Annex G

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Fiscal Affairs Department

HONG KONG SAR

POLICY AND ADMINISTRATIVE ISSUES IN INTRODUCING A GOODS AND SERVICES TAX

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PREFACE

In response to a request from the Hong Kong SAR authorities for advice on the possible introduction of a broad-based consumption tax, a mission comprising Messrs. Howell H. Zee (head), John King (both FAD), Barrie Russell, and Alan Schenk (both FAD panel experts) visited Hong Kong SAR during November 6–20, 2000.[1] The mission was accompanied by Mr. Krishnamoorthy (FAD staff assistant). This report summarizes the mission's main findings.

During its stay in Hong Kong SAR, the mission held discussions with Ms. Denise Yu, Secretary for the Treasury; Mr. Martin Glass, Deputy Secretary for the Treasury; Mr. Albert Lam, Principal Assistant Secretary for the Treasury; Ms. Rebecca Lai, Deputy Secretary for Financial Services; Mr. K.Y. Tang, Government Economist, Financial Services Bureau; Mr. Elmo Charles D'Souza, Acting Commissioner, Inland Revenue Department; Mr. Kenneth Pang, Commissioner, Rating and Valuation Department; Mr. John Tsang, Commissioner, Customs and Excise Department; and other senior government officials.

The mission also met with the Advisory Committee on New Broad-Based Taxes, as well as the representatives of a number of interested private sector business and professional associations.

The mission is grateful to the authorities for their hospitality; and to Mr. William Lee, IMF Resident Representative, and his colleagues in the Hong Kong SAR Sub-Office, especially Mr. Y.K. Mo, for their most valuable assistance.

[1] Mr. Schenk departed Hong Kong SAR on November 13, 2000.

EXECUTIVE SUMMARY

Hong Kong SAR has one of the lowest overall tax burdens in the world and its tax base is remarkably narrow by any standard. Indeed, it is the only major territory in the Asian and Pacific region that does not have some form of a broad-based tax on consumption. However, none of these facts, in and of itself, constitutes a sufficient basis for introducing a new tax in the territory, broad-based or otherwise. Therefore, the mission welcomes the fact that the impetus for considering a broad-based consumption tax in Hong Kong SAR has arisen not based on any of these facts, but in the context of assessing the necessity of meeting possibly rising revenue needs that are of a structural nature with minimum distortions, and obtaining a more cyclically stable tax base than the present one.

The focus of the present report is not on whether Hong Kong SAR should or should not introduce a broad-based consumption tax—that decision will presumably be made by the authorities after the release of the findings, expected by end-2001, of the recently formed task force charged with the responsibility of looking into the existence of any structural budget deficits in the territory. The report's focus is, instead, on issues that are largely technical in nature. Specifically, it addresses policy issues related to the design, and administrative issues related to the implementation, of a broad-based consumption tax in Hong Kong SAR—should an eventual decision be taken to introduce it.

Given sufficient preparation time and the necessary administrative resources, almost any country—let alone a territory of Hong Kong SAR's level of economic development—can introduce a broad-based consumption tax. Nevertheless, introducing such a tax in Hong Kong SAR does pose formidable administrative challenges. (It may also pose political challenges, about which the mission does not have the competence to render an informed assessment.) Most notably, effective controls over cross-border flows of goods are currently lacking on account of Hong Kong SAR's status as a free port; and key revenue departments (i.e., the Customs and Excise Department (CED) and the Inland Revenue Department (IRD)) have no experience in administering broad-based consumption taxes. Overcoming these challenges would require the political will to reorient the mode and focus of the operations of both the CED and the IRD in a fundamental way, as well as careful and advance planning to execute such a change.

In considering broad-based consumption taxation, it is the mission's understanding that the authorities have in mind a goods and services tax (GST), otherwise known as a value-added tax, of the credit-invoice type—this being the overwhelmingly dominant practice around the world and that Hong Kong SAR has little desire to deviate from the international norm. Furthermore, in keeping with the authorities' commitment to safeguard Hong Kong SAR's competitiveness in part by keeping its tax system simple and tax burden low, the mission takes as given that the prospective GST in the territory—if introduced—would: (1) contain few exemptions, zero ratings, and special concessions; and (2) have a low single rate, presumably in the range of 3–5 percent (a rate below 3 percent could raise questions about the cost-effectiveness of introducing a GST at all). It is worth underscoring that

administrative and compliance costs could rise significantly if the design of the GST were to deviate materially from these two attributes.

Policy issues

Issues of GST design are by now quite familiar, as a large number of countries have already implemented it with minor variations. Nevertheless, the mission has singled out four issues for the authorities' special attention, on account of their particular relevance to Hong Kong SAR's circumstances.

- **Destination vs. origin principle.** Almost all countries that have a GST implement it on the basis of the destination principle (i.e., imports are taxed but exports are zero-rated). Clearly, applying such a principle requires carrying out border tax adjustments and, therefore, effective border controls—which Hong Kong SAR does not, as noted earlier, currently have. An alternative would be to implement the GST on an origin basis, taxing exports but exempting imports. While not requiring border tax adjustments, the origin principle has some major disadvantages, most notably exports will bear the GST burden, which could hardly bode well for maintaining Hong Kong SAR's competitiveness (in view of Hong Kong SAR's linked exchange rate). Other problems associated with the origin principle include import and export valuation, as well as transfer pricing issues. On balance, the mission is of the view that a destination-based GST would be in the best long-run interest of the territory, and efforts should be directed to securing effective border controls.

- **Treatment of financial services.** Financial services pose some of the most difficult problems for a GST, because they are often rendered with no explicit charges. Since such services play an important role in Hong Kong SAR's economy and face a highly competitive environment in the region, care should be given to how they are to be treated under the GST. The mission advises that Hong Kong SAR should consider adopting one of two possible approaches. It could follow Singapore's approach, which taxes most financial services for which explicit fees are charged (except those exported), and exempts all others. To reduce cascading when financial services are purchased by taxable businesses as inputs, financial institutions—notwithstanding the fact that most of their outputs are exempt—are nevertheless allowed to recover a substantial proportion of the GST they paid on their purchases. As an alternative, Hong Kong SAR could take Singapore's approach one step further and allow financial institutions to recover their input tax fully, thus eliminating cascading completely. The mission has estimated that the revenue consequence of taking the latter approach, relative to Singapore's, is of only marginal significance. Either approach is conceptually superior, and administratively simpler to adopt, than the European Union's (EU) approach of exemption with no recovery of input tax allowed.

- **Treatment of immovable properties.** The importance of the real estate sector in Hong Kong SAR's economy also necessitates a careful consideration of its GST treatment. The approach favored by the mission can be stated in fairly simple terms.

The sale and use of commercial properties, whether new or existing, should be fully taxable. This will not impose a burden on taxable businesses, since the GST so paid by them on such transactions is recoverable. Rental payments on residential properties should be exempt to avoid creating a distortion between rental and owner-occupied housing. However, the sale of new residential properties supplied by the private market should be taxed—which tax could be considered as imposed on the stream of future housing services provided by the properties. The above approach is one that is broadly followed by most countries in the region, but stands in contrast to the EU's approach, which largely exempts the sale and use of immovable properties, commercial or residential.

- **Treatment of small businesses.** Given the great number of small businesses in Hong Kong SAR, the success of introducing a GST in the territory hinges crucially on setting a small business exemption threshold specified in terms of annual turnover. Businesses whose annual turnover is below the threshold are not required—but could optionally elect—to be registered. This approach, which is almost a universal practice, reduces substantially the administrative and compliance costs of the GST at relatively minor revenue costs. This is so because small businesses, though large in number, collectively contribute relatively little to an economy's total value-added. Moreover, those who are exempt because of the threshold still pay tax on their purchases. Industry survey data on the distribution profile of business establishments by annual turnover indicate that the appropriate threshold in Hong Kong SAR would most likely be between HK$1 million and HK$5 million. More detailed data are required, however, to set the exact level of the threshold.

The mission has calculated that, based on available national income accounts data and CPI basket weights, a broad-based GST would have a base of about 38 percent of Hong Kong SAR's GDP and produce only a moderate price impact—provided that the GST rate is low. These estimates are, however, largely indicative in nature; they should, therefore, be used with caution.

Administrative issues

The typical timeframe for introducing a GST in a developed economy is around two years from the date a decision to implement the tax is taken. For Hong Kong SAR, however, given its present limitations with customs and tax administrations, as noted earlier, the necessary timeframe could stretch to three years. Since the decision on the GST is still far into the future, the present report does not address the details of GST implementation; rather, it focuses on contingency planning for both the CED and the IRD—identifying tasks that each of these departments can usefully do now in anticipation of a possible eventual affirmative GST decision. The mission suggests that the authorities consider requesting further technical assistance from the Fund, if and when such a need arises after the decision to introduce the GST is made.

- **Planning focus for the CED.** An essential first step for the CED to establish an acceptable border control environment in Hong Kong SAR would be to implement with some urgency a number of recommendations put forward by a recently completed consultancy study on customs cargo clearance requirements and services. These recommendations have to do with ensuring that the CED has timely information on the movements of goods into and out of the territory through early lodging requirements of cargo manifests, and securing better physical control of public cargo working areas, especially with respect to river trading vessels. While this step alone is not sufficient to support the effective collection of GST at the borders, it would provide a strong platform for the CED to effect further necessary changes with the advent of the GST.

- **Planning focus for the IRD.** The contingency tasks that the IRD should perform are more varied, including: (1) developing and maintaining a database—including a review of the adequacy of the present system of taxpayer identification numbers—that would capture more complete information on active businesses than is available now to better ascertain the potential GST taxpayer population and set the exemption threshold, and to facilitate information exchange between the IRD and the CED; (2) accelerating the shift to a full self-assessment system; (3) developing shorter and more targeted audits, upgrading the skills of field inspection staff, and promoting a culture of field checks at business premises that the IRD does not currently have; (4) maintaining a strong focus on improving business record-keeping standards and practices; and (5) enhancing the consultation process between the IRD and relevant private-sector business and professional groups to identify and resolve existing and/or potential tax issues in a cooperative environment. Undertaking these tasks in a timely manner would place the IRD in a better position than it is now to begin preparation for the GST's introduction.

I. INTRODUCTION

The authorities of Hong Kong SAR have requested the mission to assess whether the introduction of a broad-based consumption tax is a viable option, and to advise on its possible design and administrative implications. The political decision on introducing such a tax has not yet been made and will not be made before the findings of a recently formed task force, charged with the responsibility of investigating whether a structural budgetary deficit exists in Hong Kong SAR,[2] are released. The task force is expected to complete its work by end-2001.

A. Background on the Tax System

Hong Kong SAR has one of the lowest tax burdens in the world (about 8.9 percent of GDP in 1999/2000). Its tax system is extremely simple, comprising primarily a flat rate profits tax (16 percent on corporations and 15 percent on others), a tax on salaries with four marginal rates (17 percent top rate),[3] and a few, narrowly based duties. The structure of tax revenue for 1999/2000 is provided in Table 1. About two-thirds of total tax revenue is derived from the profits tax and salary tax combined. Interest and capital gains are largely exempt from tax (the main exceptions being interest that arise in connection with trade and capital gains realized on the disposal of depreciable assets), while dividends are completely exempt. There is neither a broad-based consumption tax nor any duty on imports. About half of total budgetary revenue is derived from nontax sources, most notably proceeds from land sales and income from properties and investment.

Table 2 (in percent of GDP) and Table 3 (in percent of total tax revenue) provide a comparison of the level and composition of tax revenue in Hong Kong SAR with that found in a sample of countries in the Asian and Pacific region in 1998. Three notable features stand out from this comparative picture. First, Hong Kong SAR had by far the lowest tax revenue to GDP ratio (about 9 percent, compared to an average of about 28.6 percent for the sample of OECD countries and about 14.6 percent of GDP for the sample of non-OECD countries). Second, the ratio of consumption to income taxes in Hong Kong SAR, at about 0.4, was also the lowest; the sample of OECD countries averaged about 0.7, while the sample of non-OECD countries averaged about 1.1. Finally, total tax revenue in Hong Kong SAR amounted to only about 52.4 percent of total budgetary revenue; the comparable figures were 86.8 percent and 82.8 percent for the sample averages of OECD and non-OECD countries, respectively. To a significant extent, these notable features of Hong Kong SAR's tax revenue

[2] The overall budgetary balance deteriorated from a surplus of about 6.3 percent of GDP in 1997/98 to a small surplus of about 0.8 percent of GDP 1999/2000. For 2000/2001, the overall budget is expected to develop a small deficit.

