediment to private investment is the perceived high level of (economic) risks. Improved information about projects and demonstration effects may reduce uncertainties for foreign investors who are either new to the country or plan to undertake investment that involves large sunk costs. *Political risks* are defined as "threats to profitability that are the result of forces external to the industry and which involve some sort of government action or inaction" (Moran, 2001). Political risks may also deter investments, particularly in countries that have a history of frequent policy reversals. Political risks are particularly problematic in sensitive industries such as infrastructure, where investment typically involves large sunk costs, especially in countries where the host-country government is weak and may not be able to honour its part of the contract. Political risks are distinguished from economic risks in that the latter are uncertainties that arise from changes in economic conditions, such as costs, demand or the extent of competition in the marketplace. In practice, however, political and economic risks often go hand in hand. Foreign investors can manage political risks in a number of ways. For example, they can purchase financial products to limit losses in the case of large currency fluctuations due to political events (e.g. currency swaps). They can also form partnerships with other firms to share the risks, in which case other parties bear not only political risk but also economic risks. Finally, they can take political risk insurance (i.e. an HCM).

c. *Support for providing information surrounding investment projects.* HCMs can impact on FDI by reducing the information gap in home countries. For instance, investors are often said to suffer from a perception bias. They perceive that many countries are in trouble when in fact only one country in the region is, and thus require an inordinately high rate of return from investment in the region. Investors may not have access to necessary information to spot profitable investment opportunities and it would be too costly to obtain this individually as it cannot be fully appropriated. Public support can be given to overcome information-related market failures, as the collection and dissemination of this information has public goods aspects. One example of such public support is to alert potential investors that profitable opportunities exist in developing countries particularly in Africa (see figure 1). The provision of information can have spillover effects since investment by one TNC may send positive signals about the host country so that it is followed by investment by other TNCs (the bandwagon effect, Moran, 1998).

Figure 1. Ratio of profits (net of home country taxes) to United Kingdom FDI stock, by area



Source: See appendix.

d. *Other policies that affect the viability of investment projects*. This category bundles together other HCMs that affect FDI. Trade preferences granted to certain countries might make projects more profitable in those countries, at least temporarily, though not necessarily more efficient. Tax policies concerning, for example, double taxation on foreign affiliates' profits can also affect locational decisions.

An important issue addressed in this paper is whether United Kingdom HCMs are effective and efficient in achieving their goals of promoting FDI and development. The effectiveness and efficiency of HCMs have seldom been studied in great detail (UNCTAD, 2003). Mistry and Olesen (2003) discuss the effects of bilateral and multilateral initiatives on FDI on the basis of three FDI case studies including in Tanzania (Songos-Songos) and Uganda (MCI). Te Velde and Bilal (2003) discuss HCMs in the Cotonou agreement between EU and ACP. But neither of these studies focuses specifically on the provision of HCMs by the United Kingdom.

3. Identifying home country measures provided by the United Kingdom

In this section, we discuss United Kingdom HCMs on the basis of the four categories identified above.

Support for structural economic fundamentals and governance structures

The Department for International Development (DFID) is a major provider of aid and its aid programmes that affect FDI can be seen as HCMs,[4] especially where it is aimed at enhancing economic fundamentals and governance structures. Gross official development assistance (ODA) by the United Kingdom was £3,282 million in 2001/2002, up from £3,007 million in 2000/2001. The total DFID bilateral programme was £1,506.2 million in 2001/2002. This bilateral aid is used in various ways, but among these are programmes that can help stimulate investment, from both local and foreign sources. They include technical assistance and linkages programmes, such as the DFID challenge funds.

The analysis below uses (gross) aid commitments in the OECD Creditor Reporting System (CRS) data to compute aid by the United Kingdom. Following the classification in WTO (2003), we refer to aid in infrastructure, macroeconomic stability, legal and policy frameworks, private sector support and human resource development as FDI or investment-related aid. OECD data permit the use of five digit purpose codes to identify FDI-related aid.

Table 1. United Kingdom (bilateral) aid as reported by OECD CRS, distribution by sector

	1973-1979	1980-1989	1990-1996	1997-2002
Investment related aid	18	25	33	30
Infrastructure	10	13	13	6
Macroeconomic stability	0	8	6	7
Legal and policy frameworks	0	0	2	3
Private sector support	2	3	4	3
Human resource development	6	1	9	11
Other aid	82	75	67	70

Source: OECD CRS database.

