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**Incentives-based Competition for Foreign Direct Investment:
The Case of Brazil**

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INCENTIVES-BASED COMPETITION FOR FDI: THE CASE OF BRAZIL

I. Introduction

1. The general benefits of attracting foreign direct investment (FDI), and the potential of FDI as a tool for regional economic development in particular, are commonly recognised by policy makers and analysts. A recent study prepared under the auspices of the OECD Committee on International Investment and Multinational Enterprises concluded that FDI generally supports growth in developing, emerging and transition economies, irrespective of their initial state of development¹.

2. In the case of particularly poor or depressed areas, savings are usually low and insufficient to finance major investment. If, moreover, local businesses are curtailed in their access to markets for borrowed funds – markets that in any case are often not the most appropriate source of finance for high-risk projects -- FDI often appears as the most promising source of stable and “patient” long-term finance.

3. More highly developed areas generally have a wider choice of potential investors and sources of finance, but they nevertheless often display a revealed preference for FDI. This preference is founded in the fact that foreign investors tend to bring with them benefits that not every domestic investor can confer on the host economy. The benefits generally come in three different forms:

- First, foreign corporate presence commonly leads to improved trade linkages -- among regions as well as internationally. Where policies in the past aimed at using foreign investors as a tool for import substitution or boosting exports, it is increasingly recognised that foreign corporate presence tends to boost both imports and exports by giving the host location better access to the investors’ global networks.
- Second, FDI may have a beneficial direct effect on domestic enterprises and markets. In particular, the OECD study identified a number of cases in which the experiences with foreign participation in privatisation have been positive, in the sense that the entry of foreign strategic investors helped improve corporate governance, introduce new technology and boost efficiency. The Brazilian privatisation programme was quoted among the examples. Foreign market entry has in many cases also had a positive effect on competition in previously shielded markets. However, a note of caution needs to be struck here: if foreign entrants gain a dominant position in national or local markets, competition and trade policies will be challenged to ensure that they do not have opportunities to abuse their market share.
- Third, foreign corporate presence is capable of producing significant spillovers to the local business sector. The two areas where this channel seems to be particularly strong are technology transfer and human capital formation. Through their linkages with domestic enterprises -- on recent evidence, mainly their suppliers -- foreign-owned enterprises may share their know-how with the local business community. As for human capital, foreign-owned enterprises tend to spin off a number of trained employees, and in many cases also managers, whose specialist skills then benefit unrelated enterprises or serve as a source of entrepreneurship in the local economy.

¹. OECD (2002a).

4. These benefits do not occur automatically: Policies matter. Surveys of investor intentions (cited by the OECD study quoted above) indicate that investors are generally concerned with the quality of the so-called “enabling environment” for investment, which covers a whole range of issues, from macroeconomic stability, to structural factors, to public and corporate governance. Two qualities that particularly seem to improve an area’s chances of attracting investment are market size and transparency.

- As for market size, it almost goes without saying that a big economy is more attractive to the enterprise sector than a small one. However, it should be noted that even a small area can make itself part of a large economy through policies of openness to trade and by pursuing regional trade integration initiatives.
- Transparency has many faces. In particular, investors have displayed great sensitivity to the respect of law, the quality of public and private governance, the pervasiveness of corrupt practices and the degree to which authorities adhere to the principle of non-discrimination.

5. That said, and while national governments are generally well advised to focus their efforts at attracting FDI largely on improving the enabling environment, regional and local authorities often pursue their development objectives through the use of more targeted policies toward investment attraction. A centrepiece among these is the practice of offering investment incentives (tax reductions and other fiscal concessions, cash grants and loans, start-up assistance to investors, etc.) either generally or to attract prioritised investment projects.

6. From a general economic viewpoint, such practices may be a suitable tool for regional development when they are non-discriminatory (i.e. offer similar incentives to like classes of investors, whether domestic or foreign) and correct proven weaknesses in the domestic environment that cannot otherwise be easily addressed. Also, where local authorities aim to jump-start economic activity in a given sector, investment incentives have sometimes proved instrumental in attracting a “critical mass” of relevant enterprises. Indeed, the experiences of recent decades in both OECD countries and developing economies (notably in South East Asia) include several apparent success stories².

7. However, the use of such instruments represents a risky strategy. First, deciding how much to subsidise investment projects -- and by means of what instruments -- involves difficult political and economic choices. Authorities have to address these challenges and put in place appropriate regulatory and analytical frameworks -- at the risk of finding themselves over-subsidising projects or creating unintended economic disturbances if they “get it wrong”. Within federal countries there is moreover a risk that regional authorities find themselves bidding competitively against each other (as also demonstrated by recent Brazilian experience) without ultimately influencing the direction of investment flows very much. On the other hand, competition may also serve to enhance the efficiency of capital allocation, but this advantage needs to be weighed against the budgetary cost of achieving it.

8. The remainder of this paper is organised as follows. Section II lists a number of challenges that local authorities may want to address to ensure that their incentive policies are economically sound from the viewpoint of an individual jurisdiction. Section III raises additional concerns that may arise when local authorities compete against each other. Section IV lists some concrete examples of incentive competition within the Brazilian economy. Section V sums up some of the main issues.

² This is discussed in more detail by Oman (2000).

II. Challenges for individual authorities

9. The first question authorities will want to ask themselves is whether a policy of offering incentives to foreign investors makes sense at all. The importance of an attractive enabling environment is such that in many cases it may be more effective -- and cheaper to the public purse -- to pursue policies of structural reform as a way of competing for investors' attention. However, once a decision to offer incentives has been made, the individual jurisdiction is faced with a panoply of policy concerns arise that can be clustered broadly into four categories: (i) frameworks for policy design and implementation; (ii) the appropriateness of strategies and tools; (iii) the design and management of programmes; and (iv) transparency and evaluation. These are reviewed in more detail below.

a) Frameworks for policy design and implementation

10. National authorities (or the lowest levels of government that have legal jurisdiction, in the case of a federal system) need to decide how much power of decision to devolve to lower levels of government. This choice is influenced by the nature of FDI incentive strategies that are pursued. Those jurisdictions that choose general strategies, or sectoral strategies that are tied closely to general industrial policy, have less incentive to devolution than those who focus on the regional aspect of FDI attraction (or, of course, those who are bent on "chasing anything that moves"). The main advantage of giving the local level a freer hand lies in the more intimate knowledge of industries and individual investment projects that is available locally, but this comes at a risk of triggering competitive bidding and other wasteful practices within the jurisdiction.