[3] Total tax charged cannot, however, exceed 15 percent of total taxable income before personal allowances.

Table 1. Structure of Tax Revenue, 1999/2000

	In Percent of Total Tax Revenue	In Percent of GDP
Taxes on income and profits	61.1	5.4
Profits	34.4	3.1
Salaries	22.7	2.0
Rents	1.1	0.1
Personal assessment 1/	2.9	0.3
Taxes on consumption and asset transfers	32.4	2.9
Stamp duties	11.1	1.0
Immovable properties	4.5	0.4
Shares	6.3	0.6
Leases	0.2	--
Excise duties	6.9	0.6
Hydrocarbon oil	3.8	0.3
Tobacco	2.2	0.2
Liquor	0.7	0.1
Methyl alcohol	--	--
Hotel accommodation	0.2	--
Betting duties	10.9	1.0
Motor vehicle (first) registration duty	2.4	0.2
Estate duty	1.2	0.1
Property tax (general rates) 2/	6.5	0.6
Total tax revenue	**100.0**	**8.9**
Memorandum items:		
Total nontax revenue		10.0
Of which		
Land sales		2.8
Properties and investments		1.9
Total revenue		18.9

Sources: Data provided by the authorities; and mission calculations.

1/ Individuals taxed, at their own election, on the sum of profits, salaries, and rents at the same progressive rates of, after deducting personal allowances available under, the salaries tax. Personal assessment is considered a tax concession.

2/ Excludes revenue (0.5 percent of GDP) from municipal rates, which since January 1, 2000 has been incorporated into the budget.

Table 2. Level and Composition of Tax Revenue in Selected Asian and Pacific Countries, 1998

(In percent of GDP)

	Total Tax	Income Taxes			Consumption Taxes				Property	Memorandum Item
	Revenue	Total	Corporate	Personal	Total	General	Excises	Trade	Taxes	Total Revenue
Hong Kong	**9.0**	**6.0**	**3.6**	**2.3**	**2.6**	**--**	**2.6**	**--**	**0.3**	**17.1**
Average of all countries	**20.2**	**9.3**	**3.7**	**4.6**	**7.7**	**3.7**	**2.4**	**0.9**	**1.5**	**24.3**
OECD 1/										
Australia	29.6	16.9	4.2	12.7	8.1	2.5	3.9	0.6	2.6	33.3
Japan	28.8	9.3	2.4	3.5	5.4	2.1	1.4	0.2	3.1	31.6
Korea	21.1	6.9	2.6	4.2	8.6	3.5	3.7	0.9	2.4	25.6
New Zealand	34.7	20.0	3.8	14.6	12.4	8.8	2.2	0.6	2.0	41.0
Average	28.6	13.3	3.2	8.8	8.6	4.2	2.8	0.6	2.5	32.9
Non-OECD 2/										
China	11.8	2.0	1.2	0.4	8.8	7.4	1.0	0.4	...	13.0
Indonesia	14.2	9.6	5.8	1.5	4.2	2.7	0.8	0.5	0.4	15.3
Malaysia	16.7	10.0	7.5	2.4	6.0	2.6	1.9	1.6	0.2	20.0
Philippines	14.8	6.5	2.7	2.3	8.1	2.7	2.2	1.7	...	16.7
Singapore	15.7	6.9	4.9	2.1	6.3	1.2	3.2	0.5	1.1	30.1
Thailand	14.3	4.6	2.1	2.5	9.0	3.5	4.1	1.5	0.1	16.1
Average	14.6	6.6	4.0	1.9	7.1	3.3	2.2	1.0	0.4	18.5

Sources: *Revenue Statistics* (OECD); *OECD Economic Outlook* (OECD); and country documents (IMF).

1/ General government.
2/ Central government.

Table 3. Level and Composition of Tax Revenue in Selected Asian and Pacific Countries, 1998

	Income Taxes			Consumption Taxes				Property	Total Tax
	Total	Corporate	Personal	Total	General	Excises	Trade	Taxes	Revenue
	(In percent of total tax revenue)								(In percent of total revenue)
Hong Kong	**66.9**	**40.0**	**25.8**	**28.8**	**--**	**28.8**	**--**	**3.2**	**52.4**
Average of all countries	**44.4**	**20.5**	**19.3**	**42.1**	**20.5**	**13.1**	**5.0**	**6.0**	**84.4**
OECD 1/									
Australia	57.0	14.2	42.9	27.4	8.5	13.3	2.1	8.9	88.9
Japan	32.2	8.2	12.1	18.8	7.2	4.9	0.6	10.8	91.2
Korea	32.5	12.2	20.1	40.5	16.5	17.4	4.1	11.4	82.5
New Zealand	57.5	10.9	42.1	35.8	25.4	6.3	1.8	5.7	84.7
Average	44.8	11.4	29.3	30.6	14.4	10.5	2.2	9.2	86.8
Non-OECD 2/									
China	17.0	10.0	3.7	74.5	62.3	8.8	3.4	...	90.6
Indonesia	67.7	41.0	10.9	29.9	19.3	5.4	3.7	2.5	93.3
Malaysia	59.9	45.0	14.6	36.3	15.5	11.3	9.5	0.9	83.3
Philippines	44.1	18.0	15.8	54.8	17.9	15.1	11.7	...	88.5
Singapore	44.2	31.0	13.3	40.3	7.7	20.4	3.3	6.9	52.1
Thailand	32.1	14.4	17.8	63.1	24.3	28.6	10.1	0.8	88.7
Average	44.2	26.6	12.7	49.8	24.5	14.9	7.0	2.8	82.8

Sources: *Revenue Statistics* (OECD); *OECD Economic Outlook* (OECD); and country documents (IMF).

1/ General government.
2/ Central government.

structure could be attributed to the absence of a broad-based consumption tax. Comparing the tax revenue structure in Hong Kong SAR with that found in other countries in the region does not imply that regional tax norms are necessarily appropriate benchmarks against which Hong Kong SAR's tax system should be assessed, as different countries face different circumstances and have different national policy objectives. Instead, the value of such a comparison lies primarily in providing a basis, when the national practice deviates significantly from that abroad, for raising questions about whether the deviation is compelling and sustainable and, therefore, whether it should be maintained.

B. Impetus for Considering a Broad-Based Consumption Tax

Hong Kong SAR has always had a reputation for being a territory with a low level of taxation, a small public sector, and the discipline of avoiding budgetary deficits. These are admirable objectives; they are, in fact, enshrined in the 1997 Basic Law. Hence, neither the comparatively low level of taxation in Hong Kong SAR nor the presence of a broad-based consumption tax in just about every country elsewhere in the region should constitute, in and of itself, a sufficient basis for introducing such a tax in Hong Kong SAR. The justification has to be sought, instead, in the necessity of meeting possibly rising revenue needs that are of a structural nature with minimum distortions over the long term, as well as in the desire of obtaining a more cyclically stable tax base than the present one.[4]

For this reason, the mission considers as entirely appropriate that the impetus for considering a broad-based consumption tax in Hong Kong SAR has arisen in the context of both assessing the existence of structural budget deficits and deliberating the merits of broadening the base of the existing tax system. It should be emphasized, however, that the introduction of such a tax need not necessarily lead to a higher overall tax burden on the economy. A broad-based consumption tax could be introduced in conjunction with, for example, the reduction and/or removal of more narrowly based—and hence less revenue buoyant—taxes. A revenue-neutral lowering of the profits and salaries tax rates that accompanies the introduction of a broad-based consumption tax would, by definition, leave the overall tax burden unchanged; yet it would broaden the overall tax base.[5] The extent to which the new tax is to be an additional tax or a replacement tax is very much a policy decision, depending, as it does, on revenue needs and other policy objectives, such as equity.

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[4] The introduction of a broad-based consumption tax would enhance the cyclical stability of tax revenue because: (1) the overall tax base would be broadened, and (2) consumption is a relatively stable component of GDP over business cycles.

[5] Based on 1999/2000 data, the effective bases of the profits and salaries taxes are estimated at about 19.6 percent of GDP and 13.3 percent of GDP, respectively. Either figure is much lower than the likely base of a broad-based consumption tax, estimated at about 38.3 percent of GDP (see below).

C. Scope of the Report

The question raised by the authorities of the feasibility of introducing a broad-based consumption tax in Hong Kong SAR has two dimensions: technical and political. From a technical standpoint, given sufficient preparation time and the necessary administrative resources, almost any country—let alone a territory of Hong Kong SAR's level of economic development—can introduce such a tax.[6] Whether it is feasible for Hong Kong SAR to introduce the tax from a political standpoint is a much harder question to answer, given its unique system of government and the evident widespread opposition to the tax in the private sector. The mission does not, in any case, have the competence to render an informed judgment on this question. It is also not within the mission's terms of reference to make an explicit recommendation for or against the introduction of the tax.[7]

This report is focused on some of the most important policy (Section II) and administrative (Section III) issues that the authorities will have to address—and on ways to address them—*on the assumption that the decision on introducing a broad-based consumption tax is an affirmative one*. Since this decision is still far into the future, and the authorities are still at a very early stage of the deliberative process, the report discusses the relevant issues at a level that the mission deems to be most useful at this stage of policy deliberations. Once the decision is made, a great many additional issues—especially of an administrative nature—on actual implementation will emerge. This report does not cover those issues. The mission suggests that the authorities consider requesting further technical assistance from the Fund, if and when such a need arises after the decision to introduce the tax is taken.

Introducing a broad-based consumption tax is not the only way to broaden the base of the existing tax system. The base of the present profits and salaries taxes could be substantially broadened by, for example, subjecting more types of capital income to tax, such as interest and capital gains, as well as by rationalizing and tightening personal allowances,[8] which at their present levels allow more than 60 percent of the wage earners to escape the tax net. For purely revenue purposes, consideration should also be given to raising the rate of the property tax (known as general rates in Hong Kong SAR) from its present level of 5 percent. This tax is very broad-based, administered very efficiently, and relatively revenue-productive (0.6 percent of GDP in revenue yield in 1999/2000).

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[6] An overwhelming majority of countries in the world, at all levels of income, have some form of a broad-based consumption tax.

[7] The concluding statement by the Fund's 2000 Article IV consultation mission does mention that the option of introducing a low-rated, broad-based consumption tax merits serious consideration as a policy option to address long-term budgetary revenue needs.

[8] While this would expand the base of the salaries tax and reduce administrative costs, one should be cognizant of its equity implications.

The above issues are, however, not pursued any further in the remainder of the report, as the authorities have requested the mission to focus only on broad-based consumption taxation.

II. Policy Issues

In considering broad-based consumption taxation, the authorities have in mind a Goods and Services Tax (GST) that is implemented in the conventional manner, that is, a tax of the credit-invoice type.[9] While not necessarily ruling out other forms of consumption taxes, the authorities have stressed the importance for Hong Kong SAR of adhering to the international norm, and not undertaking "pioneering" experiments.

The mission is in substantial agreement with the authorities' position. Being a small and open economy, it would be risky for Hong Kong SAR to introduce a consumption tax in a form that is significantly different from the regional practice. Moreover, useful lessons can be drawn from the experience of other countries in the region that have recently introduced a conventional GST—especially that of Singapore, whose economy is similar in a number of structural aspects to that of Hong Kong SAR. Consequently, both in this section on policy issues and in Section III on administration issues, *the discussion will focus on a credit-invoice GST*. Nevertheless, to better appreciate the role a broad-based consumption tax could play in the context of the existing tax system, it would be useful to elucidate the different ways broad-based consumption could in fact be taxed—a credit-invoice GST being only one of a number of available options. A few of the more significant of these options that bear some relevance to Hong Kong SAR are discussed in detail in Appendix I. Among other things, it is shown there that Hong Kong SAR's present profits and salaries taxes, when taken together, already come very close to being a tax on consumption.