Around 30% of United Kingdom bilateral aid is allocated to investment-related areas (table 1), amounting to around £500 million annually, up from 18% in the 1970s. There are big differences among

[4] Excluding those going through multilateral programmes.

recipient countries: Botswana, Central African Republic, Egypt, Ghana, Lesotho, Mauritius, Rwanda, Uganda and South Africa are among African countries that receive an above-average share of investment-related aid. Investment-related aid has shifted away from infrastructure projects towards those supporting macroeconomic stability, legal and policy frameworks and human resource development, which may correspond to a shift towards providing more public goods (as documented in Te Velde *et al*., 2002).

Support for reducing economic and political risks of an investment projects

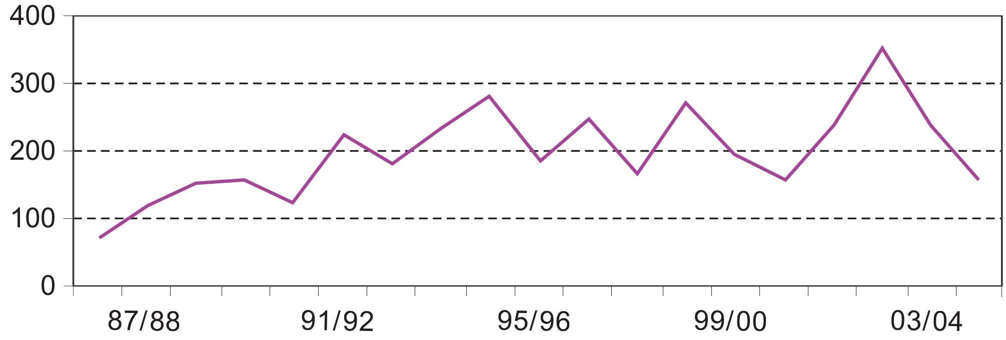
The CDC group (formerly Commonwealth Development Corporation)[5] is an example of a HCM in the United Kingdom which may reduce *economic* risks facing investors in developing countries, either by sharing the risks through loan and equity participation or by demonstrating that profitable projects and viable businesses are possible, thus sending signals to draw in additional private capital.

DFID is the sole shareholder of CDC which has an outstanding loan of £755 million, funded by exchequer advances, built up over time. CDC uses the loan (at zero interest) to support equity investment in developing countries. While additional exchequer advances are no longer provided, it can reinvest repaid loans and equity realization (without paying corporation tax). DFID has set CDC two clear aims. The first is to support the creation and growth of commercially viable private sector businesses in poorer countries of the world. The second is to mobilize third party funds into these countries by demonstrating the feasibility of creating successful ventures.

The CDC Act 1999 requires 70% of its investment to be in poor countries, and aims to make at least 50% of investments in sub-Saharan Africa and South Asia and a minimum of 70% of new investments over a five-year period in poor countries. Figure 2 shows an upward trend in net equity flows until the mid-1990s and a decline afterwards. However, the most recent data indicate a rise once again.

[5] This article analyses investments by CDC before they became a "fund of funds" which means CDC now invests in equity (particularly in other funds) not loans, and outsources a lot of operational work to other funds such as Actis.

Figure 2. CDC's annual net investments, 1987-2005
(Millions of pounds)



Source: CDC investments table 7 British Aid Statistics / Statistics on International Development.

According to CDC's annual report, its portfolio amounted to £805 million in 2002 (£816 million in 2001 and £1,064 million in 2000[6]) including £184 million worth of 24 new (loans and equity) investments. The eight largest investments represented 65% of the total. The 2002 share for new investments in sub-Saharan Africa and South Asia was 35% (69% in 2001) although the five-year average of investment in poor countries was 75%, against the target of 70%. A quarter of CDC's portfolio was in Africa; 36% in Latin America; 21% in Asia-Pacific; and 18% in South Asia. The infrastructure industries, such as power, receive a large share of investment, while the importance of the agricultural sector has declined from 16% of the portfolio in 1972 to 11% in 2002. CDC incurred a substantial loss on its portfolio in agriculture over the 1990s (it is worth only 28% in terms of original investments).

The export credit guarantee department (ECGD) is a separate department whose overseas investment insurance scheme has provided political risk insurance for investors against major adverse political events, namely expropriations, war, restrictions on remittances and breach of contract, since the 1970s.[7] ECGD's insurance exposure to political risk by country and year can be obtained from ECGD annual reports. ECGD overseas investment insurance (maximum liability) amounted to between £150 million and £200 million during the period

[6] See table in the IDC CDC minutes for a country breakdown which is used in this paper.

[7] There are several other risk-insurance schemes in which the Government of the United Kingdom is participating, but since these are mostly multilateral arrangements, we have not included them as HCMs. Such schemes include PPIAF, DEVCO, EAIF ($100mn of donor money; $205 million of private funds) and Guarantco.