11. The actual implementation of FDI promotion activities is in most cases left to specialised IPAs, which often enjoy a high degree of autonomy and are supervised directly by domestic policy makers³. However, given the diversity of incentive measures and the different levels of government involved, the main responsibility for implementing FDI incentive policies in several countries rests outside these specialised agencies, which in those cases limit themselves to an advisory and intermediary role. Regardless of the placement of the administrative and political responsibilities, it is commonly agreed that the implementation of FDI incentives should be guided by a set of clear predetermined policies communicated to the competent authorities by policy makers. High standards of accountability and disclosure vis-à-vis the general public are also helpful in creating clarity and building support for the government's strategies.

12. It may, however, be difficult in practice to hold policy implementation to such high standards. In some cases, the management of incentive programmes is, for instance, made more difficult by political pressures and media speculation. It is notoriously difficult for public sector managers to negotiate with a potential investor when the contents of negotiations are at the same time being debated in the legislature or media. Also, regional or sector-specific programmes are reportedly prone to become subject to political pressures aimed at having their resources applied beyond original mandates. The result can be both ineffective incentives and the breakdown of policy-coherence in the application of FDI incentive strategies.

b) The appropriateness of strategies and tools

13. One of the most fundamental strategic choices facing policy makers offering FDI incentives relates to the economic costs of maintaining a non-level playing field. In offering incentives specifically at foreign investors, authorities depart from the principle of non-discrimination. In practice, graduated

³. This is, for example, discussed in more detail in OECD (2002b).

approaches range from measures that mildly favour FDI to schemes that are exclusively available to foreign entrants. In positioning themselves between the two extremes, authorities need to carefully assess the value of a maintaining a level playing field against the increased costs of making measures generally available. The costs include a direct budgetary effect and a knock-on effect via the health of the domestic business sector:

- The authorities' choice would have to depend on a quantitative assessment of the relative merits of foreign versus domestic investment. Also, authorities pursuing general strategies would normally be more concerned about the budgetary cost of making investment incentive schemes generally available than would authorities who target their strategies toward relatively narrow sectors or geographic areas.
- Once it is known that incentives have been provided to foreign-owned enterprises, or that discretionary incentives might be available, other investors may threaten to move away (or hold back on investment as a negotiating ploy). The likely winners are the more mobile businesses that are able to gain incentives in response to such threats. The losers are businesses unable or unwilling to threaten mobility. Smaller firms, in particular, may be disadvantaged by their lack of capacity to negotiate an incentive agreement.

14. Not all types of FDI incentives are equally suited to the pursuit of different categories of FDI attraction strategies, but the relative merits of each type have to be weighed against its budgetary implications. Generally, financial incentives leave authorities with more leverage over the actions of the recipients and are therefore more suited to targeted FDI strategies. Similarly, they are easier to use in policies of compensating investors for structural disadvantages. Fiscal incentives are arguably more appropriate for policies of improving the general climate for foreign direct investment, and for foreign corporate presence more generally. However, national FDI incentive policies in many countries appear to rely excessively on fiscal incentives. The reason for this is that the up-front budgetary impact of deferred or foregone tax revenues is much smaller than the direct outlays needed for financial incentives. Authorities should heed the risk of being too sanguine about the cost of fiscal incentives. Their actions need to be guided by careful assessments of the present value of future foregone revenues.

c) *The design and management of programmes*

15. Minimising the deadweight loss -- i.e. the risk of paying subsidies to investment projects that would have taken place anyway -- is one of the most important challenges for policy makers. This too involves a trade-off between discrimination and budgetary costs, for general FDI incentives necessarily involve a greater risk of deadweight losses than measures that can be applied subject to discretion. However, risk of the latter contributing to deadweight losses as well may increase over time. A jurisdiction that has a history of offering generous discretionary FDI incentives finds it difficult to deny new foreign investors a similar degree of generosity.

16. The time profile of incentives is also important. It has often been argued that FDI incentives should not be too front-loaded. The risk is that "rent seeking" or "footloose" investors will stay only until the incentives ends (or until they are offered more by a competing jurisdiction). This is particularly the case where FDI incentives are general and transferable, such as cash payments and up-front tax breaks. On the other hand, a political willingness to commit FDI incentives up-front is often seen by investors as essential to offset the loss-making early period or as an important signalling device through which authorities make it clear that they bet on a long-term relationship.

17. To discourage investors from opting out, many incentive agreements contain “claw-back” provisions in the event investors fail to meet their obligations, including formal recovery and payback procedures. Tied to this is the existence of parent company guarantees and similar contractual arrangements that give strong assurance of limits on incentives expended. However, such contractual undertakings can be difficult to monitor unless carefully constructed, and investors may in most cases cite “market conditions” and scale down or leave before meeting their obligations under any incentive agreement.

18. Authorities may also choose to couple the offering of front-loaded incentives with demands that investors undertake certain contractual obligations (e.g. undertake subsequent investments). However, a fine balance would need to be struck. In particular, contractual obligations should generally not rise to the level of actual performance requirements, which numerous studies have concluded are counter-productive from the viewpoint of attracting and benefiting from FDI. Performance requirements as such are limited or proscribed by many international investment agreements.

19. At the more practical level, a number of jurisdictions appear to have a tendency to underestimate the resources needed for an efficient implementation. Many implementing authorities lack the data, the expertise, the special skills, and the senior management time required by incentive programs. In particular:

- Incentive programs are resource intensive to finance and to manage, and, in particular, most incentives are administratively burdensome. Administrative requirements and capacities need to be taken into account when any programme or piece of legislation is being considered.
- Negotiation of incentives requires special negotiating skills and expertise in the application of particular instruments. The investor will be well supported in that regard. Moreover, investors have -- and expect from the competent authorities -- a speed of decision-making that exceeds normal bureaucratic standards.

20. Finally, a caveat relates to the actual value of incentives to investors. First and foremost, it is one thing for governments to share the risk of an initial investment in a new location, but the investment has to make business sense without the support of public funds. The design of FDI incentives needs to be carefully considered, not only in terms of creating macroeconomic or sectoral subsidies, but with an eye to the concrete benefits to individual investors.