A. Basic Policy Parameters

In his 2000/2001 budget speech delivered in March 2000, the Financial Secretary clearly stated that ". . .maintaining our low, simple and predictable tax regime is an important building block of our prosperity. . . Under no circumstances will I depart from this important principle and sacrifice Hong Kong's competitiveness." Achieving the objectives of tax simplicity and low tax burden would be compatible with introducing a GST in Hong Kong SAR only if it is designed to meet the following three basic policy parameters: (1) it is

[9] In this report, the term GST (employed in Australia, Canada, New Zealand, and Singapore, among others), instead of the more familiar term value-added tax, is used to refer to a tax that is imposed on the value added of a good or service as it passes through multiple stages of production and distribution. Furthermore, given that the focus is on taxing consumption, future references to the GST, if unqualified, always refer to a consumption-type GST, that is, capital goods are taxable—and the tax imposed is creditable—in the same way as ordinary inputs. This is the international norm. At present, China is the only country in the region where the GST paid on capital goods is not recoverable (Table 4).

Table 4. Comparative GST Revenue Productivity in
Selected Asia and Pacific Countries, 1998

	Coverage 1/	Scope 2/	Type 3/	Method 4/	Rate(s) of Tax 5/	Revenue Yield	Revenue Productivity 6/
					(In percent)	(In percent of GDP)	
Average of all countries						**3.7**	**0.38**
OECD							
Japan	G + S	R	C	CA 7/	**5**	2.1	0.41
Korea	G + S	R	C	CI	**10**	3.5	0.35
New Zealand	G + S	R	C	CI	**12.5**	8.8	0.70
Average						4.8	0.49
Non-OECD							
China	G 8/	R	P	CI	13; **17**	5.3	0.31
Indonesia	G + S	R	C	CI	**10**	2.7	0.27
Philippines	G + S	R	C	CI	**10**	2.7	0.27
Singapore	G + S	R	C	CI	**3**	1.2	0.40
Thailand	G + S	R	C	CI	**10**	3.5	0.35
Average						3.1	0.32

Source: Mission compilation.

1/ G = goods; S = services.
2/ R = retail stage.
3/ C = consumption; P = production.
4/ CA = credit-accounts; CI = credit-invoice.
5/ Standard rate in bold.
6/ Revenue yield for each percentage point of the standard rate.
7/ GST assessment is accounts-based. However, invoices are required (for cross-checking purposes) for any transaction of more than ¥30,000.
8/ Inclusive of a very limited number of services.

broad-based, that is, apart from the small business exemption threshold (see below for further discussion), exemptions, zero ratings, and other concessions are kept to a bare minimum; (2) it has a *single rate*; and (3) its *rate is low*.

With respect to the first basic policy parameter, a narrow scope of exemptions, zero ratings, and concessions would not only reduce administrative and compliance costs of the GST, it would also minimize distortions and enhance the tax's revenue productivity—commonly defined as the revenue yield (in percent of GDP) from each percentage point of the standard GST rate. In the Asian and Pacific region, it is well known that New Zealand and Singapore have some of the broadest-based GSTs in the world; their impressive GST revenue productivities are testimony to this fact, reaching 0.7 percent and 0.4 percent of GDP, respectively, in 1998 (Table 4).[10] In contrast, Indonesia and the Philippines have much lower GST revenue productivities (0.27 percent of GDP for both), due in part to their narrower GST bases (see Table 5 for a comparison of some key GST features in a sample of countries in the region).[11]

Table 4 indicates that all countries in the sample, except China, have single-rate GSTs;[12] they thus meet the second basic policy parameter. The third basic policy parameter is fundamentally subjective in nature. In general, the GST rates in countries in the Asian and Pacific region are much lower than those found elsewhere. Save for one exception (the Netherlands Antilles), Singapore's GST rate, at 3 percent, is the lowest in the world.

The mission takes as given that the prospective GST in Hong Kong SAR, if introduced, would meet the three basic policy parameters stipulated above. While the choice of the tax rate is ultimately a policy decision, the mission's working assumption of a low tax rate is that it would fall within the range of 3–5 percent. In the mission's view, a GST rate below 3 percent could raise questions about the cost-effectiveness of introducing a GST at all.[13]

B. Important Aspects of GST Design

As a form of a consumption tax, the credit-invoice GST has been adopted by over 120 countries in the world. As such, most issues related to its design—and their associated administrative implications—are by now quite familiar. There are, however, four design aspects of the GST that the mission would like to particularly single out for discussion, on account of their relevance to Hong Kong SAR's circumstances.

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[10] Singapore's lower GST revenue productivity relative to New Zealand's could be explained, in part, by Singapore's much higher small business exemption threshold—42 times higher in fact than New Zealand's in U.S. dollar equivalent terms (Table 5).

[11] Technically, measured GST revenue productivity reflects a combination of two things: the breadth of the tax base and the collection efficiency of the tax administration. The two are not, however, unrelated, since administrative and compliance costs often go in tandem with the complexity of the GST's design.

[12] The recently introduced GST in Australia also has a single rate of 10 percent.

[13] In preparing for its GST introduction in 1994, Singapore experienced a 22 percent increase in administrative costs (inclusive of the costs related to some concurrent organizational restructuring of the tax administration). Due to its simple design, Singapore's GST was found to impose very low compliance costs on taxpayers. See Glenn P. Jenkins and Rup Khadka, "Value-Added Tax Policy and Implementation in Singapore," *VAT Monitor*, Vol. 9 (March/April 1998).

Table 5. Comparative GST Features in Selected Asian and Pacific Countries

			Treatment of Small Businesses						
			Registration Threshold (Amount turnover)			Special Treatment Below Threshold			
				U.S. dollar equivalent 1/					
	Notable Exemptions	Notable Zero Ratings	Local Currency (In thousands)	Amount (In thousands)	Ratio to Per-capita Income 2/	Optional Registration	Turnover Tax in Lieu of GST	Special Tax on Financial Sector	Special Tax on Real Estate Sector
OECD									
Australia	Financial transactions and services (except nonlife insurance). Residential rents and leases. Residential premises. Services connected with international transportation. Precious metals (except first supplies after refining).	Exports. Food (except restaurant and ready-to-eat meals). Medical services. Education services. Precious metals (first supplies after refining).	50	29.4	1.5	Yes	No	No	No
Japan	Financial transactions and services. Presidential rents. Medical services. Education services. Welfare service.	Exports. Services connected with international transportation.	30,000	278.0	8.6	Yes	No 3/	No	No
Korea	Financial transactions and services. Leasing of real estate. National housing construction services. Unprocessed food and agricultural products. Medical services. Education services. Transportation services (with many exceptions). Books, magazines, and newspapers.	Exports. Services connected with international transportation. Agricultural inputs (including machinery).	48,000	43.1	5.1	Yes	Yes (10% on a notional percentage of	No	No
New Zealand	Financial transactions and services (except nonlife insurance). Residential rents. Residential dwellings. Precious metals (except first supplies after refining).	Exports. Services connected with international transportation. Precious metals (first supplies after refining).	30	13.8	1.0	Yes	No	No	No
Non-OECD 4/									
China	Most services. Unprocessed agricultural products.	Exports (with many exceptions).	Non-traders: 1,000 Traders: 1,800	120.8 217.4	154.8 278.7	Yes Yes	Yes (6 percent) 5/ Yes (4 percent) 5/	Yes (8 percent on gross receipts).	Yes (5 percent on leasing and transfers of immovable properties).
Philippines	Financial transactions and services (except nonlife insurance). Residential rents and leases (with various ceilings). Immovable properties (with many exceptions). Unprocessed agricultural products. Agricultural inputs. Medical services. Education services. Books, magazines, and newspapers.	Exports. Services connected with international transportation. Packaging materials for large exporters.	550	12.4	12.2	Yes	No	Yes (1 percent to 6 percent on gross receipts; principal rate is 5 percent).	No
Singapore	Financial transactions and services. Residential rents. Residential properties.	Exports. Services connected with international transportation. International telecommunications services.	1,000	574.6	19.4	Yes	No	No	No
Thailand	Financial transactions and services. Rents on immovable properties. Immovable properties. Medical services. Education services. Transportation services.	Exports. Services connected with international transportation.	1,200	29.9	15.2	Yes	No	Yes (3 percent on gross receipts).	Yes (3 percent on sales of immovable properties).

Source: Mission compilation.

1/ Based on the average exchange rate in July 2000.
2/ Based on U.S. dollars in 1999.
3/ A taxpayer whose annual turnover is below US$1.85 million can opt for a simplified tax credit system, whereby the allowable input tax to be credited against the output tax is a notional percentage of the latter differentiated by type of business (from 50 percent to 90 percent).
4/ Indonesia is not included in this table because its GST contains numerous unconventional features, including multiple forms of exemptions, shifting basis for zero ratings, and different registration thresholds for goods, services, and retailers. Some of these features have no basis in the GST legislature.
5/ There is a second, lower threshold of US$2.9 thousands for goods and of US$1.2 thousands for services below which businesses are completely exempt. These thresholds imply a ratio to per-capita income of, respectively, 3.7 and 1.5.

Destination vs. origin principle

In almost all countries that have a GST, the GST is implemented on the destination principle, that is, imports are taxed and exports are zero rated. This principle essentially ensures that international flows of goods and services do not bear any GST element of the countries from which they originate. Under normal circumstances, the imperative for Hong Kong SAR to follow this principle would be so strong and obvious that further discussion on the issue would seem unnecessary. Unfortunately, adoption of the destination principle in Hong Kong SAR will pose a formidable challenge to its present customs administration.

By definition, a destination-based GST requires border tax adjustments, that is, the GST must be applied on (removed from) goods and services as they enter (leave) the territory, which in turn requires effective border controls, with respect to both imports (for collecting the GST) and exports (for providing GST refunds). In most countries, the collection of import duties is a central task of the customs administration. Hence, the collection of the GST on imports can easily be integrated with normal customs operations. As a free port, however, Hong Kong SAR has no import duties; its customs administration, except for four categories of imports on which excise duties are applied, is generally not focused on, and is unaccustomed to, procedures necessary for effective revenue collection. Furthermore, the border between Hong Kong SAR and China is extremely porous. In particular, many major cargo entry points (e.g., the so-called public cargo working areas) connected with the river trade have little or no customs controls. While it is true that a significant proportion of the goods imported into Hong Kong SAR are re-exported,[14] the integrity of a destination-based GST cannot be ensured under the current customs procedures.[15]

An alternative to the destination principle would be the origin principle, under which imports are exempt but exports are taxed, and, therefore, no border tax adjustments would be required. An origin-based GST has, however, some serious limitations. First, under it, exports from Hong Kong SAR would bear the GST burden; this could hardly bode well for maintaining

[14] In 1999, reexports of goods amounted to about 84 percent of total imports of goods.

[15] In theory, a destination-based GST can be implemented without border controls through the use of the so-called reverse charging system. Under this system, all businesses, whether registered or exempt for GST purposes, are required to account (reverse charge) for the GST on their imports. If the importing business is GST-registered, the reverse charge is creditable against its output tax, thus producing no net revenue effect. If the importing business is GST-exempt (typically because of the small business exemption threshold), it would be required to file GST returns and remit the reverse charge to the tax authorities. Such a system of reverse charging is already being applied on imported services in many countries; it is also applied—often referred to as a postponed accounting system—on imported goods on intra-European Union (EU) trade as a transitional measure, as fiscal borders within the EU have disappeared. The basic problem with this system is that the leakage is likely to be severe. For example, there would be little incentive for GST-exempt businesses to account for the GST on their imports. If administrative resources have to be devoted to enforce it, it would negate much of the rationale for having the exemption threshold in the first place.

Hong Kong SAR's competitive edge.[16] Second, it is well known that an origin-based GST would create valuation problems regarding imports and exports. Since the value of imports is typically embedded in the sales of domestic producers, such value must be properly ascertained so that it can be removed from the tax base.[17] There is, therefore, an incentive for importers to over-declare. Exactly the opposite would be true for exporters, who would have an incentive to underdeclare. Hence, under an origin-based GST, significant administrative resources would have to be deployed to address this valuation problem; such a problem (i.e., over-declaration of imports and under-declaration of exports) does not exist under the destination-based GST.[18] Finally, origin-based taxation is usually vulnerable to transfer pricing problems.

