# ONE

# Why This Book?

Few fiscal topics are more important than the value-added tax (VAT).[1] Over the last few decades, VAT has swept the world. With the notable exception of the United States most countries around the world now have a VAT. In many developing and transitional countries VAT is the most important single tax. But should every country have a VAT? Is the VAT in place in most countries as good as it should be in economic, equity, and administrative terms? Can it handle the fiscal tasks imposed by trade liberalization and other factors in recent years? Can it deal adequately with the novel issues arising from digital commerce and decentralization? Can it be administered sufficiently effectively by the already hard-pressed revenue administrations of developing and transitional countries?[2]

The answers to such questions are critical not only to fiscal stability in developing and transitional countries but also to their growth and development. Are the VATs now in place in most of these countries the efficient, simple revenue-raisers they are often purported to be? Or are they so inequitable that they may exacerbate social tensions and hence undermine

[1] We use *VAT* throughout as an abbreviation for both *value-added tax* and *value-added taxation*. The precise meaning should generally be clear from the context.

[2] As Keen and Lockwood (2006) note, the experience with VAT in most of the countries emerging from the former Soviet Union, and indeed to some extent in all the formerly centrally planned 'transitional' countries, differs in some important respects from that in developing countries more generally, essentially because of the very different starting point in transitional countries. We discuss some of these factors briefly with respect to, for example, Ukraine and China later in this book; for a more general overview of the peculiar fiscal starting point for centrally planned economies, see Wanless (1985), and for discussion of some of the fiscal issues more specific to countries in the process of transition from centrally planned to more market-driven economies, see Tanzi (1992, 1993), Bird (1999), Martinez-Vazquez and McNab (2000), Mitra and Stern (2003), and Wong and Bird (2005).

the political equilibrium reflected in a country's fiscal structure? Does VAT provide a feasible way to tap the informal sector? Or may it end up expanding the range of such activities? In this book we consider these and other critical questions about the design and performance of a tax that in recent years has become the mainstay of the revenue system in most developing and transitional countries around the world.

## THE KEY QUESTIONS

We consider three key questions in this book. The first is whether developing and transitional countries should have a VAT at all. On the whole, we think that they should. The second question is, What kind of VAT should they have? The answer to this question is by no means as clear. Different forms of VAT may be best for different purposes in different countries, so we consider a variety of possible designs with respect to various issues. Nonetheless, on the whole we conclude that much of the conventional wisdom about VAT design is sound, although we raise a few questions about how some of that wisdom has been applied in practice.[3] Further, we suggest that most developing and transitional countries should not worry unduly about such 'frontier' VAT issues as the treatment of the financial and public sectors or how to cope with electronic commerce. Such issues are at the forefront of VAT discussions in the developed world. They also matter in many developing and transitional economies to varying degrees. As a rule, however, what is much more important for most emerging economies is to concentrate on the difficult task of first getting an appropriate VAT into place and then running it effectively.

Indeed, the final and most important question for the many developing and transitional countries around that world that already have a VAT in place is how to make a tax like VAT – which to work properly relies essentially on self-assessment (as we discuss further in later chapters) – function adequately in environments that often fail to meet most necessary preconditions for a self-assessment system. Our answer involves two stages. In the first place, fiscal experts need to spend even more time and effort than they already do in determining precisely what kind of less-than-perfect VAT may function best in the particular circumstances of each particular country. There is no

[3] The best source of the conventional wisdom on VAT is a series of IMF publications: Tait (1988, 1991), Ebrill et al. (2001), and (jointly with the OECD and the World Bank) International Tax Dialogue (ITD) (2005). The most comprehensive of these studies remains Ebrill et al. (2001), which is more subtle and restrained in its analysis than the practical application of the advice contained therein seems to have been in some instances.

'one-size-fits-all' (NOSFA) solution. Secondly, much more attention needs to be paid to working out in detail exactly how countries can move over time from their initial VAT – which is almost certain for political and practical reasons to be unsatisfactory in some respects – to a good (or at least better) VAT.