1985–1995, but increased dramatically to £797 million (covering investments in 23 countries) in 1999/2000 and £1,009 million in 2001/2002. The United Kingdom recorded the fastest increase in bilateral risk insurance among major industrialized countries over the period 1998–2001. Interestingly, there has been a rapid decline in its exposure to only £239 million in 2006, and ECGD (2006) suggests that this is because many investors have had a rethink over their risk strategies.

In general, TNCs' exposure to risk also varies by home country, because countries are home to different types of TNCs. The type of TNCs can determine the demand for political risk insurance. Some industries have relatively little sunk costs and hence few risks (e.g. a feature of many Dutch TNCs, which have long invested without taking out risk insurance), while other industries are much more risky because they involve large sunk costs and possibly in politically sensitive industries (e.g. the United States oil industry, the German energy and automobile industries, and United Kingdom service industries[8]). As expected, ECGD's cover is used primarily in the infrastructure industries (power, energy and telecommunications) which are most sensitive to political risks in the long-run due to large sunk costs and issues surrounding cost recovery.

ECGD's exposure to investments in low-income countries is small. In 2001, only 6% of exposure was in Africa (down from 20% in 1996), 19% in the Middle East, 25% in Americas, 13% in South Asia, 33% in other Asia and 6% in Europe. In some countries, ECGD's insurance covers a significant share of the total stock of inward FDI from the United Kingdom. ECGD's exposure was worth 10% of the total United Kingdom FDI stock in Indonesia and India in 2000.[9]

Support to provide information surrounding investment projects

The United Kingdom Foreign and Commonwealth Office (FCO) and the United Kingdom Department of Trade and Industry (DTI) have jointly established British Trade International (BTI). BTI has two aims: to raise inward FDI and to raise the competitiveness of United Kingdom

[8] Thames Water was the biggest single user of ECGD political risk insurance for overseas investment in 2002.

[9] The country breakdown for 1996, 1997, 1998 and 2000 based on ECGD annual reports is available from the authors.

firms by promoting overseas sales and investment through the provision of basic information and organization of overseas missions.[10]

BTI provides support to business in terms of information provisions in diplomatic posts. Of the 1,500 staff it employs, nearly 1,200 are posted overseas, with around 80 staff in Africa. The budget of BTI was £92.2 million in 2002/2003, up from £69 million in 1998/1999; around £70 million of this (or 78%) was spent to "promote overseas sales and investment". It was set to rise by a further £10 million over the period 2004–2006. Much of this support is for organizing exhibitions and seminars abroad. Such overseas missions are organized frequently. A BTI survey found that nearly 60% of firms regarded BTI support as useful. However, there are few missions to low-income countries, probably because these are small markets with relatively few commercial opportunities for United Kingdom firms.[11]

Besides supporting BTI, the FCO has set up a "one-stop" programme to provide appropriate information on political risks, but this is a relatively small scale operation. Overseas missions (other than BTI) provide some limited *ad hoc* fora for discussion of political risks surrounding investment opportunities.

Other home country policies that affect the viability of investment projects

There are several other types of HCMs that affect FDI abroad. Trade policy, specially granting trade preferences, is one area. For instance, the African Growth and Opportunity Act (AGOA) trade preferences provided by the United States to certain African countries have stimulated investment in garment assembly. Thus, trade policy can be an important HCM. Since trade policy falls under the competency of the European Union, further examination of EU (not United Kingdom) HCMs would be required.

[10] Firms that are purely exporters without any overseas investment also participate in these missions.

[11] We counted on the United Kingdom trade partners website a total of 3,952 missions over the period 2000–2002; 8.6% of this was to Germany, 11.3% to the United States, but Brazil accounted for just 2.2%, Egypt for 0.9%, Ethiopia for 0.1%, Ghana for 0.5%, India for 2.4%, Mozambique for 0.1%, Nigeria for 0.6%, South Africa for 1.8%, and Uganda for 0.4%.

Bilateral investment treaties (negotiated by the FCO) would not normally be classified as HCMs, but rather as international agreements. Finally, tax incentives for investment abroad constitute a relatively unexplored area. Tax experts argue that the treatment of profits for United Kingdom TNCs is on a par with that in the United States, but is less generous than in countries such as the Netherlands. A full understanding of this type of HCM requires a detailed examination of tax systems in developed countries, and represents another issue for further research.

Table 2 provides a summary of the home country measures provided by the United Kingdom. Of course, these types of measures are mirrored in equivalent policies of other home countries to investment, as well as supranational bodies such as the EU (the measures provided by the European Commission under the Cotonou Partnership Agreement are also given in table 2 by way of comparison).