21. The value and costs of fiscal incentives can vary considerably depending on the investor’s circumstances and the nature of its presence in the host country (e.g. through a subsidiary or a branch). Other important factors include the tax laws of the home country, as well as agreements -- or the absence of agreements -- governing taxation between the home and host countries. In fact, it has been asserted that many incentives on offer are of little relevance or interest to the investors that are being targeted. Unless an incentive package represents a meaningful cost reduction and goes directly to the firm’s bottom line, its value could be discounted despite the possible costs to the implementing authority.

d) *Transparency and evaluation*

22. The FDI attraction strategies should be communicated to the enterprise sector (and civil society) in a timely and transparent manner. While the implementation of strategies at the individual company level may, depending on the circumstances, necessitate an element of discretion and confidentiality, authorities have strong incentives to make their general thrust clear to investors. First, this has an important signalling effect vis-à-vis these enterprises that are relevant to strategies pursued. Second, it gives the enterprises sector at large an opportunity to inform themselves and communicate any misgivings

to the relevant authorities, which need to take such information into account in the design and evaluation of their strategies.

23. Many national or local authorities already review the relevance and appropriateness of their FDI incentive strategies at regular intervals and make the results public through annual reports or other communications with the public. In addition, elected officials, for instance through parliamentary bodies, and national audit courts may choose to perform evaluations of their own. In doing so they may not wish to rely solely on the assessments of the implementing agencies. For example, they have the option of involving business sector representatives, national audit courts, the academic community and international organisations in discussions about the role of FDI incentives.

24. Conversely, if proactive communication strategies are considered as being too resource intensive for some authorities, a policy of disclosing a “minimum sufficient” amount of information to the general public could be pursued. This would allow any interested party outside the government to analyse to costs and benefits of incentive programmes, ex post if not ex ante.

25. It follows from several of the points already made that a crucial prerequisite for avoiding wasteful FDI incentives is the implementation of sound and comprehensive practices for cost-benefit analysis. The analysis does, at a minimum, need to develop an assessment of the total benefits derived from foreign direct investment projects, and of the total costs not only to the public purse but to the host economy as a whole. Doing so in practice involves numerous challenges, some of which are:

- Good, professional cost-benefit analyses and programme evaluations cost money. The latter may also require legislative authority.
- It is not always clear at what point in time cost-benefit analysis should be applied. It may for instance be done before a specific incentive “deal” is reached or after the deal has been in operation for some time. Also, the entire policy or strategy may be made subject to cost-benefit analysis. Ideally, all three categories of analysis should be undertaken, but resource limitations may in practice preclude this.
- There is no common agreement about what exactly to include in cost-benefits analysis. A number of cost-benefit models (and programme evaluation models) exist, but all of them have recognised limitations. Moreover, important provisos relate to the quality of data available and to the implementing authorities’ possible incentives to over-report the success of their activities. More specifically, this raises some additional challenges:
 - i) Typical quantitative methods require reliable, current data (and data collection capacity), as well as persons with the technical expertise to carry out the analysis, and to benchmark results against other jurisdictions or programs.
 - ii) Those offering incentives should not be excessively dependent on investors for critical information affecting possible analysis or commitments, a determination of opportunity costs, or the monitoring and evaluation of incentive programs.
 - iii) Specific problems may arise when assessing the cost of fiscal incentives. For example, the subsidies involved in the granting of investment tax credits can be so deep that corporations cannot use all their credits and are owed additional revenue back from the fiscal authorities almost indefinitely, thereby creating a very long-term and somewhat unpredictable fiscal liability.

26. Some more practical problems with monitoring programmes and investors may also present themselves. An important challenge for authorities is the complexity of the relationship between investors and authorities, which may dent their analysis and make them rely on hearsay. Agreements that make no provision for subsequent or periodic monitoring and evaluation, and the publishing of the results, can lead to a failure to perform, to a lack of accountability, and to a loss of mutual trust.

27. Unclear agreements between investors and authorities -- several different authorities, in some cases -- are sometimes drawn up, which are difficult to manage, monitor and enforce. In more extreme cases a general lack of clarity may expose authorities to opaque or dishonest practices by investors. For instance, incentives may invite abuses, such as aggressive tax planning techniques, transfer pricing, “round tripping”, “new firms for old” or the sale of duty-free imports. Grants or other discretionary incentives can also give rise to corruption or bribery.

III. Incentive competition

28. What are the national welfare consequences when many local governments adopt investment incentives, however individually rational? Local authorities obviously have to aim for incentives that are optimal not only from the local point of view, but which also take into account the strategic imperative to compete with other local authorities for the benefits of investment. The process of offering competitive incentives is often termed a ‘bidding war’. This describes a situation in which it is individually rational for authorities to increase their offer of incentives to firms, but the collective effect of this competition may produce unintended consequences.

29. The consequences of competition can produce both positive and negative welfare effects. As indicated in the previous section, *local* welfare is affected when competition changes the *level* of incentives on offer. If, on the other hand, competition causes governments to increase the quality and volume of their FDI inflow through more effective and cost-efficient incentives, then the domestic effects are positive. On the other hand, in some circumstances competition may exacerbate poor incentive policies, potentially leading officials to use inefficient incentive instruments or to offer incentives that are greater than the net benefits of the investment project to the host country. In such a scenario the government will have ‘over-subsidised’ the investment project and competition may lead to a misallocation of resources and negative domestic welfare consequences.

30. *National* welfare is affected when incentives cause the spatial *distribution* of investment to change. If competition improves the distribution – allocating investment projects to the location in which they are most profitable – then welfare is increased. If competition leads to unnecessary shifting of investments or distorts the allocation of projects then competition might be wasteful and welfare will be reduced.

a) *The potentially positive and negative effects*

1) *Positive effects*

31. Incentive competition has been praised for encouraging the creation of business-friendly environments and facilitating the efficient allocation of investment.⁴ Indeed, in recent years there has been

⁴ See also Charlton (2003).

considerable ‘revisionist’ research on the positive effects of aggressively competitive industrial development programs.