It is not simple to determine how best to succeed at either of these tasks in the context of any particular country. In 1991, for example, after a careful examination of Egypt's fiscal position, its existing tax structure and its administrative capacity, as well as close consideration of then-recent experience with adopting VAT in other North African countries (Morocco, Algeria, Tunisia), Egypt introduced its first general sales tax.[4] Essentially, this tax was a VAT limited to importers and manufacturers, although the law explicitly provided for the tax base to be expanded to encompass the distribution sector at a later date. It all seemed quite reasonable at the time. Looking back, however, it is now clear that this approach was wrong.

The critical issue in VAT design relates not to the *stage* at which the tax is imposed but to the *size* of the registered firms. In 2001, when Egypt finally did extend its VAT to include wholesale and retail trade, the immediate result was to triple the number of registrants (firms registered as VAT taxpayers) with no concomitant gain in revenue. The need to deal with so many new, and mostly very small, taxpayers inevitably resulted in some loss in administrative efficiency. What had seemed a decade earlier to be a good design decision based on experience elsewhere as well as Egypt's own prior experience with manufacturers' level consumption taxes (and its limited administrative capacity) turned out to have been mistaken for at least two reasons.

First, further experience has made it much clearer than it was 15 years ago that one of the most critical VAT design decisions is the level of the threshold above which firms must register. For most developing and transitional countries we now know that it is likely wiser to set that threshold too high than too low. We discuss this issue further in Chapter 7. Secondly, experience in many countries has also shown that tempting and apparently logical as it may often be to build upon what exists – as was done in Egypt by choosing to start VAT at the manufacturers' level – countries are more likely to end up with good VAT administration if they start fresh with a VAT. One key reason is precisely that doing so reduces the likelihood that the 'stage' of the production-distribution chain is thought of as a critical element in tax

[4] While many other countries could be used to make the same point, the Egyptian example is used here largely because one of the authors was partly responsible for the initial 'mistake' discussed.

determination. Current 'best practice' advice is thus to make a clean break with old taxes and to include all firms above a (fairly high) threshold in the tax base. As the Egyptian case suggests, this advice seems generally sound. Nonetheless, it may not always be feasible to follow this advice at those rare moments in any country in which such a major tax reform as the adoption (or major reform) of a VAT becomes feasible. What should one do then? We consider this question in some detail in this book.

The key questions that must be answered in designing and implementing VAT are essentially the same in all countries. But the context within which these questions must be answered may differ significantly from country to country and may also vary over time within any one country. Different tax designs may be best for different countries or for the same country at different times. Some features of VAT design sometimes considered to be inherently desirable – such as a single rate, zero-rating instead of exemptions, or full and immediate refund of input tax credits that cannot be offset against taxes due on outputs – may not be attainable or even desirable in the context of a particular country at a particular time. Similarly, some 'bad' features – such as too high or too low thresholds, overly extensive exemptions, or multiple rates – may be essential to successful adoption in the first place. Later on, however, such features may prove to be extremely difficult to remove. Difficult choices need to be made.

In the case of Jamaica, for example, a country that introduced VAT in 1991 as did Egypt, a clear 'exemption cycle' is evident with the initial exemptions (and domestic zero-rating) being gradually expanded over time until a major reform in 2003 eliminated many of these concessions. Within a year, however, pressure to reestablish much of the relief just removed was already beginning to build up (Edmiston and Bird 2004). Similar cycles are not unknown in other countries. Nonetheless, though one may regret it later, some 'bad' initial VAT features may be an essential element in getting the tax accepted in the first place. Whether the price is worth paying is a question that countries need to consider carefully.

Anyone who has been involved in attempting to design and implement VAT in any country is well aware of such realities. Nonetheless, surprisingly little effort appears to have been made so far to help those engaged in such tasks in dealing with some vital questions. For example, precisely which factors are critical in defining the VAT design that makes most sense for a particular country at a particular time? Over the years, numerous studies have cited many factors that may affect tax level and tax structure such as industrial concentration, literacy, openness, 'tax morale,' the size of the public sector, the existence of certain political institutions, and administrative capacity.[5] Many of these same factors have a role to play in determining how a VAT should be designed. Nowhere, however, can one find either a clear picture of the relationship between such features and VAT design or any solid basis for assessing the extent to which the choice of particular design features may affect outcomes in particular contexts. This book begins the task of providing such a basis.