4. Preliminary analysis of the effectiveness of United Kingdom HCMs

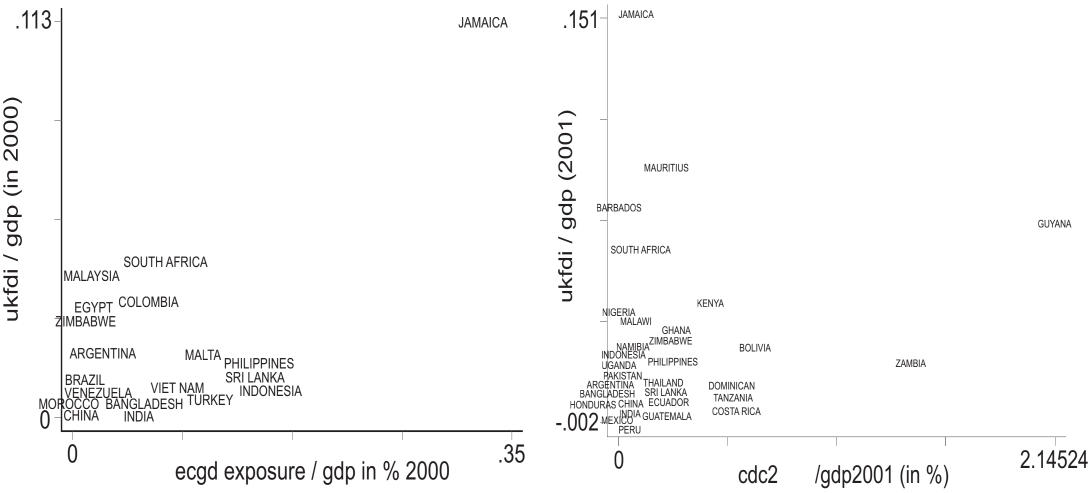
It is important to note at the outset that there are various limitations to quantitative measures of HCMs. It is not possible to obtain simple quantitative measures for some categories, such as the nature of trade preferences and rules of origin, which tend to be framed at a very detailed product level. For other categories, where we have been able to provide some measures, these may not be completely accurate. It is well known that the OECD CRS database is only a crude reflection of aid flows to countries and a more accurate breakdown and classification by activity and by country would be helpful. It would also be helpful to distinguish between aid for technical assistance and aid for infrastructure provision. It would also be valuable to have a more accurate and recent description of public exposure to political risk insurance by country. Furthermore, it would be useful to identify the various sources of information provided or supported by the government to help *new and potential investors* (and not existing exporters). Given these limitations, the analysis below should be seen as preliminary and there is ample scope for further research on measuring and assessing the effectiveness of HCMs.

The discussion below focuses on two key questions: 1) is it possible to determine an overall *macro* effect of United Kingdom HCMs on its FDI; and 2) under what *micro* level circumstances are United Kingdom HCMs more effective (e.g. in what industries, or type of countries, type of HCMs, etc.)? Of course, we should bear in mind that the ultimate goal of United Kingdom aid is not the promotion of FDI but poverty reduction in developing countries. However, aid might help improve the conditions for economic development and various types of investment in those countries.

Macro level

In this analysis, we relate the level of FDI stocks to the level of ECGD exposure and the level of CDC investments (all scaled by GDP). We also relate FDI *flows* to investment-related aid. Figure 3 shows that ECGD's exposure and the stock of United Kingdom FDI are correlated (country observations are denoted by their name), with a correlation coefficient 0.63, and highly significant (with a p-value of 0.01)**.** This does not necessarily imply that one factor causes the other. For instance, ECGD's exposure (in 1997) is not necessarily an indicator of further United Kingdom FDI (changes over the period 1997–2001) as the right panel of figure 3 shows: the correlation coefficient is -0.40 with a p-value of 0.08, i.e. not significant at the 5% level but is at the 10% level. The correlation between the change in the stock of United Kingdom FDI and the change in ECGD's exposure is also not significant. Appendix A confirms the presence of these correlations using econometric estimations.

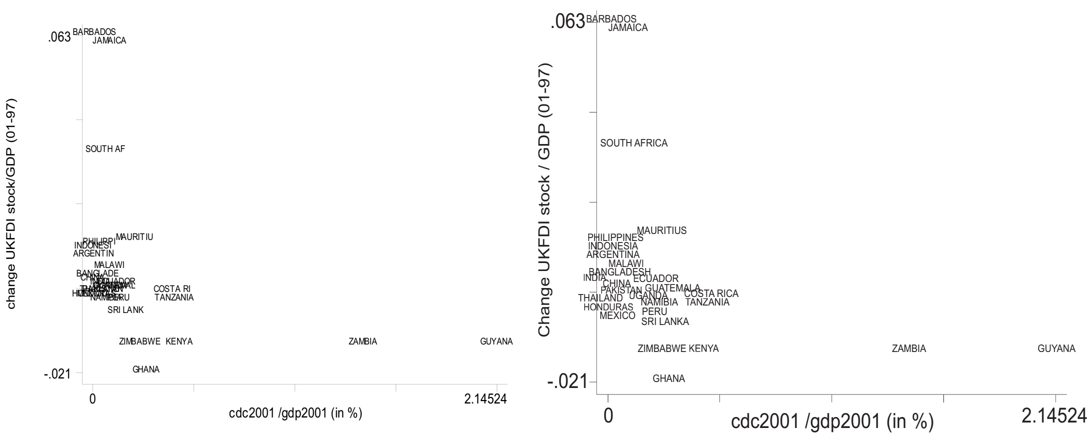
Figure 3. ECGD exposure and United Kingdom FDI