32. The basic argument for why competition between host economies for mobile capital is good goes back to the Tiebout Hypothesis (1956)⁵ which shows how competition among governments may ensure that taxes are efficient. Efficiency in this sense means that taxes are driven to a point at which they reflect the cost of providing public inputs, like infrastructure and trained labour, to the marginal firm.⁶

33. In the conclusions of so-called ‘Leviathan models’, tax competition also improves welfare because it forces government officials to reduce wasteful expenditure. Brennan and Buchanan (1980) argue that tax competition improves welfare, because the size of government would be excessive in the absence of this competition.⁷ Wilson (2001) notes that when governments spend more on incentives, they have smaller budgets for redistribution purposes, perhaps resulting in less utilisation of the political process by interest groups engaged in potentially wasteful rent-seeking.⁸

34. Incentives may also be welfare enhancing if they lead to a more efficient spatial distribution of capital. Indeed incentives are widely used in practice for the purpose of attracting investment to underdeveloped regions. Bartik (1991) argues that even if incentives just shift jobs from one location to another, they are beneficial to the extent that they result in a concentration in relatively low-growth or high-unemployment regions. This is because the benefits of jobs created in distressed areas will exceed the benefits foregone in lower unemployment areas. The benefits of this transfer were described in Wood's (1994) and Williamson's (1997) hypothesis of the beneficial effects of international trade and movement of capital in developing countries.⁹ Fisher and Peters (1996) find mixed evidence on this issue.¹⁰

2) *Negative effects*

35. Criticism of incentive competition can be roughly separated into two categories: basic concerns about the transfer of resources from governments to firms through incentives; and efforts at documenting the inefficiencies that can be created by them. This section focuses on inefficiencies rather than distributional concerns.

⁵ Tiebout (1956), pp 416-424. Tiebout's Hypothesis relies on many strict assumptions, including the full availability of information and perfect foresight of governments, which would be unlikely to hold in practical circumstances.

⁶ Tiebout's initial hypothesis related to general tax competition for mobile households. However it can also be applied to mobile firms (White, 1975).

⁷ Brennan and Buchanan (1980).

⁸ Wilson (2001).

⁹ Williamson (1997) and Wood (1994).

¹⁰ Fisher and Peters (1996). After analysing the returns for 16 hypothetical firms in 112 cities across 24 states, the study finds only weak support for either of these hypotheses. It concludes that “after at least a decade and a half of intense competition for investment and jobs, and the widespread adoption of pro-development tax policies and development programs, states and cities have produced a system of taxes and incentives that provides no clear inducement for firms to invest in higher-unemployment places.”

36. One of the main themes of academic literature is that investment incentives may lead to fiscal haemorrhaging and hence lower spending on public goods below efficient levels.¹¹ Oxfam (2000) estimates that developing countries lose USD 35 billion per year due to a competitive pressure to reduce corporate tax rates combined with the transfer of profits out of developing countries to low-tax environments.¹² The simplest paradigm of incentive competition is summed up by Oates (1972) “The result of tax competition may well be a tendency towards less than efficient levels of ... local services. In an attempt to keep taxes low to attract business investment, local officials may hold spending below [optimal] levels.”¹³ Oates concludes that in a world where every government offers incentives, the game is zero-sum from the point of view of global welfare and negative-sum from the point of view of governments. All governments would be better off having used their resources to fund efficient public investment.

37. A second argument against incentive competition is that it might cause authorities to pay too much for investment projects (i.e. the ‘winner’s curse’ and ‘beggar-thy-neighbour’ scenarios mentioned below) leading to inefficiently high subsidisation of international firms at the expense of the domestic economy. The risk of such outcomes is compounded by the fact that valuations of the benefits of investment projects depend on identifying and quantifying ‘positive spillovers’, which is notoriously difficult. Political pressure on governments to be seen as job winners, to send signals or to attract ‘landmark’ investments also mitigate in favour of overbidding¹⁴. The public pressure to preserve and create jobs pushes policymakers to ‘play the game’ (Wolkoff, 1992)¹⁵. In a similar vein, studies in Ireland have indicated that the contributions of foreign companies to Irish GDP, export and employment growth may have been exaggerated in public debate.¹⁶ Competitive investment incentives support industries for political rather than economic reasons. For example they tend to be offered to the most mobile producers and not to ‘captive’ producers. This may lead to a relative over production of goods made by mobile producers. It also tends to operate as a subsidy to foreign firms.

38. Finally, incentive competition might also lead to excessive firm turnover. In the presence of incentive competition, firms may be inclined to reduce the ‘depth’ of their investment in any one location, enabling them to move more easily, and capitalise more frequently on incentive offers¹⁷.

39. Summing up, the negative scenario is a classic ‘prisoner’s dilemma’ situation. States are better off collectively if they limit the size of incentives offered to firms, but this co-operation is unstable because any individual state knows that it would be better off if it deviated from the coalition and lured firms by itself.

¹¹ The cost per job, expended in the form of direct and indirect incentives can exceed US\$ 100,000. Indeed the Mercedes investment in Minas Gerais in Brazil involved a cost of incentives per direct job of about US\$ 340,000, of which 92 per cent are fiscal incentives (Oman, 2000).

¹² This estimate combines the cost of tax incentives and other tax measures (Oxfam, 2000).

¹³ Oates (1972).

¹⁴ Biglaiser and Mezzetti (1997) investigate a model in which attracting mobile firms provides a state governor with the opportunity to engage in activities that imperfectly signal his ability to voters. They show that competition in this framework can lead to overbidding and even inefficient location.

¹⁵ Wolkoff (1992).

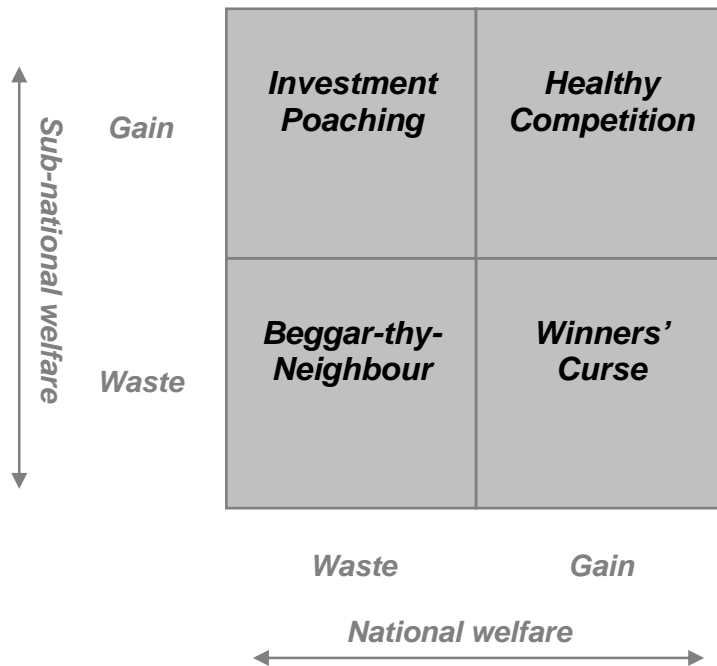
¹⁶ PACEC (1995).