## WHAT LIES AHEAD

We begin in Chapter 2 with a brief review of how and why VAT has come to cover the world in recent decades. In Chapter 3 we step back a bit and consider whether the (relatively few) developing countries – mainly small islands and countries in the Middle East – that do not as yet have a VAT (as well as, perhaps, regional governments in large federal states [see Chapter 8]) should adopt one. How does a jurisdiction, national or subnational, decide when it should adopt a VAT? In Chapter 3 we discuss this question first by considering briefly the pros and cons of consumption and income taxes for developing and transitional countries and then, in more detail, comparing VAT to other forms of general sales tax, such as a turnover tax and a retail sales tax.

In Chapters 4 and 5 we turn to several critical questions about the desirability of the move to VAT and the role and effects of VAT in developing and transitional countries that have been raised in recent literature, illustrating portions of the argument with recent experiences in such countries as Ukraine and Jamaica. As mainstream economists have begun – at last – to turn their attention to VAT some recent analysis has raised questions about the trade and revenue effects of VAT, as we discuss in Chapter 4, as well as the critical distributional and developmental effects we discuss in Chapter 5.[6] We do not have clear answers yet to all these questions. Nonetheless, on the whole the best path for most developing and transitional countries is not to reject VAT but rather to attempt to understand it better and to improve its design and implementation to fit their particular circumstances.

5 Of course, many of the items listed are themselves conceptually imprecise and difficult to measure. Still, many attempts have been made to do so: for a recent summary of such studies 'explaining' tax ratios, and a recent example, see Bird, Martinez-Vazquez, and Torgler (2006). We return to some of these issues in later chapters.

6 As Keen (2006) notes, two important reasons why so little serious analytical and empirical work has been done with respect to VAT are (1) that the United States, still the main source of economic research, does not have a VAT and (2) that so few analysts actually understand how VAT works. Our aim in this book is in part to rectify the second of these problems.

Almost without exception, developing and transitional countries need both more revenue and better revenue systems.[7] A good general consumption tax is almost always a critical element in such systems, and a VAT is the best form of general consumption tax available. In the immortal words a World War I cartoonist (Bruce Bairnsfather) once put into the mouth of a soldier responding to another who is complaining about the inadequacy of the foxhole to which he has been assigned: "Well, if you knows a better 'ole, go to it." We are as enthusiastic as the next expert about well-designed selective consumption taxes (excises), moderate income and payroll taxes, sensible property taxes, and good user charges.[8] But we do not think there is a better fiscal 'hole' than VAT for most emerging countries.

The equity and distributional effects of VAT and its potentially distorting economic effects are always matters of concern. But the simple reality is that most developing and transitional countries cannot finance the education, health, and infrastructure development they need to sustain growth in the world in which we live without recourse to some form of general consumption tax. The revenue possibilities of both personal income taxes and corporate income taxes are so limited in most developing and transitional countries that the key revenue choice is generally between payroll taxes and VAT.[9] Given the critical role of the so-called informal sector in most developing and transitional countries and the extensive use in some developing countries (e.g., in Latin America) and most transitional countries of the payroll base to finance social security, VAT – despite its limitations – still seems the best road for most such countries to follow.[10] Most experienced analysts of development taxation – regardless of their political persuasion – have reached similar conclusions.[11]

Better theory should provide better guidelines for much-needed empirical analyses. To date, however, the relatively few such analyses made of VAT are based on inevitably questionable cross section or (limited) panel data

[7] Of course, they also generally need to spend the revenues that they have in better ways, but we cannot pursue this critical question further here.

[8] For earlier discussions of these and many other issues related to development taxation, see, for example, Bird and Oldman (1990) and Bird (1992).