On balance, the mission is of the view that, notwithstanding the required changes to the customs administration to tighten border controls and implement other procedures (see Section III), a destination-based GST with conventional border tax adjustments would probably be in the best long-run interest of Hong Kong SAR.

Treatment of financial services

The treatment of financial services under a credit-invoice GST has long been recognized as one of the most complex policy issues in designing the tax. The basic problem with taxing these services, such as financial intermediation, is that their values are frequently incorporated into the interest rate spreads and cannot, therefore, be easily ascertained on a transaction-by-transaction basis, which is the normal basis for applying the GST on the sale of goods and services. Different countries have adopted different approaches to addressing this difficulty—with varying degrees of success. A detailed examination of the nature of the problem, description and assessment of alternative approaches, and survey of country practices are provided in Appendix II.

[16] There is a well-established literature that has shown that, under certain conditions, the destination and origin principles are theoretically equivalent. The conditions that are required for the equivalence to hold are, however, quite stringent, including (among others) fully flexible prices or exchange rates for a barter economy, fully flexible exchange rates for a monetary economy, international immobility of factors of production, and all goods and services taxed at a single rate (which implies no exemptions). For a detailed discussion of the economic implications of destination and origin principles, see Howell H. Zee, "Value-Added Tax," in *Tax Policy Handbook*, edited by Parthasarathi Shome (IMF, 1995).

[17] In practice, this is achieved under a credit-invoice GST by imputing an amount of credits to imports at the applicable GST rate.

[18] Of course, the destination principle is not entirely immune to valuation problems, especially with respect to over-declaration of exports for purposes of claiming GST refunds (under-declaration of imports under the destination principle is less serious as long as they are imported by registered businesses).

Based on 1998 data, the financial sector (inclusive of insurance) accounted for about 9.5 percent of Hong Kong SAR's GDP. While it is not the largest service industry in the territory, the financial sector faces a highly competitive environment in the region, and is of sufficient importance to the domestic economy to warrant careful consideration of how it should be treated under the GST.

The mission suggests that the authorities consider one of the following two alternative treatments. The first is the approach adopted by Singapore, under which most financial services provided with explicit fees are taxed (except when the services are exported, in which case they are zero-rated), and all others are exempt. To alleviate the cascading that would result when exempt financial services are provided to businesses as inputs in the production of taxable sales, Singapore allows financial institutions to recover a substantial portion of their input taxes on the basis of a fixed percentage that is differentiated by type of institution, but is independent of a particular institution's actual composition of output (be it taxable, exempt, or exported). In this way, the administrative complexity in allocating allowable input tax credits among taxable and exempt financial services—which is one of the most problematic aspects of taxing such services under the GST—is obviated.

Singapore's approach to treating financial services under the GST strikes a good balance between policy correctness and administrative simplicity. It does, however, leave some residual cascading in the system, since not all input taxes paid by financial institutions are recoverable. Hong Kong SAR could, therefore, also consider the alternative of taking Singapore's approach one step further to allow full input tax recovery by financial institutions, irrespective of the composition of their output. In effect, this approach is formally equivalent to taxing all financial services for which explicit fees are charged (except when the services are exported, in which case they are zero rated) and zero rating all others. Under this approach, no cascading would result at all, since the credit chain is not broken when goods and services flow through the financial sector.

The revenue cost of the zero-rating approach is naturally higher than that adopted by Singapore, since under the latter, recovery of input taxes by financial institutions is not complete. Based on 1997 data, intermediate consumption by the financial sector amounted to about 3.9 percent of GDP. Hence, assuming the GST rate is 3 percent, the maximum revenue that would be forgone by the zero-rating approach in the form of input tax credits claimed by financial institutions would amount to only about 0.1 percent of GDP. Hence, any revenue saved from adopting Singapore's approach would seem quite marginal at best.[19]

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[19] It should be noted that the application of the zero-rating approach still requires the identification of financial services that are to be zero rated; the zero rating should not be granted on the basis of specific financial institutions.

Treatment of immovable properties

Given the importance of the real estate sector in Hong Kong SAR's economy (it accounted for about 9 percent of GDP in 1998), its GST treatment also deserves careful consideration. In theory, residential housing services, just like other services, should be taxable under a broad-based consumption tax. In practice, however, due to the infeasibility of taxing the implicit rental values of owner-occupied housing, it would be appropriate to exempt residential rental payments as well so as to avoid creating a distortion between rental and owner-occupied residential properties.[20] This is, in fact, the approach followed by almost all countries that have a GST. The mission does not see any reason for Hong Kong SAR to deviate from the international norm.

Even if residential rental payments are directly exempt, they could be taxed indirectly by taxing the sale of newly constructed residential properties, since the purchase price of a residential property reflects theoretically the present value of the stream of future rental payments and/or implicit rental values. On this basis, the majority of OECD countries and many other countries include the sale of new private residential properties in the GST net (but exclude the sale of existing ones[21]); it would be appropriate for Hong Kong SAR to follow the same practice.

If it is appropriate to tax new residential properties, the case is even more compelling to tax commercial properties, new or existing, since purchases of such properties by businesses are no different from purchases of other capital goods. The same reasoning would suggest that rental payments on commercial properties should also be taxable, as they are a form of business input. The GST paid on the purchase or on the rental payment of a commercial property should, of course, be creditable if the purchaser or renter is a GST-registered business. This approach to treating commercial properties, which is employed by many countries, including Australia, Canada, Japan, New Zealand, and Singapore, is conceptually superior to that adopted by the EU, which exempts transactions related to the sale and use of such properties and, therefore, may lead to cascading (optional GST registration is, however, provided by the Sixth Directive of the EU to overcome this problem).

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[20] Even if the implicit rental values of owner-occupied housing can be imputed (say, based on data by which property taxes are assessed), it would still be administratively infeasible to subject residential rental payments to tax, since this would require the owners of such rental properties—many of them final consumers—to register for and collect the GST.

[21] The sale of existing residential properties should not be taxed since they were already taxed when newly constructed and no credit was claimable for the tax so paid by the consumer. At the time when a GST is first introduced, however, existing residential properties would not have borne any prior GST burden, so a theoretical argument could be made that the first sale of such properties after the GST's introduction should be taxable.

Treatment of small businesses

A universal characteristic of a tax like the GST is that the bulk (typically, about 80–90 percent) of its revenue is collected from a relatively small proportion (typically, about 10–20 percent) of taxpayers. To avoid impairing the cost-effectiveness of the tax administration, setting a turnover threshold and exempting businesses with turnover below the threshold is a proven effective measure in dealing with small businesses in almost all countries that have a GST. In any given country, however, the choice of an appropriate threshold level invariably involves balancing revenue with claims on administrative resources—factors that are usually highly dependent on circumstances specific to the country.[22] For this reason, cross-country comparisons of threshold levels may not be particularly meaningful, as evidenced by their wide variation among the sample countries shown in Table 5.

There are two common objections to setting a small business exemption threshold. First, it would confer a competitive advantage for small businesses over larger ones and result in a loss of neutrality in the tax treatment between the two. It should be noted, however, that the GST paid by exempt small businesses on their inputs is not recoverable, so that the extent of the relative benefit they are able to derive from being below the exemption threshold could, in actuality, be quite limited. Nevertheless, to address this concern, a few countries (e.g., China and Korea) subject small businesses below the exemption threshold to a simple turnover tax at a relatively low rate that effectively taxes their value added at approximately the same rate as the regular GST rate on businesses above the threshold.

The second objection to the exemption threshold is that exempt businesses below the threshold that mainly transact with taxable businesses would effectively break the credit chain and lead to cascading, thus putting them (the exempt businesses) in a disadvantageous position relative to their taxable competitors.[23] This concern can be effectively addressed by including in the GST legislation a provision for optional GST registration for businesses below the threshold. Optional registration is an almost universal practice. To safeguard against frequent opting in and out of registration by businesses, a minimum registration period (say, two years) could be imposed.

If a GST is to be introduced in Hong Kong SAR, having an exemption threshold for small businesses with optional registration would be crucial for its success. Consistent with Hong Kong SAR's strong preference for keeping its tax system simple, it would not be advisable for it to introduce special tax treatments of exempt businesses below the threshold. By

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[22] Suppose the increase in GST revenue from adding one registered business is $R = \tau \cdot \nu \cdot T$ at an additional administrative and compliance cost of C, where τ is the GST rate, ν is the ratio of value-added to turnover, and T is turnover. Clearly, the threshold should be lowered as long as $R > C$. The optimal threshold would be reached when $R = C$, or at the point where $T = C/(\tau \cdot \nu)$.

[23] For a numerical illustration of how breaking the credit chain would lead to cascading, see Zee (1995), op. cit.

definition, all such treatments can only address the perceived underlying problem imperfectly, but—no matter how simple their design—they tend to absorb valuable administrative resources with little revenue yield in return.

The setting of the appropriate exemption threshold would require data on the distribution profile of business establishments by annual turnover level. Table 6 provides such data based on 1998 annual surveys of various economic sectors conducted by the Census and Statistics Department.[24] As is expected, the lowest annual turnover brackets capture a huge number of business establishments, but these establishments collectively contribute little value-added to the economy. A threshold of HK$1 million would, for example, exempt about 46 percent of all business establishments for a loss of only about 3 percent of the total value-added. Even raising the threshold to HK$5 million would only entail a moderate increase in the loss of value-added (to about 12 percent), while the number of exempt business establishments would jump to about 77 percent. It seems almost certain, therefore, that the exemption threshold should be set at somewhere between HK$1 million and HK$5 million. While the precise threshold level in this range cannot be ascertained without further information on the distribution of business establishments falling within the range, the data shown in Table 6 are suggestive of one closer to the top rather than the bottom of the range.[25]

C. Estimated Tax Base and Price Impact

The absence of an existing broad-based consumption tax, as well as the unavailability of input-output tables, have rendered the estimation of the base of a prospective GST in Hong Kong SAR difficult. Nevertheless, the mission has attempted a rough first estimation of the GST base on the basis of available national income accounts data for 1999. The mission has also undertaken, on the basis of existing CPI basket weights, an estimation of the likely price impact of the GST's introduction.

Tax base

Since the target of a GST implemented on the destination principle is private consumption in the domestic market, the natural starting point for estimating the tax base would be domestic

[24] Data reported in Table 6 have been constructed from 1998 annual surveys covering the following economic sectors: manufacturing; wholesale, retail, import and export trades, restaurants, and hotels; building, construction, and real estate; transport and related services; and storage, communication, financing (excluding banking and insurance), and business services.

[25] Indeed, the formula given in footnote 22 indicates that the lower the tax rate, the more likely this would be the case. For comparison, HK$5 million would be equivalent to US$642.7 thousand, which is slightly higher than Singapore's threshold of US$574.6 thousand.

Table 6. Distribution Profile of Business Establishments by Annual Turnover, 1998

Annual Turnover	Cumulative Number	Cumulative Value Added
(In millions of HK$)	(In percent of total)	
Below 1	45.6	3.2
1–4.9	77.0	12.0
5–9.9	85.5	17.0
10–19.9	90.9	23.1
20–49.9	96.0	32.7
Over 50	100.0	100.0
Memorandum items:		
Estimated business establishments based on sample surveys		
Total number	284,070	
Total value added		
In millions of HK$	482,081	
In percent of GDP	38.2	

Sources: 1998 annual surveys of various economic sectors (Census and Statistics Department, Hong Kong SAR); and mission calculations.

consumption expenditure by residents. In 1999, such expenditure amounted to about 57.3 percent of GDP (Table 7).