Source: Data appendix.

The right-hand panel of figure 4 indicates that CDC seems less active in those countries where United Kingdom FDI has risen most between 1997 and 2001. So both CDC and ECGD may have been less active in countries where inflows of United Kingdom FDI were growing fast. On the one hand, one could argue that that is exactly what is required from them – to promote FDI into countries where there has been little – but on the other hand, the demonstration effect of these HCMs on United Kingdom FDI may need to be further examined.[12] The weak association between the ECGD's insurance variable and *additional* FDI is consistent with anecdotal evidence from United Kingdom investors (reviewed below). Some investors cope with risk by diversifying their investment (e.g. big oil companies), while other investors are increasingly making use of insurance offered by the private sector which might be more costly but more flexible. Some investors, especially in the infrastructure industries, remain interested in public insurance. In addition, ECGD (2006, 2007) argues that private investors are rethinking their risk strategies, which has contributed to the sharp decline in demand for political risk insurance it provides (from exposure worth £1 billion during the peak of 2001 down to the £152 million in March 2007 which is below the average over the period 1985−1995) and this decline is expected to continue.

Figure 4. United Kingdom FDI and CDC's portfolio



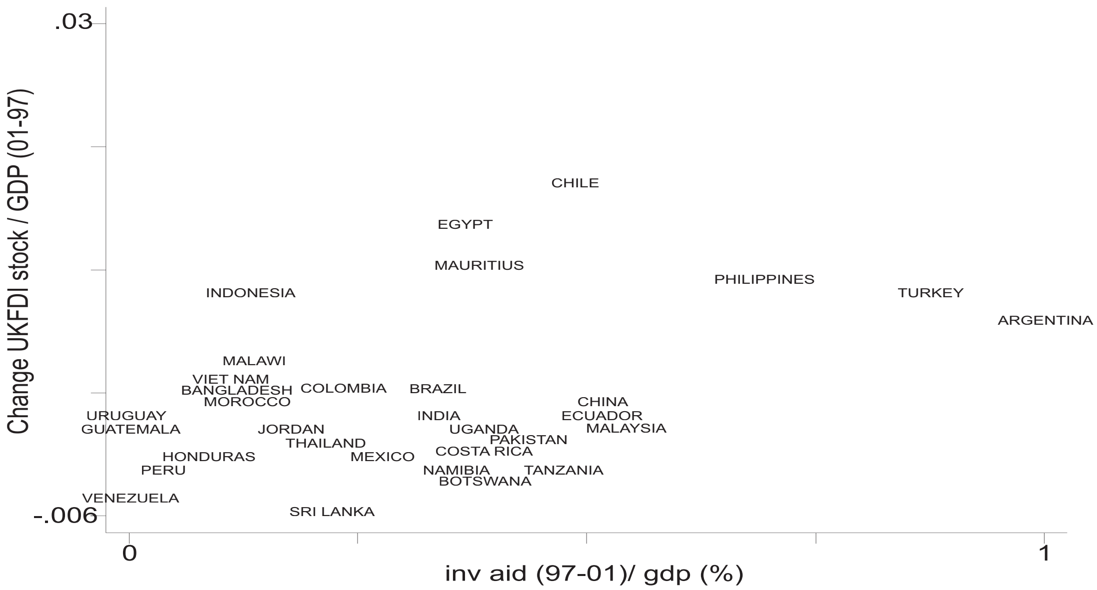
Source: Data appendix.

Figure 5 shows that investment-related aid (scaled by GDP) is positively correlated with the *change* in stock of United Kingdom FDI (scaled by GDP), with a correlation coefficient of 0.41 and a p-value of 0.02. The effect of investment-related aid requires more detailed

[12] It could also be that these HCMs have other effects, directly (e.g. restructuring company) or indirectly (stimulating local and non-United Kingdom foreign investment), which are not measured by United Kingdom FDI.

analyses than has been possible in this paper. For instance, it could be argued that because aid has become more investment-related over time (table 1), the effect on FDI should have increased.