[9] See, for example, the detailed discussion of the limited potential of personal income taxes in developing countries in Bird and Zolt (2005). Although Bird (2002) argues that the corporate income tax constitutes an essential ingredient of the revenue system, this does not imply that much revenue can or should be expected from this source in most developing countries, particularly in light of increased international competition for capital.

[10] For an interesting recent analysis of (high) taxes on payrolls in a developing country, see Alm and López-Castaño (2005).

[11] See, for recent examples, Toye (2000), Moore (2004), and Heady (2004).

and are difficult to relate in policy practice to relevant country settings. Empirical work is hampered by the fact that good data are often unavailable. Continued development of both theoretical and empirical analysis of VAT will presumably provide better 'optimal' policy designs in the future. Still, the optimal tax approach (Newbery and Stern 1987), though sometimes suggestive, has not as yet proved to be of much practical help in tax policy design in the real-world setting of any developing or transitional country. One reason is that this approach has not as yet managed adequately to include the administrative considerations that are often dominant in such countries (Slemrod 1990). Moreover, the approach does not encompass adequately the even more important political economy dimension (Moore 2004).[12] We do not attempt here to fill these important analytical gaps. Instead, one of our aims is to set out in some detail a few of the many tasks that remain to be tackled as VAT becomes, as we think it should, as important a focus for future academic and policy research as the income tax has long been.

In Chapter 6 we turn to several important issues in choosing the base of a VAT that have proved troublesome not only in developing countries but more generally – the treatment of real property; the treatment of public sector, nonprofit, and charitable activities (the PNC sector); and the treatment of financial services. We consider a number of alternative designs in each of these areas. In principle, as always when considering any real-world fiscal institution, it is obvious that more could generally be done with respect to each of these topics in even the poorest and least developed countries. Nonetheless, we conclude that even the most advanced emerging economies should not try to pioneer in such matters. One reason we do so is that we think that the distortions arising from the present admittedly imperfect bases of most VATs are unlikely to be very important quantitatively in most developing and transitional countries. However, this statement like so much else we (or others) say about VAT is at this stage necessarily a belief based more on our own (inevitably limited) experience than on solid empirical evidence.

In Chapter 7 we consider some key elements of VAT structure such as rates, thresholds, exemptions, and zero-rating, again illustrating some points with reference to experience in several countries. We conclude that in most cases

12 See, however, Munk (2006) for a recent contribution. Even this interesting paper, however, does not take adequate account of the real world of VAT administration, in which what is done is often very different from what reading the law suggests should be done, as Keen (2006) notes in a useful argument on the need for more systematic 'second-best' analysis of VAT. For an interesting example of the uses and limitations of another analytical approach – CGE modelling – in this context, see Rutherford, Light, and Barrera (2005).

there are excellent reasons for the prevailing conventional wisdom of one rate, a fairly high threshold, and as little use of exemptions and (nonexport) zero-rating as one can get away with (ITD 2005). Again, however, we note that there is surprisingly little evidence supporting much of that wisdom and that there are plausible reasons for diverging from its prescriptions in at least some instances.

Much recent discussion of VAT in the developed world has related to two relatively new phenomena. The first is the rise of digital (electronic) commerce. The second is the apparently increasing interest in a number of countries in subnational VATs. We discuss each of these questions briefly in Chapter 8. As with the frontier tax base issues of the PNC sector and financial services discussed in Chapter 6, we conclude that 'e-commerce' is not at present a matter of great concern for most developing and transitional countries and is unlikely to become a significant factor in shaping their VATs for years to come. On the other hand, we suggest that there may indeed be a limited role for some forms of subnational VAT at the regional level in at least a few such countries, especially larger federal states such as India.[13]