Not all components of consumption expenditure should, however be taxed. As discussed earlier, residential rental payments—typically representing a major component of consumption expenditure—should probably be exempt. Other consumption components that are frequently exempt even under a broad-based GST are expenditures on health and education, largely motivated by equity concerns. In estimating the GST base, the mission has assumed that such expenditures would be exempt in Hong Kong SAR, but has otherwise kept exemptions to a minimum. On this basis, taxable domestic consumption by residents is

Table 7. Estimated Base of a Broad-Based GST, 1999

	In Billions of HK$		In Percent of GDP	
Domestic private consumption in domestic market		706.4		57.3
Less: Likely GST-exempt consumption 1/				
Rent, rates, water, and household maintenance	-134.1		-10.9	
Household operation and personal care	-19.8		-1.6	
Medical and health	-35.0		-2.8	
Education	-11.3		-0.9	
Total		-200.2		-16.2
Taxable domestic private consumption in domestic market		506.2		41.0
Expenditure of nonresidents in domestic market		53.6		4.3
Private-sector residential buildings 2/		70.0		5.7
Potential GST base		629.8		51.1
Less: Likely leakage 3/		-157.5		-12.8
Estimated GST base		**472.4**		**38.3**

Sources: *Gross Domestic Product 1961 to 1999* (Census and Statistics Department, Hong Kong SAR); *Gross Domestic Product Second Quarter 2000* (Census and Statistics Department, Hong Kong SAR); and mission calculations.

1/ Based on 1998 weights for components of domestic private consumption in domestic market.
2/ Based on 1998 weights for components of gross domestic fixed capital formation, inclusive of real estate developers' margin and other transfer costs.
3/ Assumed to be 25 percent of potential GST base.

estimated to be about 41 percent of GDP. To this, one would add consumption expenditure by nonresidents in the domestic market, amounting to about 4.3 percent of GDP in 1999.[26]

[26] If GST rebates are provided to nonresidents on goods bought in, but taken out of, the territory upon departure—which is a common international practice—the amount that would be added to the base from this source would be reduced accordingly (but not completely eliminated).

Earlier discussions suggest that it would be appropriate to tax the sale of immovable properties. Taxing the sales of commercial buildings should produce no net revenue gain, since such taxes are creditable. Taxing the sales of newly constructed residential buildings in the private sector, which form a part of gross domestic fixed capital formation, does add to revenue, since households cannot claim tax credits. The addition to the tax base from this source is estimated to be about 5.7 percent of GDP.

The above calculations suggest that the potential base of a broad-based GST in Hong Kong SAR would be about 51.1 percent of GDP. This is, however, a theoretical base. In practice, there are always leakages, the severity of which depends on a number of factors, most notably the effectiveness of the tax administration. While highly country specific, international experience suggests that a leakage of 20 percent to 30 percent of the potential base is quite common. Assuming a 25 percent leakage factor for Hong Kong SAR,[27] the estimated GST base would be about 38.3 percent of GDP. This would imply a GST revenue productivity of about 0.38, which, coincidentally, happens to be exactly the regional average (Table 4).

By its very nature, the estimated GST base derived in the above manner can only be broadly indicative, as its computation relies on data at a very aggregate level. Furthermore, data limitations have necessitated the exclusion from consideration of a number of important factors that would almost certainly affect the tax base, such as the tax element that would remain in exempt consumption expenditure (which leads to an understatement of the estimated GST base), as well as the impact of the small business exemption threshold (which leads to an overstatement of the estimated GST base). For these reasons, the estimated figure should be used with great caution.

Price impact

The burden of the GST, being a tax on consumption, should in principle be passed forward to the consumers in the first instance, in which case the consumer price level—as measured by the CPI—will increase. The extent of the increase will obviously depend on the GST rate and the proportion of the CPI basket that is taxable. Assuming the base of the GST is in broad terms as described above, the proportion of each of the four CPI baskets tracked by the Census and Statistics Department that would be affected by the GST is shown in Table 8.

As expected, the GST would have a larger impact on the consumption basket of low-spending households than that of high-spending households, largely because residential rents,

[27] On the assumption that both the customs administration and the tax administration are adequately prepared to implement the GST.

Table 8. Price Impact of a Broad-based GST

	CPI (A) Weights 1/		CPI (B) Weights 2/		CPI (C) Weights 3/		Composite CPI Weights	
	Basket	Affected by GST	Basket	Affected by GST	Basket	Affected by GST	Basket	Affected by GST
Food	37.30	37.30	29.37	29.37	20.38	20.38	29.50	29.50
Housing	25.34	--	28.18	--	34.00	--	28.83	--
Fuel and light	3.37	3.37	2.16	2.16	1.50	1.50	2.36	2.36
Alcoholic drinks and tobacco	2.06	2.06	1.18	1.18	0.77	0.77	1.35	1.35
Clothing and footwear	5.12	5.12	6.95	6.95	8.04	8.04	6.66	6.66
Durable goods	4.34	4.34	5.85	5.85	6.31	6.31	5.49	5.49
Miscellaneous goods	6.03	6.03	6.44	6.44	5.79	5.79	6.14	6.14
Transport	7.17	7.17	7.57	7.57	8.79	8.79	7.77	7.77
Miscellaneous services 4/	9.27	3.13	12.30	4.08	14.42	5.23	11.90	4.08
Total	**100.00**	**68.52**	**100.00**	**63.60**	**100.00**	**56.81**	**100.00**	**63.35**

Memorandum items:

Increase in price level 5/	
CPI (A)	2.1 percent
CPI (B)	1.9 percent
CPI (C)	1.7 percent
Composite CPI	1.9 percent

Sources: *Monthly Report on the Consumer Price Index* (Census and Statistics Department, Hong Kong SAR); and mission calculations.

1/ Based on households (50 percent of total) with average monthly expenditure of HK$4,000 to HK$15,999 in 1994/95.
2/ Based on households (30 percent of total) with average monthly expenditure of HK$16,000 to HK$29,999 in 1994/95.
3/ Based on households (10 percent of total) with average monthly expenditure of HK$30,000 to HK$59,999 in l994/95.
4/ Services in this category considered to be GST-exempt correspond broadly to those listed in Table 7: household services; medical and health services; and education services.
5/ Based on a GST rate of 3 percent.

which are GST exempt, constitute a larger share of the latter's consumption basket. The GST is shown to affect about 63 percent of the composite CPI basket.[28]

Irrespective of which CPI basket is used as a reference, the price impact would be quite moderate as long as the GST rate is low. For example, with a GST rate of 3 percent, the price impact would range narrowly from about 2.1 percent (CPI (A)) to about 1.7 percent (CPI (C)). The overall impact on the composite CPI would only be about 1.9 percent.[29] However, these calculations of the price impact, just as with the estimate of the GST base, are only indicative in nature; the factors that qualified the base estimate apply here with equal force.

III. Administrative Issues

The introduction of a major tax like the GST requires an enormous effort in administrative preparation covering a wide range of tasks, such as the drafting of legislation; carrying out consultation, publicity, and education; determining and securing staffing needs; undertaking training of staff; developing systems, procedures, and forms for collection; and preparation of manuals and guidelines. It also requires careful planning for a timetable and the setting up of a dedicated task force for carrying out the various tasks. In the Hong Kong SAR context, however, a detailed discussion of such tasks at this juncture is considered premature by the mission, since the decision to introduce the GST is, as noted earlier, still far into the future.[30] Instead, the focus of the discussion below is on *contingency planning*—identifying tasks that customs and tax administrations can usefully do *now* in anticipation of a possible eventual affirmative GST decision.

A. Timeframe for Preparation

The typical timeframe for introducing a credit-invoice GST in a developed economy with efficient communication networks and transport infrastructure is around two years from the

[28] This figure is slightly at odds with that implied by Table 7, where about 72 percent of total domestic consumption expenditure by residents is supposed to be taxable under the GST. This discrepancy could be due, in part, to the imperfect correspondence between components of domestic consumption as shown in Table 7 and components of the composite CPI basket as shown in Table 8; and, in part, to the fact that the CPI weights are based on a household expenditure survey conducted in 1994/95.

[29] These calculations ignore the possible impact of the GST on private residential rents, as new private residential properties become taxable. To the extent that such rents are raised by the GST's introduction (an estimate of which would require a detailed analysis of the housing rental market that is beyond the scope of the present report), the indicated price impact is somewhat understated.

[30] Many of the requisite tasks, such as the drafting of legislation, cannot in any case be performed before the decision is taken. For a generic description of the required preparation for a GST's introduction, see Alan A. Tait (ed.), *Value-Added Tax: Administrative and Policy Issues,* Occasional Paper No. 88 (IMF, 1991).

date of a firm decision to implement the tax. This timeframe assumes that the critical policy issues related to the design of the GST, such as those discussed in Section II, have been settled at the time the decision to proceed is taken. It also assumes a clear period of at least 12 months between the date of passage of the enabling legislation and the commencement date of the GST. This is essential to allow both the tax administration and affected businesses to properly prepare for the new tax.

The two-year timeframe is indicative only, as there are a range of other factors that will impact on the time required for implementation in any particular country. In the case of Hong Kong SAR, there are two major limiting factors that would severely impinge upon the ability of the authorities to meet the standard implementation timeframe:

- the lack of effective controls over cross-border flows of goods; and
- the lack of experience of key revenue departments, that is, the Customs and Excise Department (CED) and the Inland Revenue Department (IRD), in dealing with broad-based consumption taxes.

The key issue for the authorities is whether they are prepared to undertake contingency planning to address these two limitations sufficiently (say, a year) in advance of a firm decision on the introduction of the GST. If no contingency planning is taken pending a decision on the GST, then it is likely that the implementation timeframe from the date of that decision would stretch to three years.

B. Border Controls

In most countries, the customs authorities retain control of goods entering or leaving the country until such time as the trader or his agent obtains a positive release from the authorities. The normal process is that the customs authorities obtain both a cargo manifest that provides details of the nature and quantity of the goods, and a trade declaration that provides a detailed valuation of the goods, before release is approved. Risk management decisions are taken on the basis of these two documents and other intelligence available to the authorities.

However, the level of control currently exercised by the CED of Hong Kong SAR over cross-border cargo depends upon the mode of transport involved:

- *Air cargo*—the CED has a high level of physical control over air cargo due to the overall security of the airport environment; mandatory manifest reporting requirements apply and pre-arrival data are available due to the high technological capability of air cargo operators.
- *Rail cargo*—rail cargo yards are currently considered insecure although the CED is moving to introduce closed-circuit television surveillance and dedicated examination

areas; mandatory manifest reporting requirements apply and pre-arrival data are available.

- *Road cargo*—while there are very high volumes of cross-border traffic, particularly during peak hours, at each of the three border-crossing points, a high level of physical control is present. Mandatory manifest reporting requirements apply (truck drivers, rather than the traders or their agents, normally prepare the manifests), but pre-arrival data are unavailable.

- *Sea cargo*—there is very little physical control over sea cargo, especially cargo delivered by river trading vessels (RTVs), which load and discharge most cargo directly onto delivery vehicles at public cargo working areas at which the CED has only a limited presence; pre-arrival notification is required of ocean-going vessels, but not of RTVs—there are no legal restrictions over where vessels may berth to load or discharge cargo, and no mandatory manifest reporting requirements apply (manifests are only required if specifically requested by the CED, otherwise automatic clearance is presumed).

This relatively loose control environment has evolved because Hong Kong SAR has always operated as a free port that has no import duties and only a few excise duties (imposed on hydrocarbon oil, liquor, tobacco, and methyl alcohol), most of which are at specific rates. Excisable goods are required to be held under the CED's control through a system of bonded or licensed warehouses until the duty is paid and a formal release is issued.

Nonexcisable goods are generally not subject to any such controls. Traders can take delivery of the goods up to 14 days before they are required to lodge a trade declaration to the Census and Statistics Department, providing details of the goods (based on the Harmonized System) and their valuation. This document is prepared by the trader and used mainly for checking whether trade licensing obligations have been met and for compiling trade statistics. Accordingly, *the CED does not have access to trade declarations at the time of cargo entry*.

Under a destination-based GST, virtually all importations of goods (other than trans-shipments) will be taxable, and all importations of goods (inclusive of goods in transit) will require the lodging of import declarations. Unless the CED can gain physical control of imported goods and maintain that control until such time as full descriptions and valuations are available for clearance purposes, it cannot hope to develop an effective risk management program, and the potential for leakage of the GST revenue will be enormous. Equally important will be undertaking measures to prepare importers to meet the new customs procedures and requirements under a destination-based GST.[31]

[31] In many countries, importers could avail themselves of the services of customs brokers to meet customs formalities. Hong Kong SAR does not at present have the practice of utilizing customs brokers.