¹⁷ Wilson (1996) builds a model in which excessive turnover is generated by the use of initial subsidies such as tax holidays, and Bond (1981) found empirical evidence pointing in this direction.

b) *Efficiency overall: combining the local and national scenarios*

40. Combining the criteria for wastefulness developed for the national and the domestic dimensions, the range of possible welfare outcomes produced by competitive incentive bidding for investment can be presented in a matrix form.

Matrix of welfare outcomes from the use of investment incentives



The four outcomes may be categorised thus:

41. *Investment poaching.* This occurs when incentives operate to enhance the efficiency of the local economy but have negative effects on national efficiency. This is for instance the case where one regional body lures an investment project from a location in which it was naturally more efficient. In such a scenario, there may also be no net employment creation and the investment could be less profitable (net of incentives) after the move. Another example relates to the case where incentives are effective in attracting firms to a particular location, but have the unintended consequence of changing the behaviour of investors. Firms could respond to greater incentives by becoming more ‘footloose’, moving between locations more frequently and engaging in ‘incentive shopping’ or rent-seeking activities.

42. *Healthy competition.* In this win-win scenario, incentives produce local efficiency, in the sense that they improve the flow of investment projects. Competition for investment also delivers nation-wide efficiency, ensuring that investment projects are matched to the locations in which their value is greatest. Incentives instruments are carefully chosen to have minimum distortion and their size is calculated to produce the maximum benefit for total welfare. In particular, this will be the case where incentives are picked to closely reflect the eventual spillover benefits to the host economy from foreign corporate presence. In this case, the country bidding the highest will *ceteris paribus* be the one where the potential efficiency gains are the largest.

43. *Beggar-thy-neighbour*. Beggar-thy-neighbour outcomes are the most potentially harmful consequences of bidding wars. They occur when the use of incentives produces both the negative nation-wide efficiency effect described above, and additional local inefficiencies. Local inefficiencies can result from poor incentive policies, implementation problems or errors in the estimation of the potential benefits from an investment project. For example, authorities might create inefficiencies by attracting a firm, which is not suited to the local area's capabilities and natural resources. Alternatively, local inefficiencies can occur when the potential benefits from an investment project are overestimated, leading to overbidding and a net loss to the government.

44. *Winners' curse*. This problem of systematic overbidding is a common feature in any auction of an object with an uncertain value. Even if the bidding process is nationally efficient, in the sense that the project was 'won' by the location in which its value is greatest, the bidding authorities may lose if they have paid too much for the investment. This scenario involves nation-wide efficiency, but local inefficiency.

c) *Options for policy makers*

45. Policymakers will wish to develop a workable policy approach that reduces the negative effects of bidding wars without preventing national or sub-national governments from pursuing legitimate industrial policy goals, such as regional development or sectoral promotion. However, in practice this often involves balancing a trade-off between conflicting policy requirements.

46. If authorities were to embark on cross-country (or cross-jurisdiction) policy action, there are essentially three options, representing three levels of ambition with regards to the objectives being pursued. In ascending order these are: (1) transparency-enhancing measures; (2) co-operation between jurisdictions; and (3) the putting in place of enforceable rules. In the case of Brazil, measures of the third kind are already in place in the form of the national government's right to veto some kinds of incentives. The following sub-sections focus on the first two options.

1) *Transparency*

47. It has been argued that "the most effective reform would be informing citizens and policymakers what the costs and the benefits are".¹⁸ Currently, most citizens and, apparently, many policy makers do not know what is actually spent (on and off budget) on investment incentives. Very few national and sub-national authorities have thorough accounting practices, which quantify and consolidate all channels of business assistance. The multitude of government agencies and independent and private agencies that are involved arguably compound the opacity.

48. To some extent it is understandable that authorities have been traditionally reluctant to divulge information about their incentive packages. Governments seek to avoid the public backlash from some parts of the electorate which might be hostile to incentives, and also to avoid setting a precedent which future investing firms could use to ratchet up their incentive demands. However, and even though these considerations are to some degree legitimate, there are significant benefits available to nations that are willing to increase the transparency and accountability of their incentive payments. At a minimum, proper accounting for incentives should give a clear picture of the true level of state resources being spent on economic development, assisting governments with planning and ensuring they effectively align expenditure with policy goals.

¹⁸

David S. Kraybill, regional economist at Ohio State University.

49. Further, increased transparency across jurisdictions would increase the bargaining power of governments in incentive negotiations. Where incentive offers are opaque, the investing firm has an advantage over the bidding governments who do not know the size of each other's bids. Firms may succeed in capitalising on the opacity of the negotiating processes. Anecdotal evidence suggests that the bidding process for some auto plants in particular has involved veritable cloak-and-dagger techniques. In some cases this allowed investors to play governments off against one another by selectively disclosing the best elements of the packages offered by each one.

50. Transparency measures may also operate to reduce the scope for corruption. Oman (2000) highlights the potential that investment competition has, particularly in developing countries, to generate graft, corruption and other rent-seeking behaviour.¹⁹ Greater accountability and less discretion on the part of government officials reduce the opportunity for corrupt activities.

51. In these ways, increased transparency in incentive packages has the potential to minimise the disadvantages of incentive competition described in the previous sections, whilst not greatly impinging on its positive aspects. There are several reasons to suggest that an *international* policy approach would be the optimal way to introduce transparency. Whereas no state receives an individual benefit from unilaterally disclosing the extent of their incentive packages to other states, there is a clear dividend from co-operation if all governments simultaneously take this step. If states have full information about each others incentive packages then they are less likely to be taken advantage of by firms playing several governments off against each other.