Figure 5. Investment related United Kingdom bilateral aid and United Kingdom FDI



Source: Author's analysis.

Note: Investment related aid relates to the average over 1997-2001. United Kingdom FDI relates to the change in United Kingdom FDI stocks. Both variables are scaled by GDP. We have left out the two outliers Malta (which had rapid negative FDI growth) and Seychelles (which had rapid positive FDI growth).

Micro level

At the micro level, in the absence of detailed research, the picture is more anecdotal and mixed. For instance, the chairman of MSI Cellular, a telephone company operating throughout Africa, said that "CDC was our first investor and their presence helped MSI attract both other developmental finance and private sector money from the likes of Citigroup and AIG", suggesting that in this case, a demonstration effect may have facilitated inflows of private capital (United Kingdom Select Committee on International Development, 2001). On the other hand, in the case of a bank for which ECGD provided political risk insurance when it invested in Algeria and Morocco, the availability of political risk insurance was only a minor factor in the investment decision since this bank was committed to these markets and would have invested there with or without risk insurance. Even in this latter case, we should not disregard the usefulness of risk insurances altogether, e.g. in this case, risk insurance offered a certain level of comfort, though it was not essential for stimulating *additional* FDI (Te Velde and Bilal, 2003).

Such anecdotal evidence suggests that it is important to consider the conditions under which HCMs are more likely to be effective, not just whether HCMs affect the aggregated FDI. We suggest that the effectiveness of HCMs is likely to depend on a number of factors including the following.

Table 2. Summary of major HCMs provided by the United Kingdom, compared with the EU

Type	United Kingdom		EU – Cotonou	
	Programme	Size and importance	Programme	Size and importance
Support for reducing economic and political risk	CDC group is a partly privatised equity investor and loan provider, with DFID the sole shareholder.	Based on £755 million loan from government, CDC invests between £100 and £200 million annually. Stock of investments was worth around 1£bn in 2002.	Investment Facility of EIB. Financially sustainable fund to stimulate investment and commercially viable business and promote local financial markets. Loans backed by member state guarantees	€2.2bn from EDF + €1.7bn own resources + subsidies. New portfolio (2000-2002) €1.1 billion to global SME loans (32%), energy (28%), other (40%) in ACP public and private sector.
	United Kingdom ECGD (DTI/FCO) has offered political risk insurance for overseas investment since the 1970s.	The maximum overseas investment insurance liability was £1 billion in 2002. Has increased by 58% over 1998-2001. 6% of programmes in Africa.	Investment Facility, EIB	Part of €2.2 billion from EDF (see below) can be used for guarantees, but so far not used
Provision of information opportunities in host countries	United Kingdom Trade Partners / DTI organizes and provides support for trade and investment missions in developing countries. Also BIS.	The United Kingdom Trade Partners supports outward missions to raise competitiveness of United Kingdom companies (£70 million annually) – few missions to small developing countries, e.g. 0.1% in Ethiopia.	PROINVEST to promote investment in ACP companies by strengthening the capacities of private sector intermediaries (IPAs) and professional associations and to support companies to develop partnerships.	Approximately €10 million annually
Support for economic fundamentals governance structures	Various DFID aid programmes, classified as Investment related aid.	Around 30% of United Kingdom bilateral aid (in OECD-CRS) is investment related, worth around £500 million annually.	National and regional indicative programmes; some countries have chose private sector development as one of the priority areas.	€11.3 billion (9th EDF minus contribution to EIB) over five years
	E.g. DFID Challenge Funds have been implemented recently, including BLCF,	The £18 million BLCF over five years, committed £6.1 million for 26 projects by 2002 leveraging £11 million of investment.	E.g. CDE provides technical assistance for companies and intermediaries	CDE has a budget of approximately €20 million annually.
Others	DTI Trade policy on market access; FCO Investment policy; Treasury Tax incentives	Difficult to quantify	Many by individual EU member states. Also, trade policy such as preferences and rules of origin	

Sources: DTI, CDC, ECGD, and Te Velde and Bilal (2003) for the HCMs by EU.

First, the *type of industry* matters as some industries are more likely to be users of certain types of HCMs. Looking at each type of HCM in table 3, It is possible to distinguish between heavy, medium and low-use industries. CDC's equity investments appear to benefit the power and financial industries most. Infrastructure and agriculture are in the middle, while the minerals, oil and gas industries tend not to involve CDC very much, despite being the major industries of United Kingdom FDI in non-OECD countries. TNCs in the oil and gas industries tend to rely on large development finance institutions such as the International Finance Corporation or European Investment Bank, who often finance a relatively small share, but which nevertheless can bring some reassurance and an important "stamp of approval".

Table 3. Which industries are important users of United Kingdom home country measures?