In the absence of improved border controls and appropriate preparation of importers, the integrity of the GST would be so greatly compromised that implementation of the tax could not sensibly proceed.

C. Experience of Key Revenue Departments

CED

Current situation

The CED's main operational focus is on the interdiction of drugs and other prohibited goods, detection of smuggling, and enforcement of trade regulations and licenses. Its revenue collection activities are narrowly focused on the few excisables noted earlier. Consequently, it has not yet developed a strong commercial capability. Even for the branch that has responsibility for the collection of excise duties, there are very few operational officers who hold qualifications in accounting or commerce disciplines.

In all other (nonrevenue related) respects, the CED presents a relatively efficient and modern customs department. The absence of effective border controls referred to earlier is a direct result of the current free port status of Hong Kong SAR and the lack of statutory regulations on trading activities. There appears, however, to be adequate physical control infrastructure in place for passengers at all border-crossing points.

Implications of GST introduction

As noted earlier, all imports other than transshipment goods would be taxable under a destination-based GST, including goods brought across the border by air, sea, road, or rail as the personal baggage of passengers.[32] Typically, 40–60 percent of total GST collections will come from imports.

The CED will be responsible for capturing the valuation details of both import and export cargo, screening that cargo under a risk management program to ensure that the declared descriptions and valuations are accurate, and assessing and collecting the GST (and excise duty, if applicable) on taxable imports. The CED will also be required to administer arrangements related to the tax-free treatment of transshipment goods to ensure that goods subject to these concessions are not diverted into domestic consumption.[33] It will also be necessary for it to verify commercial exports on a targeted sample basis to guard against

[32] Most countries allow a low-value exemption threshold for these goods to facilitate passenger processing at the border.

[33] Most countries allow transshipment goods to be handled on a tax-free basis to alleviate the cash flow burden on traders. These arrangements are subject to strict customs controls.

export fraud (e.g., traders claiming to have exported goods that have in fact been sold domestically).

If the GST is to include provisions for tax refunds to tourists for goods taken overseas, infrastructure, to verify that the goods are exported and to assess and pay the amount of refund, will also need to be put in place at all major tourist departure points.

In short, *the CED will have to undergo a major reorientation of its operations and establish an entirely new commercial capability*.

IRD

Current situation

The IRD has in place a modern and sophisticated revenue collection system and an impressive suite of electronic taxpayer service delivery channels; both of these are essential capabilities for the successful implementation of a GST. However, it does not currently administer any broad-based consumption taxes: it is organized around the existing income taxes (on profits, salaries, and rental payments), all of which are imposed on a financial year basis and are subject to the issue of a formal assessment by the IRD. There are no mandatory withholding arrangements linked to these income taxes and the voluntary advance payments initiatives in place are not strongly patronized.

Based on data provided by the IRD, the majority of its financial and staff resources are currently devoted to its assessing and collection functions (85 percent and 89 percent, respectively). There are relatively few professional field audit and investigation staff (only 200 of a total staff of 3,392). There are a further 134 nonprofessional “inspections” staff who carry out nontechnical work in the field (e.g., service of notices, checks for possession of business licenses, etc.). The standard operating procedure for auditors appears to be to examine taxpayers’ records back at headquarters rather than at the business premises.

Both the field audit and investigation teams currently achieve close to a 100 percent recovery rate in cases selected for field checks (the coverage rate is about 1 percent). Even allowing for the fact that these cases are highly targeted, this success rate raises concerns about the general level of compliance in Hong Kong SAR with existing taxes.

The IRD screens returns filed for high value/high risk cases and holds these for internal examination. Around 30 percent of returns filed are targeted for this action. The remainder are accepted at face value (subject to the possibility of later audit) and processed on the basis of the data supplied by the taxpayer. The IRD is currently planning to reduce the extent of returns subjected to this formal internal review to 20 percent in future years.

The standard of record keeping among small businesses is of major concern. Since 1995/96, a substantial effort has been made to improve the situation. The record-keeping requirements in the law have been amended to specify in detail the type of records required to be maintained, and a significant education campaign has been undertaken. Senior IRD staff report that the project has been successful in increasing the number of businesses that have the requisite records; they are less confident about the completeness of those records. A survey conducted in 1998 by the IRD of around 2,500 businesses in sectors known to have a high proportion of cash sales indicated that only one third of the sample had cash registers—primarily those with an annual turnover of over HK$1 million. IRD staff also advised that the penetration of standard accounting software packages among small businesses is not high in Hong Kong SAR, as these products are generally not available in Chinese.

Implications of GST introduction

The introduction of a GST would have a major impact on the operations of the IRD. Even with a relatively high exemption threshold, a GST in Hong Kong SAR could still reasonably be expected to involve a great number of registered taxpayers.[34] Unlike the existing income taxes, the GST will involve multiple returns and payments during the year for each registered taxpayer. It is common to require large taxpayers to file and pay every month to improve the government's cash flow. Smaller taxpayers are often granted extended filing periods (e.g., on a quarterly basis) to reduce both administrative and compliance costs.

This change will represent a major increase in the processing work of the IRD, and will require different strategies in respect of identifying and actioning stop filer cases and managing tax arrears. Strategies that are effective in dealing with annual obligations are not necessarily transferable to monthly and quarterly type obligations where the potential revenue loss escalates at a far quicker pace.

Effective GST administrations rely on a self-assessment or voluntary-compliance regime. Obligations are self-assessed for each filing period by registered taxpayers. Returns are filed with payments and represent the taxpayers' final liability unless a subsequent check discloses an error. Compliance is achieved through a combination of high-quality taxpayer education and service, a highly visible field audit presence, and an effective enforcement system. The majority of GST field visits tend to be highly targeted quick audits aimed at verifying specific claims. Typically, upwards of 40 percent of GST staff are involved in some form of audit activity.

Like the CED, *the IRD will clearly need to re-engineer its operations and procedures to effectively implement the new tax.*

[34] As a rough indication, the data from Table 6 suggest that the number of registered taxpayers would be about 200,000 (90,000) if the registration threshold is set at HK$1 million (HK$5 million). These estimates incorporate an assumed number of voluntary registrants that is about a third of required registrants.

D. Contingency Planning

One important decision in introducing a GST is the choice of the department to administer it. International practice suggests that there are basically three options: the IRD, the CED, or a new GST department. In making this decision, a number of factors would need to be considered.[35] While in the Hong Kong SAR's context an assessment of such factors at this juncture is premature (for reasons already noted), it is likely that the IRD would be more suitable to administer the GST in Hong Kong SAR with the CED responsible for collections at the borders.[36] One reason for this is clearly that the IRD has far superior expertise relative to the CED in tax administration in general; another reason would be that the overheads involved in setting up a new and separate department to administer the GST at the low rate contemplated by the authorities would be prohibitive.

Even in the absence of an organizational decision on the choice of the department to administer the GST, there are measures that both the CED and the IRD could usefully undertake now to prepare for its possible introduction. Neither the CED nor the IRD has, as yet, conducted any contingency planning to identify the potential impact of introducing a destination-based GST on its administration. The impact on both departments will be great and will clearly require a sea change in the design of their operations and systems support.

It is suggested that both departments should commence planning now around the contingency of the GST's introduction in a three-year timeframe (assuming the decision to introduce the GST is taken around end-2001). These planning exercises should focus both on the broad impact of a GST and on identifying administrative improvements that could reasonably be implemented over the next 12 months. Given their lack of experience in administering broad-based taxes, the departments should be encouraged to seek assistance with these exercises from other countries in the region that have relevant experience and expertise.

The focus of the discussion below on contingency planning is on measures that, if implemented, would strengthen both the IRD and the CED even if the ultimate decision is not to introduce the GST.

Planning focus for CED

For purposes of contingency planning, the CED should focus on the following tasks.

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[35] For a general discussion of these factors, see Tait (1991), op. cit.

[36] This is the organizational model that has been adopted by many countries, including Australia, New Zealand, and Singapore.

Implementing key recommendations on customs clearance and services

A major review of the CED's operations with the aim of improving the levels of cargo facilitation and control has recently been completed.[37] The mission regards recommendations 1–5 and 10 of that report as *essential* first steps in establishing an acceptable border control environment in Hong Kong SAR. These recommendations (in summary form) are to:

- require compulsory notification from RTVs of their intended place of discharge and loading of cargo;
- address security issues at all places where sea cargo is loaded or discharged;
- provide an effective vessel identification system for RTVs;
- advance the CED's proposal to introduce closed-circuit television surveillance and dedicated examination areas at railway terminals;
- require import manifests to be provided to the CED for all modes of cargo prior to release of the cargo; and
- maintain requirement for export manifest reporting prior to departure.

Improved control and earlier lodgment of cargo manifests alone will not provide sufficient information to support the effective administration of a GST, as the manifests do not contain specific descriptions of the cargo and do not provide details of valuation. However, taking action now to gain effective physical control over all modes of transport, and to improve the timeliness of current information flows, would provide a much stronger platform for further incremental change with the advent of the GST. Dealing with these critical issues on an incremental basis will also assist in managing the resistance likely to be faced from operators of RTVs and other small businesses involved in cross-border trade.

Taking an integrated approach to border controls

The mission noted that border-processing activities are currently conducted independently by the CED and immigration officers operating from separate kiosks. In many countries, customs officers perform both (frontline) immigration and customs activities from a single kiosk. The adoption of this "whole-of-government" approach should be considered for Hong Kong SAR—it could potentially deliver significant resource savings to offset the costs of implementing a GST.

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[37] See *Consultancy Study on Customs Cargo Clearance Requirements and Services* (Crow Maunsell Management Consultants; August 17, 2000).

Planning focus for IRD

For purposes of contingency planning, the IRD should focus on the following tasks.
Developing and maintaining a database on active businesses

Data required to support the implementation of a GST, such as the form of business, annual turnover, trade classification, business address, and other contact details of all active registered businesses should be identified to improve the IRD's current risk management and case selection capabilities and improve the targeting of service initiatives.[38] Amendments to current returns and surveys could be considered to further the objective of enhanced data capturing. Developing and maintaining such a database will also enable the authorities to set an appropriate exemption threshold for small businesses,[39] as well as establish the basis for a GST taxpayer masterfile that will facilitate the initial GST registration.

The opportunities presented by the introduction of a GST for the regular capture of real-time data to support compliance management of existing taxes should be reviewed so that a coordinated data capture strategy across all taxes and charges can be implemented. This review should also include consideration of external data sources that may be useful for information matching purposes, and the identification of any impediments to the free exchange of such information (e.g., information from the recently introduced Mandatory Provident Fund (MPF)).

Information exchange would, of course, be facilitated if the same system of taxpayer identification numbers (TINs) is used for all taxes, including the prospective GST. At present, TINs in Hong Kong SAR are based on the mandatory business registration numbers. This would be an opportune time to review whether such numbers are adequate in capturing all the essential taxpayer information and, if not, to undertake a comprehensive revision.[40]

Accelerating the shift to a full self-assessment system

The planned shift away from reliance on formal internal assessments of taxpayers' liabilities toward more of a full self-assessment system should be accelerated.[41] Professional staff and other resources freed up through this strategy should be redeployed to substantially upgrade

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[38] It is understood that systems enhancements planned for next year will include this capability. Their pace of implementation should be quickened as a matter of priority.

[39] At present, the IRD cannot readily produce data, for example, to allow an accurate estimate of the potential GST taxpayer population.

[40] See Tait (1991), op. cit., for more detailed discussion of TIN design.

[41] Organizationally, the IRD, being already organized along functional lines, is certainly well positioned to accommodate such a shift.

the department's field audit and enforcement capabilities. This would modernize the current administration and encourage increased voluntary compliance with existing taxes. It would also place the IRD on a much stronger footing to deal with the increased field audit coverage necessary under a GST.

In carrying out the above shift, it is worth emphasizing the minimum requirements of an effective self-assessment system. They include: (1) taxpayers must have a good understanding of their obligations and entitlements; (2) forms and procedures must be simple to encourage taxpayer compliance; (3) the penalties of noncompliance must be perceived by taxpayers as strong but fair; and (4) taxpayers must believe that effective verification and enforcement programs exist. These requirements are applicable to all taxes, not just the GST.