52. However, the downside of broad incentive disclosure should not be ignored. First, good reporting is costly. Proper assessments are a significant administrative burden and may also antagonise or discourage investing firms. Proper evaluations are difficult and subject to considerable uncertainty. Ascertaining the cost-effectiveness of incentive programs often depends critically on whether a firm would have invested without such incentives or whether another opportunity would have arisen in its absence -- which are inherently speculative questions. Moreover, evaluation errors can be costly. Negative evaluations may be used to terminate schemes and positive assessments might be discounted by opponents of incentives.

2) *Co-operation between jurisdictions*

53. The introduction of comprehensive and transparent accounting practices for incentives has the potential to increase the effectiveness of incentives and reduce wasteful expenditure. However, waste due to poor information is only one of the negative effects of bidding wars described in the previous sections. To the extent that strategic competition creates a 'prisoner's dilemma' in which it is *individually optimal* for nations to offer incentives exceeding the efficient level, then no extra information will encourage governments to bring their incentive bids down. The potential effect of the prisoner's dilemma provides a rationale for co-operation between jurisdictions.

54. Unfortunately, the nature of the prisoner's dilemma makes co-ordination notoriously difficult to sustain. Attempts by nations, and regions within nations to form investment alliances or reduce competition have often been unsuccessful.²⁰ In 1991, New York, New Jersey and Connecticut signed an agreement to stop offering incentives to businesses relocating from one state to another. However, one of the signatories broke the agreement before it had lasted a week. In 1993, the US National Governors' Association adopted non-binding "guidelines for the de-escalation of interstate bidding wars", but this has

¹⁹ Oman (2000).

²⁰ On efforts to forge investment alliances among developing nations, see C.P. Kindleberger (1969).

yet to be broadly successful.²¹ Another national example is the investment provisions in Canada's Agreement on Internal Trade (for details see text box).

Box. The Canadian experience with curbing incentives competition

Canadian policy regarding the offering of incentives to lure business investments in competition with other jurisdictions within Canada consists of two elements. The first element is the Agreement on Internal Trade (AIT) that was signed by the federal and provincial governments in 1994. Secondly, legislation in most provinces prohibits Canadian municipal governments from offering "bonuses" or firm-specific incentives to lure businesses to their jurisdiction from elsewhere in Canada. The latter element of Canadian policy may arguably have had the greater impact.

Article 607 of the AIT provides that "parties to the agreement may not discriminate against an enterprise on the basis of ownership, control or location of an enterprise within Canada. Annex 607.3 establishes a "code of conduct" on incentives which requires parties to the AIT not to offer "poaching incentives" and to make "best efforts" to avoid incentives that distort economic activity.

Canada's AIT is not principally a tool for central influence over sub-national levels of government. Rather, the primary reason for the prohibition of sub-national incentives is a consensus amongst municipal leaders that they do not wish to compete with each other by offering investment shifting incentives, for fears of getting caught up in situations such as the "prisoner's dilemma". It was in response to requests from municipal leaders that provincial governments moved to outlaw "bonusing" by municipal governments. While the original intent may have been limited to not luring existing businesses from one Canadian jurisdiction to another, the practice, if not the laws, has prevented municipalities from offering incentives to attract greenfield investments from outside the country.

However, while the original consensus amongst municipal governments appears to be holding, provincial governments themselves have appeared less stringent in applying the principle. Canadian policy is therefore very much a "bottom-up" one. More recent efforts by the federal government, to strengthen the rather "soft" provisions against incentives in the AIT, have seemingly enjoyed less priority amongst provincial Ministers.

55. The latent prisoners' dilemma problem in connection with bidding wars is made particularly intractable by a couple of additional factors. First, agreements between authorities to limit incentives use are difficult to monitor because of the difficulty in accurately estimating the true size of deals offered to investors. The precise details of incentive agreements are often not made public and governments have shown a strong desire to hide or understate the actual incentives deal. Even when all the details are revealed, the actual benefit to the firm may be quite difficult to determine. They depend critically on the value attributed to the constituent elements. For example, the value of tax holidays depends on assumptions about the future profits of the firm. Similarly, the value of free or discounted land can be subjective, and benefits such as training subsidies or loan guarantees are extremely difficult to quantify. Even more difficult are calculations attributing general expenditure to specific investments. The value of setting incentive limits is diminished if it is almost impossible to accurately determine whether those limits are being adhered to.

56. Second, another concern is that business incentives come in a wide variety of different forms. Moreover, in some countries processes are informal and government agencies have considerable discretion to create ad hoc incentives as part of the bargaining process. With such a multiplicity of available instruments through which to confer benefits on firms, most agreements can be easily circumvented.

²¹ Parrish (2001).

57. These factors make co-operation between jurisdictions inherently difficult. If any agreement is too strict then it denies the legitimate policy goals of states and will not be adhered to. If it is too weak then it will collapse under the weight of the prisoners' dilemma, since the incentive to deviate from the agreement is strong and the cost of not deviating when others do is large.

IV. The Brazilian experience

58. Policy competition to attract investment was "activated" in Brazil by the dramatic success of the 1994 "Real Plan" in cutting inflation and bringing macroeconomic stability to the country. One reason the Plan had this effect is that conditions favourable to investment in production -- and investment planning -- were finally restored, and both domestic and foreign investment responded accordingly. Another reason, perhaps less anticipated, was the distributional impact of the Plan in favour of the poorer segments of the population. That distributional impact has had both sectoral and regional dimensions: demand growth has been particularly strong for lower-income as well as middle-class consumer goods, both durable and non-durable; and demand growth in the poorest regions has been higher than the national average -- highlighting the consumption potential of those markets.

59. Also important was the consolidation of the "Mercosul" regional-integration process after December 1994, when agreement was reached with Argentina, Paraguay and Uruguay to achieve a Common Market, and Brazil's on-going unilateral policy and regulatory reforms to liberalise trade, investment and domestic competition. Average import tariffs fell from 32 per cent in 1990 to 14 per cent in 1994, for example, and privatisation of state-owned enterprises, notably in infrastructure (e.g. railroads, ports, utilities, telecommunications), subsequently accounted for a quarter of all incoming FDI. All these policy changes and regulatory reforms helped to attract FDI, as well as to promote domestic investment, which have grown rapidly since 1994. All thus also helped to stimulate competition to attract investment in Brazil, which became very active after 1994.