HCM	High-use industries	Medium-use industries	Low-use industries
CDC (%) -2001	Power (30%) Financial Institutions (17%)	Infrastructure (11%) Agribusiness (11%) TMT (11%)	Minerals, oil and gas (7%) Consumer Goods (5%) Healthcare (3%)
OII ECGD (%) - 2002	Power (35%) Water (30%)	Manufacturing (15%) Communications (11%)	Mining (3%) Services (3%) Oil and Gas (3%)
BTI outward mission (number of mission) 2000-2002	Electronics and Hardware (323) Software and computer services (321) Creative and Media (200) Clothing footwear fashion (183) Engineering (171) Agriculture horticulture and fisheries (155)	Environment (153) Construction (149) Giftware (142) Infrastructure (142) Communication (139) Food & drink (138) Leisure and Tourism (132) Education and training (130) Healthcare and Medical (120) Household Goods (104) Oil and Gas (103)	Automotive (81) Textiles (77) Water (77) Power (75) Biotechnology and Pharmaceuticals (72) Chemicals (70) Fire police security (70) Aerospace (56) Business and consumer services (51) Financial Services (48) Paper printing and packaging (30) Marine (24) Aid business (12) Mining (7) Railways (3) Ports and logistics (2) Sports and Leisure infrastructure (2) Airports (1)
United Kingdom FDI stocks in non-OECD countries(%) - 2001	Mining and quarrying (incl. oil and gas (29%) Financial Services (20%) Food products (9%) Chemical products (7%)	Transport and Communications (6%) Textile, wood and printing (4%) Retail trade (4%)	Other man (4%) Metal products (1%) Electricity Gas Water and Construction (2%) Agriculture (0%) IT communications (0%) Transport equipment (1%) Hotels & Restaurants (1%)

Source: DTI, ONS, CDC, ECGD.

The power and water industries are major users of ECGD risk insurance, partly because these industries involve large sunk investment and a long payback period (with revenues in local currency running the risk of devaluation). The oil and gas industries, on the other hand, tend to use political risk insurance less, suggesting that alternative political risk mitigation strategies are being used. Overall, tentatively, the relative importance of political risk insurance will vary by industry.

Second, the *size and age of the firm* also matters, though this may correspond to the TNCs industry to a degree. Large TNCs tend to participate in BTI's overseas missions less, partly because they have their own information gathering systems. Instead, industries with smaller firms, such as electronics, engineering, clothing and agriculture, tend to be the main users of this type of HCM. Participation in overseas missions is more common for industries that account for a smaller share of United Kingdom FDI stocks in non-OECD countries.

Third, the effectiveness of certain HCMs depends on the *motivation of investors*. Export-intensive, efficiency-seeking investment (e.g. textiles and clothing) requires market access, so preferential market access would be a relevant HCM for these investors. Other conditions might include the characteristics of the home and host countries, including size and industrial structure.

5. Conclusions and further research

HCMs include laws, regulations, policies and programmes in home countries that affect outflows of FDI. We defined the scope on the basis of how HCMs can affect FDI in theory. So far, there has been no systematic discussion or quantification of United Kingdom HCMs. We analysed investment-related United Kingdom (bilateral) aid and found that this has increased since the 1970s, both in volumes and in share of total (bilateral) aid, currently at 30%. Investment-related aid has shifted towards providing macroeconomic stability, legal and policy frameworks and human resource development. The shift towards more investment-related aid should have helped to attract investment including FDI to developing countries

Development finance may also help to leverage in private investment. CDC's new investments have declined somewhat since the mid-1990s but increased in recent years. Its portfolio (before it became a "fund of funds") is geared more towards infrastructure projects and less towards agriculture. It has a substantial presence in low-income countries, including 25% or £250 million in Africa. The ECGD's programme on overseas investment insurance has increased rapidly to £1 billion, faster than in any other major developed country. However, just 6% of the portfolio in 2002 was for Africa, down from some 20% in 1996. Most exposure is in infrastructure industries. The BTI's programme for outward mission has increased, but only few missions reach low-income countries.

With regard to the effectiveness of HCMs in stimulating investment, we argued that aid *flows* are positively correlated with *changes* in United Kingdom FDI stocks over the period 1997–2001 and that the *stock* of ECGD insurance and the stock of CDC investment are positively correlated only with the *level* of United Kingdom FDI stocks. This suggests that investment-related aid has been useful and further work should concentrate on this issue. However, consistent with the recent sharp decline in demand for political risk insurance provided by the public sector, ECGD insurance does not appear to have led to additional FDI. We suggested that the effectiveness of HCMs depends on: the type of HCM; industry; firm characteristics; motive of investment; and home and host country economic conditions. It would be of interest to examine in more detail how investment related (untied) aid can take these conditions into account in order to raise the level of FDI in developing countries.