Developing shorter and more targeted audits

While there may be limited scope for this type of activity under the current income tax regime, the IRD should look for opportunities to pursue this strategy, such as contracting to manage compliance checks related to the MPF (if resources permit and such arrangements do not face regulatory obstacles). In looking for these opportunities, the IRD should keep in mind the potential overlap of the incidence of GST obligations with obligations for other government taxes and licenses. Many countries are moving toward a whole-of-government approach to compliance management to minimize costs and reduce the level of intrusion of government on business.

Promoting a culture of field checks at business premises

The current audit culture of withdrawing to the IRD offices to review tax records rather than completing the audit at the actual business premises needs to shift towards a more robust field-based approach. Staff will need to become accustomed to dealing with taxpayers on their own premises to effectively manage GST compliance.

Upgrading the skills of field inspection staff

IRD inspections staff currently achieve very high coverage rates for low-level field activities. This type of high visibility is also desirable under a GST regime. With extra training and experience these staff could potentially be utilized in conducting taxpayer advisory visits under a GST, [42] or other education activities for existing taxes. Consideration should be given now to upgrading their skills in areas such as record-keeping (i.e., to a point where they can advise small businesses on how to set up their record-keeping systems to comply with IRD requirements).

[42] It has been found in Australia that a most effective way to ensure that small businesses fully appreciate their obligations and entitlements under the GST is to provide a program of free advisory visits at the taxpayer's premises.

Maintaining a strong focus on improving record-keeping standards and practices

Good business record-keeping practices are an essential element of a successful GST administration. Businesses need to maintain accurate records to establish both their liabilities on sales and to substantiate claims for input tax credits. The IRD should continue to focus on improved record-keeping practices as a major strategy to enhance voluntary compliance with existing taxes, and to create an environment suitable for the introduction of a GST. The outcome targeted should be an improvement in the accuracy of the records kept as well as the form in which they are kept.

This focus should also be used to sharpen the IRD's intelligence on the penetration of cash registers and other point-of-sale technology in the small business market segment. This will be another important input to the decision on where to set the GST registration threshold.[43]

Enhancing consultations with industry representatives and tax professionals

The IRD should consider setting up a number of "industry-partnerships" under which a cross section of industry participants are provided with an on-going opportunity for direct input on policy and administrative issues affecting their industry. This form of consultation is most effective where the industry representatives are encouraged to put forward options for improvements rather than to merely identify issues and/or respond to government proposals.

Genuine commitment to this process will help establish better relationships between the IRD and industry and most likely result in the development of consensus approaches to resolving difficult issues. Once a level of trust has been established between the parties, and these forums are working effectively, they can be invaluable in quickly identifying and resolving issues with any new or existing taxes.

This same partnership approach should be adopted in regard to dealings with tax professionals, particularly those practitioners that service small businesses. Effective consultations with this group can provide significant leverage in educating new businesses regarding changes to the tax regime, and in improving compliance by small businesses.

[43] Australia provided a $A200 redeemable voucher to assist small businesses to upgrade accounting and other point-of-sale equipment, and allowed a 100 percent immediate income tax write-off.

Taxing Broad-Based Consumption: Concepts and Methods

A broad-based consumption tax can be levied in many different ways. This appendix looks at the main alternatives, and discusses the practical differences between them from an economic perspective.

The main focus is on taxes which are levied on flows of goods and services, and which are not differentiated according to any characteristics of the final consumers. Conventionally, these are classified as indirect taxes, since the burden ultimately borne by individuals depends on the way in which the tax is passed on to them in the prices of the goods and services that they buy. A very large number of taxes of this kind can be distinguished. Three main possibilities are summarized below, and their properties are compared. A tax on consumption can, however, also be levied directly, according to the total value of goods and services that each individual consumes. Taxes of this kind are also briefly considered.

A. Retail Sales Tax

The aim of a consumption tax that is levied on flows of goods and services is to tax all final consumption at a single rate (or at different rates which depend only on the nature of the goods and services consumed, and not on any characteristics of the consumer). The basic design problem is to ensure that each item of final consumption bears the appropriate amount of tax.

A uniform turnover tax levied on all business sales of goods and services cannot achieve this result, because such a tax is charged each time goods and services pass from one business to another in intermediate stages of the production process. Such taxes provide strong incentives for vertical integration in the business sector, to minimize the total amount of tax that is levied. When viewed as a form of consumption tax, they also result in arbitrary variations in the total amount of tax that is effectively levied on final goods and services over all stages of production up to and including the final consumption stage. This problem of the cascading of tax at intermediate stages of production and distribution becomes an increasingly serious one as an economy develops and inter-industry transactions become increasingly complex. Simple turnover taxes, once widespread, have now virtually disappeared as a form of general consumption tax.

The most obvious solution to the problem of cascading in a simple turnover tax is to levy tax at only one stage of the production and distribution process—for preference, at the point where goods and services pass from the business sector to their final consumers. Defining this as the retail stage, this form of tax is the retail sales tax (RST).

RSTs have been applied in the past by many countries. Although no major country now uses a RST at the national level as its preferred form of consumption tax, such taxes are still levied in 46 of the states of the United States (where they were first introduced in the early

1930s) and in some Canadian provinces. Since the United States does not levy a consumption tax at the federal level,[44] these state-level RSTs are its main form of consumption tax. To the extent that a RST succeeds in confining the tax charge to final sales to consumers, cascading will be eliminated. In addition, the RST would appear to have an administrative advantage over a turnover tax, insofar as the number of taxpaying businesses will be smaller. In practice, however, this administrative advantage is rather limited, because retailers usually form the majority of businesses by number. Furthermore, in modern economies, other businesses, such as wholesalers and manufacturers, increasingly make some of their sales directly to consumers (and the proportion seems likely to rise quite sharply in the future with the increase in e-commerce). Eliminating tax on sales to businesses, while ensuring that all sales to consumers are subject to tax, thus becomes problematical. In the case of RSTs, this objective leads to a complex system of exemptions for:

- *businesses* that are not required to apply the RST on the grounds that all their sales are to other businesses;
- *sales of particular goods and services*, which are of a business nature and which are not likely to be purchased by final consumers; and
- *sales to particular customers*, who can certify that they are "business customers" for the purposes of the tax, or that their purchases are for resale.

These various exemptions are the primary source of administrative and compliance difficulties in the RSTs of the U.S. states. It appears, however, that they are not very effective in eliminating cascading: it has been estimated that about two-fifths of the tax revenue derived from the RSTs in the United States is actually derived from sales to businesses.[45]

The RST is designed to tax *domestic* consumption: that is, in principle it is a destination-based consumption tax. Any export sales that are made by registered retailers are exempted. By the same token, if domestic consumers import goods and services directly rather than through registered retailers, those imports should be subject to the RST.[46]

[44] The possible introduction of a federal RST has, however, been widely discussed in the United States in recent years.

[45] Raymond R. Ring, "Consumers' Share and Producers' Share of the General Sales Tax," *National Tax Journal*, Vol. 52 (March 1999). This high proportion is not entirely due to inherent weaknesses in the methods used to exempt sales to businesses under the state RSTs in the United States (though these weaknesses are substantial); to some degree, it also reflects deliberate policy choices to tax some intermediate goods and capital goods.

[46] In the case of the RSTs in most of the U.S. states—which have no customs boundaries, and which are constitutionally barred from imposing tax on retailers in other states—this result requires a supplementary "use tax," which is payable when goods imported from other states are brought into use in the taxing state. The use tax is applied most effectively to goods such as motor vehicles, which must be registered in the consumer's state of residence.

A single stage tax such as the RST can, of course, be levied at other stages of the production and distribution process—notably the wholesale stage, which may be defined for this purpose as a sale to a retailer. The motivation for this modification is to reduce the number of businesses that must apply the tax, and hence the administrative and compliance costs of collection. Because retail margins vary, however, such a tax cannot ensure that the appropriate amount of tax has been collected on all final sales to consumers; it cannot tax most services; and the practical problems of eliminating cascading of tax, which are already severe in the RST, are greatly compounded. Furthermore, it is much more difficult in practice to distinguish wholesalers (who make sales to retailers) than it is to distinguish retailers (who make sales to final consumers). If it is necessary to confine the obligation to apply a consumption tax on goods and services to a limited number of businesses to limit administrative and compliance costs, there is a much better alternative (discussed below) to a single-stage wholesale tax.

B. Credit-Invoice GST

The GST adopts an alternative method of eliminating cascading from a turnover tax structure to arrive at the same final result as is achieved, in principle, by the RST. Though the origins of the GST can be traced much further back, it first appeared in its modern form in Western Europe and Latin America in the late 1960s, and has since spread rapidly. Of the Fund's 182 member countries, more than two-thirds now use the GST as their general tax on consumption.

Instead of being confined to the final retail sale to a consumer, the GST is applied at each stage of the production and distribution chain—just as in the case of a turnover tax—but a full *credit* is provided for tax paid at the previous stage. In the most common form of the GST, businesses are required to provide purchasers with an invoice for each sale, indicating the amount of GST charged; those invoices entitle business purchasers to an input tax credit of that amount, to set against their GST output tax liability on their own sales; in the event that the net liability is negative in any period, the excess credit is refunded.

Provided that all sales of goods and services are subject to the GST, this credit-invoice mechanism should ensure that there is no cascading in the system. The qualification is, however, important. If any business is exempted from liability to GST on its sales, it will receive no credit for GST paid on its inputs; hence, that input tax will be included in the cost of its output. When that output is purchased by a GST-liable business, that business will receive no input tax credit, so that cascading will result. In general, any exemption of a business or a transaction in the production and distribution chain will result in cascading in a credit-invoice GST, unless the exempt transaction is a sale to a final consumer or an importation of goods and services. (When imports by a taxable business are exempted, the appropriate amount of tax will be collected on sales by the business and no cascading will arise.) In the case of a sale to a final consumer, loss of input tax credit by the exempt business ensures that it is only its value added that is effectively exempted—not the total value of the sale.

To ensure that exports are entirely free of tax (as required for a destination-based consumption tax that is equivalent to a RST), it is, therefore, not enough for a credit-invoice GST simply to exempt export sales. It must also ensure that the exporter receives full input tax credit for all of its purchases. This result is achieved by applying the credit-invoice system to exporters, but charging output tax on exports at a zero rate. In consequence, exporters typically have negative GST liabilities and are entitled to immediate refunds. (Since these refunds present opportunities for fraud in a GST system, however, they are usually subject to strict controls.)

In very open economies with a relatively small domestic manufacturing base, it is usually the case that at least half of the revenues from a GST are collected on imports by the customs administration with registered businesses contributing the remaining (net) revenue. This is in sharp contrast to the situation under a RST, where the amount that should in principle be collected on imports would typically be small.

C. Subtraction-Method GST

Both the RST and the credit-invoice GST are applied on a transaction basis to each sale of goods and services. Typically, both taxes must be paid to the government by registered businesses each month (or in some cases each quarter). The essential documentation consists in both cases of a comprehensive list of the business's sales (and purchases, in the case of the GST), the associated tax collected (and paid on purchases, in the case of the GST), and such supporting documentation as is required by the tax law (notably, in the case of a credit-invoice GST, the GST invoices).

These ledger records of sales and purchases are, of course, essential primary inputs into the annual accounting statements of the business. This suggests that the same GST could be levied in an alternative way on the basis of those accounts, by applying the tax rate to the difference between total sales of goods and services and total purchases from other businesses during the accounting period.[47] This subtraction-method GST (sometimes referred to as a business transactions tax) would appear at first glance to be a simpler and less intrusive form of levying the tax than the credit-invoice method.