60. Trade liberalisation and regulatory reform combined with competition among sub-national governments to attract investment have had two types of effect on the location or relocation of production in Brazil. One effect involves some movement away from Brazil's traditional industrial pole in São Paulo to other sites in the South and Southeast regions, i.e. to areas which are relatively wealthy and benefit from economies of agglomeration in technologically relatively sophisticated activities, such as automobiles and auto parts, electronics and telecommunications equipment. The Mercosul integration process and many of the country's regulatory reforms (the latter often cited by government officials as needed to attract FDI in modern services) have also tended to promote this effect. The other effect has been a relocation of some production away from the South and Southeast altogether -- sometimes involving actual plant relocations -- to sites in the North, Northeast and Centre-West, notably in such traditional labour-intensive consumer goods as clothing and footwear, along with food products, beverages, hygiene and cleaning products. Proximity both to export markets in the United States and Europe and to newly expanding consumer markets in Brazil's poorer regions, as well as lower labour costs, are important reasons for this relocation.

a) *The "fiscal war"*

61. The so-called auto regime, by which the Brazilian government attempted to nurture domestic car production, has been accompanied by fierce competition among sub-national governments to attract investments in this sector. That competition lies at the heart of what came to be called "the fiscal war" among the states in Brazil -- and constitutes the core of incentives-based competition to attract investment in Brazil. (Thus, in Brazil as in many other countries, while sub-national governments that compete to

attract corporate investment make no formal or legal distinction between the incentives they offer to foreign investors and those they offer to promote or attract domestic investment, in actual practice that competition tends to be heavily biased towards attracting FDI.)

62. A typical auto-sector investment incentives package offered by sub-national governments includes both financial and fiscal incentives, and both state and municipal governments commonly participate²². The value of the fiscal incentives (commonly state sales-tax holidays and exemptions from municipal taxes) tends, however, to be much larger than that of the financial incentives (which commonly include the provision and preparation of the project site and buildings, along with dedicated infrastructure). The examples given below provide a far-from exhaustive illustration of the packages that were offered to car manufacturers.

63. Volkswagen's investment project in the State of Rio de Janeiro was commenced in June 1995. It was scheduled to directly create 1,800 jobs, and it benefited from financial incentives worth about US\$ 14 million (for dedicated infrastructure) and fiscal incentives worth between US\$ 83 and 155 million. The implied incentives cost per direct job is thus between US\$ 54,000 and 94,000, of which fiscal incentives constituted between 86 and 92 per cent.

64. Another big auto deal occurred in 1995/96 when the state of Paraná and the municipality of São José dos Pinhais attracted an investment by Renault involving 1,500 new jobs. In return for the deal, Renault was offered a massive incentive package including a capital contribution of up to US\$ 300 million, interest free loans and a series of local tax breaks. The government contribution also included the donation of a 2.5 million square meter site, provision of all the necessary infrastructure and utilities at the site. Renault was also to receive electricity at prices 25 per cent below market value. For the investment in Paraná, the figures suggest a total cost of incentives per direct job of about US\$ 133,000, of which fiscal incentives constituted 88 per cent.

65. A further big deal was between Mercedes-Benz and the city of Juiz da Fora in Minas Gerais. In exchange for undertaking investment of a similar size as Renault, Mercedes-Benz secured from the state and the city an equally impressive catalogue of incentives. As well as land, grants and tax breaks, the local authorities were willing to conduct extensive infrastructure development including, the construction of access roads and rail links to the plant and the development of utilities and sanitation (with lower water costs for ten years). For the investment in Minas Gerais, the figures point to a total cost of incentives per direct job of about US\$ 340,000, of which 92 per cent were fiscal incentives'

66. In 1997 the state of Rio Grande entered the fray. The authorities privatised the local port and phone company and allocated the proceeds to pay for investment incentives earmarked for attracting car plants. Both General Motors and Ford signed deals to build new factories near Porto Alegre. According to the terms of the agreements General Motors will pay no state sales tax for 15 years. Moreover, the state government is spending around US\$ 67 million to prepare the factory's site, and it also lent the carmaker 254 million *reais* at 6 per cent interest rate (the market rate was above 35 per cent at the time). Ford reportedly obtained similar terms. The generosity of these terms gave rise to considerable political controversy within the state.

67. There are signs of a cooling in the public and political attitude towards incentives. For instance, in 1999 Brazil's president vetoed a measure to offer 700 million *reais* a year in tax credits that had been

²² Some packages also include state participation in a project's equity — directly or via a public development fund — not so much as a financial incentive, at least for large investors with easy access to funding, but as a means to formalise the government's commitment to the success of the project and thus serve to mitigate political risk.

offered to Ford in return for building a new factory in Bahia. Instead, the carmaker accepted a lesser, though still attractive, deal involving an annual subsidy estimated at around 180 million *reais*.²³

b) *The broader context*

68. Looking beyond the auto industry *per se*, to the phenomenon of the relocation of production in some industries from the wealthier southern regions to the poorer northern regions, a growing mobility and readiness of firms to relocate within the country appears to have been an important factor. In that context investor survey results identify fiscal incentives and market proximity as the two most important factors, followed by labour costs, in explaining the relocation phenomenon. This evidence would seem to suggest not only that incentives are playing a key role in many investment-location decisions, but that incentives-based competition in Brazil may well remain strong in the coming years.

69. While incentives-based competition is most intense at the level of state governments, and secondarily at the level of municipalities (whose governments often team up with their state government to compete against sites in other states), the federal government is responsible for the auto regime and, as such, responsible for Brazil's most significant and elaborate investment-incentives scheme. That scheme reproduces an industrial-policy approach typical of import-substituting industrialisation, characterised by strong sectoral discrimination which effectively penalises other sectors (notably including auto parts in this case). The scheme is reproduced, and its effects greatly amplified, by state governments' competition to attract investments in this sector.

70. The federal government is additionally responsible for incentives-based competition in Brazil in the sense that it has avoided any attempt to limit such competition among the states and municipalities. This is true, first, because the federal government has consistently failed to apply existing legislation (notably a 1975 law) which authorises it to impose limits. It is true, secondly, because the country's President and the legislative leadership of states in the poorer regions agreed to block a recent initiative of the federal Senate to limit the states' use of investment incentives. The poorer regions' desire to use incentives to compete with the wealthier states to attract FDI thus appears to have been supported by the President, and, in addition to the announced concern over possible investment diversion to Argentina, may also have been an important factor behind the auto regime.