While this article has provided some insights into United Kingdom HCMs, we should emphasize that these are preliminary results and there is considerable scope for further research. First, there might be scope for improving the quality of existing data. Limitations are primarily related to reporting of aid statistics. Secondly, we still do not have good reviews and measures of trade policy, rules of origin and tax incentives in the context of HCMs. Thirdly, as we have discussed, HCMs aimed at promoting FDI may not necessarily result in meeting development objectives. It would be useful to examine which HCMs are most effective in promoting FDI conducive to development. Fourthly, there is also an important research agenda with respect to investigating the effectiveness of development finance institutions in stimulating investment and development. The results of the preliminary research suggest a positive correlation between the level of development finance and the level of FDI, but this relationship requires further examination, particularly in relation to the discussion of whether development finance stimulates additional investment by the private sector. Finally, we have focused on the efforts in the United Kingdom, but we do not know if these are representative of HCMs provided by industrialized countries in general or specific to the United Kingdom.

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Data appendix

United Kingdom FDI: Net book value of FDI by United Kingdom enterprises, converted into the United States dollar for 66 countries, Business Monitor MA4 (and data obtained directly from the United Kingdom ONS). Variables are deflated by home GDP deflator from the World Development Indicators, and are in natural logarithm form. Profits net of taxes also from MA4.

GDP_USD	Gross Domestic Product in host countries, constant United States dollars, WDI
PHONES	telephone landlines, # per 1,000 population, WDI
AID	Aid related data taken from the OECD CRS database on www.oecd.org
ECGD	Investment exposure by ECGD from annual report in 1996–1998, 2000
CDC	From DFID statistics and annual CDC reports
RTA	0/1 dummy which denotes a measure of whether a country is party to one of the 7 main regions analysed in te Velde and Bezemer (2006).

Data are available from the author upon request.

Appendix A. An econometric analysis of Home Country Measures

The presence of several observations on HCMs, including ECGD exposure over time (1996-2000), and across countries allows us to perform a simple econometric analysis. An econometric model controls for a number of explanatory variables. Our model is based on the approach in line with Pain (1997); Te Velde and Bezemer (2006) apply the methodology to UK FDI in developing countries. We augment a standard FDI model with an additional variable measuring HCMs. The theoretical overview in the paper suggests that there should be a separate and positive effect of HCMs which we try to measure by:

(1) $$FDI_{ijt} = f(HOME_{ijt}, HOST_{ijt}, HCM_{ijt}, RTA_{j}),$$

where FDI is the real stock of FDI, *i* is the home country (here UK), *j* is the host country, *t* time. *HOME* country factors can include home country measures. *HOST* country factors include market size, infrastructure (measured by phone lines) and political stability. *RTA* denotes a measure of whether a country is party to one of the main regions analysed in detail in Te Velde and Bezemer (2006). *HCM* is a measure of an HCM.

Table A1 provides the results of regressions that pool United Kingdom FDI for 66 countries over 1996–2000 and use OLS estimation with robust t-statistics. This shows that amongst other variables, (the log of real) ECGD investment exposure is positively and significantly correlated with FDI. If FDI is 10% higher in one country, investment exposure is higher by 1.2%. However, when we use a dynamic error correction model with (lags of log of real) ECGD exposure explaining changes in United Kingdom FDI stocks (table A2), the effect becomes insignificant. This supports the analysis in the text, suggesting that ECGD's impact on FDI is limited.

Table A1. Explaining United Kingdom FDI, 1996-2000

	Ln (FDI)
Ln (GDP_host)	0.61 (12.5)**
Phonelines per 1000 inhabitants	0.004 (5.0)**
Regional Integration Agreement	0.76 (5.8)**
Political Stability	-0.09 (-0.7)
Ln (ECGD)	0.12 (2.3)**
No of observations	213
R-squared	0.59
Robust standard errors	Yes
Estimation method	OLS

** denotes 5% significance level, t-statistics between parentheses.

Table A2. Dynamic specifications for United Kingdom FDI 1997–2000

	Δ Ln (UK FDI)
$Ln(UK\ FDI)_{-1}$	-0.19 (-4.4)**
$Ln(GDP\_host)_{-1}$	0.17 (3.6)**
Regional Integration Agreement$_{-1}$	0.21 (2.5)**
$Ln(ECGD)_{-1}$	0.06 (1.4)
Political Risk$_{-1}$	-0.00 (-0.0)
ΔLn (GDP_host)	1.32 (0.6)**
No of observations	141
R-squared	0.18
Robust standard errors	Yes
Estimation method	OLS

** denotes 5% significance level, t-statistics between parentheses.