We conclude our review of how VAT really works in Chapters 9 and 10 by discussing a few critical administrative issues.[14] In most developing countries, as Milka Casanegra once put it, "tax administration *is* tax policy" (Casanegra de Jantscher 1990, 179). The real tax system is that which is administered, not that which appears in the formal law. It is thus critical that VAT design take into account real administrative limitations. It is equally critical that constant attention be paid not only to the many administrative design and implementation issues needed to make VAT work but also to maintaining and adapting VAT administration as necessary to confront the realities of changing countries and a changing environment. No developing or transitional country starts with a good VAT administration; all have to 'grow' one (Bird 2005). We set out some ideas on how this may best be done, again illustrating with examples from a variety of jurisdictions. In Chapter 10 we go on to consider briefly such current 'hot' topics as VAT refunds, VAT fraud, and VAT withholding systems as well as the pervasive problem of how to deal with 'semivisible' enterprises – those hidden in the 'small'

[13] As Bird (2003) argues, a different form of VAT may have a role to play as a useful addition to local taxation at least in larger metropolitan areas (as it does in Japan and Italy and as is currently being considered for implementation in Colombia and South Africa), but we do not discuss this possibility further here.

[14] For a good general discussion of VAT administration that covers aspects (such as organization) not covered in this book, see Ebrill et al. (2001).

and (more critically) 'shadowy' sectors that loom large in most developing and transitional countries.

Political considerations rule most tax policy decisions in every country. We turn in Chapter 11 to some aspects of the role that VAT and VAT design may play in sustaining 'political equilibrium' in the sense of balancing equity, efficiency, and sustainability in the fiscal sphere. We focus especially on evidence from Latin America, the region of the developing world with by far the longest experience with VAT. Finally, in Chapter 12 we consider briefly the variety of VATs found in some Asian countries and offer a few suggestions on how best to approach VAT issues in developing and transitional countries.

Even the best VAT cannot be the answer to all the fiscal problems facing the many and varied developing and transitional economies around the world. Like most human institutions, VAT is neither perfect nor perfectible. Nonetheless, some form of VAT almost certainly constitutes a critical ingredient in the fiscal answer for most countries. VAT may not always work well. In some cases, VAT can certainly be designed better to fit the context of the country. In many instances, VAT can definitely be better administered even in the face of adverse political and capacity factors. But as long as a general consumption tax makes sense as a key part of a country's fiscal system, as is surely true in most developing and transitional countries, VAT remains the best way to do the job. Our aim in this book is thus neither to praise nor to bury VAT but to pull together much of what we now know about this important tax, which has become the mainstay of revenue systems around the world, and to suggest some further lines of inquiry that seem likely to reward more detailed and deeper investigation in the future.

# TWO

# The Rise of VAT

In this chapter, we consider four simple questions. First, what exactly is a VAT? Second, which countries have VATs, and how important is VAT in these countries? Third, why has VAT spread around the world so quickly and so broadly? Fourth, is there one 'VAT world' or two?

## WHAT IS A VAT?

What exactly is a VAT? A recent definitive statement defines a *value-added tax* as "a broad-based tax levied at multiple stages of production [and distribution] with – crucially – taxes on inputs credited against taxes on output. That is, while sellers are required to charge the tax on all their sales, they can also claim a credit for taxes that they have been charged on their inputs. The advantage is that revenue is secured by being collected throughout the process of production (unlike a retail sales tax) but without distorting production decisions (as a turnover tax does)" (International Tax Dialogue 2005, 8; emphasis omitted). The same name, however – whether *value-added tax* (VAT) or the more recently favored *goods and services tax* (GST) – may cover a variety of taxes in different countries. Like the personal income tax, a VAT is not so much a single tax as a set of taxes that share certain characteristics. To put the point in zoological terms, VAT is neither a gorilla nor a chimpanzee but rather a genus like 'primates.' The Annex to this book contains a country-by-country summary of some characteristics of the VATs found around the world as of about mid-2006.[1] Here we discuss

[1] It should be noted that the list of 'VAT countries' found in Annex Table A.1 differs in some respects from the similar information contained in other recent sources such as ITD (2005) and Annacondia and van der Corput (2005) – which also differ from one another. Such differences are inevitable, given the fast-changing nature of the VAT universe and some fuzziness around its definitional edges. For instance, one can differ as to what should be