71. There is, in any case, broad agreement in Brazil that the loss of the federal government's efficiency in regional-development policy was a major driving force behind the "fiscal war" among the states. In Brazil as in other countries, there is thus an important, if somewhat less than transparent, relationship between the executive authority's use of investment incentives (and its allowance of states to use incentives) and its desire to promote development in the poorer regions by inducing investment in those regions. In Brazil more specifically, the activation of incentives-based competition since 1994 marks the culmination of a process of dissolution, underway since the mid-1980s, of the country's relatively *dirigiste* import-substituting-industrialisation development strategy. That dissolution is accompanied by a process of policy decentralisation in which fiscal resources and responsibilities are transferred from the federal government to the states (and secondarily to municipalities).

72. This decentralisation process has been occurring in a broader context of regulatory reform, regional integration (Mercosul), privatisation, and trade and investment liberalisation (with the notable exception of the auto regime), all of which have tended to strengthen market forces and contribute to the modernisation of the public sector. Increasingly, in other words, the logic of investment-location decisions

²³

The Economist (1999).

has been essentially a private one governed by cost and competitiveness criteria, rather than by political negotiations between (unelected) state and federal officials as was the case previously.

73. This new, emerging, context also induces sub-national governments increasingly to modernise and organise themselves more flexibly with a view to enhancing local competitiveness. They are learning not only how to negotiate incentives but to help investors identify investment opportunities, target potential investors, co-ordinate and professionalize their actions, and improve their own learning skills.

V. Summing up

74. The fiscal war in Brazil is hardly representative of the use of investment incentives by state governments and municipalities. Anecdotal evidence abounds of targeted investor attraction being used as a tool for regional and local economic development. There is further evidence to suggest that this has been a contributing factor to the geographic broadening of Brazil's industrial base over the last decade. However, the fiscal war may serve as an indication of the risks that occur when sub-national levels of government pursue pro-active investment incentive strategies with little regard for the action taken elsewhere and the broader national interest.

75. It is not possible to conclude on the basis of case studies and anecdotal evidence where, on a scale from the best-case "healthy competition" to the worst-case "beggar thy neighbour" scenario, the fiscal war pitted state and local authorities. However, a reported size of individual incentive packages up to US\$ 300,000 per job could be taken to indicate that subsidies have been paid in excess of the additional efficiency gains from reallocating plants within Brazil (hence, a case can be made for inefficiency at the national level). Moreover, the political controversy surrounding the generosity of some incentive packages would seem to imply that some quarters considered them to exceed the benefits even from a narrowly local perspective.

76. National and state authorities in Brazil have become increasingly alert to the risks. The central government has exercised its veto over locally-offered incentive packages. Some state governments have publicly announced their retreat from the fiscal war and their determination to compete on the basis of other factors of investment promotion such as economic environment, social amenities and infrastructure²⁴. Nevertheless, state and local authorities may wish to ask themselves whether, in addition to these individual actions at the central and sub-national levels, it would be helpful to put in place mechanisms for nation-wide information sharing or, even, policy co-ordination. If this were the case, the experiences from OECD countries (sub-nationally as well as internationally) could provide valuable insights.

²⁴. As for example stated by the Instituto de Desenvolvimento Industrial de Minas Gerais in a communication to the OECD Secretariat.

BIBLIOGRAPHY

- Biglaiser, G., and Mezzetti, C. (1997), "Politicians' Decision making with Reelection concerns" *Journal of Public Economics* 66, 425.
- Bond, E. (1981), "Tax Holidays and Industry Behaviour", *Lreview of Economics and Statistics*, Vol. 63.
- Brennan, G., and Buchanan, J. (1980), *The power to Tax: Analytical Foundations of a Fiscal Constitution*, Cambridge University Press, New York.
- Charlton, A. (2003), "Incentive Bidding for Mobile Investment: Economic Consequences and Potential Responses", Technical Paper no. 203, OECD Development Centre, Paris.
- Fisher, P., and Peters, A., (1996), "Taxes, Incentives and Competition for Investment", *The Region*, June.
- Kindleberger, C. (1969), *American Business Abroad; Six lectures on Direct Investment*, Yale UP, New Haven.
- Oates, W., (1972) *Fiscal Federalism*, Harcourt Brace, New York.
- Oman, C. (2000), *Policy competition for Foreign Direct Investment: A Study of Competition Among Governments to Attract FDI*, OECD Development Centre, Paris.
- OECD (2002a), *Foreign Direct Investment for Development: Maximising Benefits, Minimising Costs*.
- OECD (2002b), *Best Practice Investment Promotion Strategies*, South East Europe Compact for Reform, investment Integrity and Growth.
- OXFAM (2002), "Tax Havens", Oxfam Policy Papers, 6/2000.
- PACEC (1995), *Assessment of the Wider Effects of Foreign Direct Investment in Manufacturing in the UK*, Cambridge.
- Parrish, L., (2001), "Can State Incentives Compacts Work?" *Accountability: The Newsletter of the Business Incentives Clearinghouse*, Volume 3, Number 1.
- The Economist (1999), *Federal offences*, July 29.
- Tiebout, C., M. (1956), "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64: 416-424.
- Bartik, T. (1991), "Who Benefits from State and Local Economic Development Policies?" *Kalamazoo*, W.E. Upjohn Institute for Employment Research.

White, M. (1975), "Firm Location in a Zoned Metropolitan Area." In *Fiscal Zoning and Land Use Controls*, edited by Mills E., and Oates W. Lexington, MA: D.C. Heath.

Williamson, J.G. (1997), "Globalization and inequality, past and present". *World Bank Research Observer* 12, 117-35.

Wilson, J. (1996), "The Tax Treatment of Imperfectly Mobile Firms: Rent Seeking, Rent Protection, and Rent Destruction" In Feenstra, R., Grossman, G., and Irwin, D., (eds) *The Political Economy of Trade Policy: Papers in Honor of Jagdish Bhagwati*, MIT Press.

Wilson, J. (2001), "Welfare-Improving Competition for Mobile Capital", Department of Economics, Michigan State University, *Mimeo*.

Wolkoff, M. (1992), "Is Economic Development Decision Making Rational?" *Urban Affairs Quarterly* 27 (3) 340-355.

Wood, A. (1994), *North-South trade, employment and inequality: changing fortunes in a skill driven world*. Clarendon Press, Oxford.