For an individual business in a particular period of time, the two methods will yield the same result, provided that all purchases and sales are subject to the same tax rate. Differences arise, however, if some goods and services are subject to different tax rates (including the zero rate for exports, when the tax is applied on a destination basis) or if some of them are exempt. Implicitly, when a GST is applied by the subtraction method at a particular rate, the business

[47] In general, credit-invoice GSTs are applied to sales measured on a GST-exclusive basis, and the purchases and sales of a GST-registered business are generally shown in its accounts on this same GST-exclusive basis. When the GST is applied using the subtraction method, however, it is more natural to show purchases and sales in the accounts on a GST-inclusive basis.

receives a credit for all of its inputs at that same rate—irrespective of how much tax was actually charged on those inputs by its suppliers. Hence, by the time particular goods and services reach their final consumers, the total amount of tax actually collected will vary arbitrarily between the highest and the lowest rate levied on all stages of the production and distribution process.[48]

At the price of introducing some complexity into the system, it is possible to modify a subtraction-method GST in such a way as to remove this feature. Sales and purchases shown in the ledgers could be disaggregated according to the different rates applicable to each transaction. The amount of output tax and input tax that would have been collected or paid under a credit-invoice GST could then be computed and the computed; and the computed input tax could then be subtracted from the tax due on sales. Modification along these lines would be necessary to allow a destination-based GST, exempting exports from the tax, to be applied. Effectively, this modified subtraction-method GST would be equivalent to a credit-invoice GST, but it would be collected using a rather different administrative machinery (at less frequent intervals, and perhaps with different documentation requirements).[49]

A different variant of the basic subtraction-method GST is an addition-method GST. The difference between sales and purchases by a business consists, by definition, of the earnings of factors of production in the form of wages, interest, and profits.[50] Thus, a tax exactly equivalent to a simple subtraction-method GST can be calculated directly from the annual accounts (rather than from the underlying sales and purchase ledgers), by adding wage costs and interest expenses to an appropriate measure of profits. GSTs have been applied in this form in some countries in a variety of circumstances—for example, in Israel, as a way of including the value added of the financial sector in the aggregate base of a consumption tax (see Appendix II). Approximations to an addition-method GST are also applied in two U.S. states, Michigan and New Hampshire, where they are known respectively as the single business tax and the business enterprise tax. A similar tax was introduced in Italy in 1998, as a component of a reform of its taxes on corporate income and wealth. As their titles indicate, these taxes are perceived as taxes on businesses rather than as consumption taxes, despite their formal equivalence to a subtraction-method GST levied on an origin basis. In the case of Michigan, the single business tax was introduced as a replacement for a state corporate income tax and it coexists with a state RST.

[48] It should be noted, however, that there will be no cascading in a subtraction-method GST. The problem that can arise in a credit-invoice GST—that cascading results when exempt businesses sell to taxable businesses—would be overcome, since the taxable business purchaser would effectively receive a credit for tax that had not in fact been paid by the exempt business supplier.

[49] This is the method applied in Japan, whose consumption tax is based on annual accounts but seeks to achieve essentially the same result as a standard credit-invoice GST.

[50] For this identity to hold, it is necessary to make certain adjustments to the measure of profits shown in conventional accounting statements. In particular, depreciation would be added back to those accounting profits; and purchases of capital assets, increases in the book value of inventories, and capital gains, would all be deducted.

D. Some Comparisons

In the simplest case, when all goods and services are subject to the same tax rate, exactly the same tax on final consumption could be levied using any of the three basic methods discussed above. However, there are substantial differences in their administrative implications, both for businesses and for the tax administration. These differences inevitably lead to compromises in the precise form in which the three taxes are applied in practice. Those compromises, in turn, can have important economic implications. Further differences arise from the difference in the stage of the production and distribution chain at which the tax is collected. Finally, the particular form in which the tax is levied may influence the way in which it is perceived, both by businesses and by the general public.

Administration

The main administrative differences stem from the set of businesses that are liable to collect and pay the tax and the reporting and documentation requirements imposed on them.

The most obvious difference between the RST on the one hand, and the two forms of GST on the other, concerns the number of businesses that would need to be registered if the taxes were to be applied in a comprehensive manner, with no exemptions for smaller businesses in particular. Estimates for the United States suggest that as many as two-thirds of businesses are registered for RST purposes in the states in which this tax is applied, so the difference should not be exaggerated; but it is nevertheless a substantial one. The difference in administrative and compliance costs between a RST and a credit-invoice GST is not, however, proportional to the difference in taxpayer numbers. As noted above, to eliminate tax from sales to other businesses, the RST requires exemption mechanisms, which can be quite complex, both for RST-liable businesses to apply and for a tax administration to audit. The failure of these mechanisms in practice to eliminate tax on sales to other businesses is commonly seen in the United States as the most serious weakness of its state RSTs.

Furthermore, GSTs are generally not applied comprehensively: smaller businesses (usually defined as those with turnover below some specified level) are exempted from the system. The purpose of this exemption is simply to reduce administrative and compliance costs. The exemption entails some revenue loss, but this is generally rather small. As has already been noted, it also results in some cascading in a credit-invoice GST when the exempt business sells to a taxable business; and it distorts price competition between businesses that are exempt and those that are not. These effects are also usually quite small, however. As noted in the main text, taxable businesses will prefer not to buy their inputs from those that are exempt, since they would then lose their input tax credit. Hence, any business that sells primarily to taxable businesses will have an incentive to register as a GST taxpayer, even when it is not required to do so; this reduces cascading. And the potential pricing advantage of an exempt over a taxable business will be confined to the tax on the former’s net margin of profit and labor cost; if that margin is 15 percent and the tax rate is 3 percent, for example, the potential price advantage created by the exemption is only 0.45 percent—not the full 3 percent tax rate applied.

It might appear that any saving of administrative and compliance costs which can be achieved in a GST through the use of an exemption threshold could also be achieved in a single-stage RST. In this case, however, the potential distortion to price competition would be much larger: in the above example, the price advantage of the exempt business would be 3 percent, not 0.45 percent. Hence, an exemption for small businesses creates much more distortion under a RST than under a GST, and is likely to be a much more contentious provision. In practice, while the great majority of GSTs exempt small businesses from liability to collect and pay the tax, none of the state RSTs in the United States does so.

With regard to documentation, the major difference between the three taxes is the GST invoice that credit-invoice GSTs require sellers to provide with each sale. The function of this invoice is to provide the basis for an audit of claims to input tax credit. It is not an essential difference between the three systems, which in practice rely primarily on sales and purchase ledgers (or their electronic equivalents). However, the audit trail created by a credit-invoice GST is an important reason why—other things being equal—taxpayer compliance can be expected to be significantly higher under this tax than under a RST (or a subtraction-method GST without an invoice requirement). For all but the smallest businesses, the GST's invoice requirement is unlikely to add significantly to compliance costs.

Stages of collection

Under the GST (in both its credit-invoice and subtraction forms), tax is collected incrementally at every stage from imports or primary production to retail sale; under the RST, by contrast, the tax is suspended until that final retail stage. The timing of revenue collections under the two taxes is, therefore, different.

More importantly, the incremental approach of the GST has three major benefits from a compliance perspective. First, tax compliance is generally weakest, and enforcement most difficult, in the retail sector—since this sector typically includes large numbers of very small businesses, with relatively low standards of accounting and record keeping. The GST shifts the major part of tax collections from this sector to earlier stages including the import stage, where most countries find it easiest to levy tax effectively. Second, less revenue is at risk in the event of noncompliance by any particular business. An understatement of sales results in a loss of tax only on the sale margin, not on the total value of the sale.[51] Third, in the case of a credit-invoice GST where the understatement is coupled with failure to issue a GST invoice, that loss of tax will be made up at any subsequent stage since it will reduce the tax credit available to the purchaser. To this extent, the credit-invoice GST is self-policing.

[51] In addition to understatement of sales, a credit-invoice GST can be vulnerable to fraudulent claims for input tax credits—a form of noncompliance that is not available under a RST. However, there are features of a RST that create opportunities for fraud that are not present in a GST. Claims to exemptions for sales to businesses are an example: with a RST, both seller and purchaser have an interest in representing a sale as exempt.

From a compliance perspective, therefore, the GST—particularly in its credit-invoice form—has substantial advantages over a RST. These advantages become increasingly important, the higher is the tax rate that is to be applied, and the lower is the general state of tax compliance in an economy. It is not accidental that RSTs survive only where they are levied at relatively low rates, in economies with relatively high levels of tax compliance.

Perceptions

The base of all three taxes is domestic consumption of goods and services. Although the law places liability to pay the tax on businesses (and importers), the intention and the expectation are that the full amount of the tax will be passed on in the first instance in the prices charged on sales. Businesses are appropriately seen as tax collectors, rather than as taxpayers.

This is most evident in the case of the state RSTs in the United States. The U.S. practice is to quote retail prices on a tax-exclusive basis, and to itemize the tax separately on invoices and receipts: consumers are reminded that they are paying tax every time they make a purchase. In the case of credit-invoice GSTs, the practice varies. In most countries retail prices are quoted on a tax-inclusive basis, although the GST element of the price must still be itemized separately on the invoice or receipt; in some cases, tax-inclusive invoices that do not itemize the tax may be permitted for retail sales. These differences in the way in which prices must be quoted do not, however, reflect any difference of substance in the taxes themselves. With all three forms of the tax, the government can require prices to be quoted on either a tax-exclusive or a tax-inclusive basis.

From the standpoint of public perceptions, the distinction between transactions-based taxes (such as the RST and the credit-invoice GST) and those that are based on accounts (such as the addition- and subtraction-method GSTs) may be more important. Because of the particular way in which it is assessed, it is not difficult to see why Michigan's addition-method GST is commonly viewed by businesses (and by legislators) as a rather crude charge on their profits, and is not generally seen by consumers as equivalent to a RST. These perceptions are likely to make an accounts-based tax more acceptable to consumers, and less acceptable to businesses.

E. Direct Consumption Taxes

Flat rate cash-flow tax

As has been noted, a GST that is identical to a subtraction-method, origin-based GST can be levied instead under the addition method on a base that consists, for each business, of the total of its wage payments and profits—where profits are measured for this purpose on a cash-flow basis consisting of:

- conventional accounting profits;

- *plus* depreciation charged in the accounts, sales of capital assets, and interest payments,

- *less* capital expenditures, increases in the value of inventories, interest receipts, and capital gains included in accounting profits.[52]

It should make no difference if this tax were to be divided into two parts, and levied separately on wages (or payroll), and the cash-flow measure of profits. Furthermore, since the incidence of a tax in economic theory does not depend on whether the legal liability for payment is placed on the buyer or the seller, but only on what is taxed, liability for the payroll element of this tax could be transferred from the business to its employees without destroying its analytical equivalence to a subtraction-method GST applied on an origin basis.

This is, in essence, the consumption tax proposal that was first put forward in the United States in the early 1980s under the name of the "flat tax."[53] As a possible replacement for the present federal personal and corporate income taxes, this proposal has received considerable attention in subsequent discussions of fundamental tax reform in the United States. The only significant difference between a subtraction-method, origin-based GST and the flat tax proposal is that the wage tax component of the latter would incorporate an individual (or family) exemption, and would thus have an element of progressivity. Formally, the proposal may be seen as equivalent to a combination of an origin-based GST, and a tax credit for individual wage- and pension-earners that would depend on their family circumstances. Although draft flat tax legislation was introduced in the United States Congress in 1995, the likelihood of such a proposal being adopted seems very low.

It is worth noting at this point, however, that the combination of Hong Kong SAR's salaries tax (with a top marginal rate of 17 percent, and a standard rate of 15 percent) and profits tax (with uniform rates of 16 percent (on corporations) and 15 percent (on others)) approximates quite closely to the above flat tax proposal. In the profits tax, expenditure on plant and machinery qualifies for an allowance of 60 percent in the first year (and 100 percent when it is used in a manufacturing process), so that allowances for capital expenditures are closer to full expensing than to the depreciation allowances that would be given in a conventional profits tax; interest receipts of nonfinancial businesses are exempt, or charged at one-half of the standard rate; and most capital gains are exempt. The present profits tax in Hong Kong SAR thus has many of the features of the cash-flow tax on businesses; combined with its salaries tax, one can argue that Hong Kong SAR already has, in effect, a tax on consumption.

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[52] As a tax base, this cash-flow measure of profit has the characteristic feature that the tax would not affect the rate of return on an investment by the business. By allowing an immediate deduction for all investment expenditures, but taxing the proceeds in full, the tax would effectively make the government an equity partner with the business in each investment: in present value terms, the government gains (or loses) as the investment proves successful (or unsuccessful) for the investing business.

[53] Robert E. Hall and Alvin Rabuschka, *The Flat Tax*, second edition (Hoover Institution Press, 1995).

This consumption tax is levied, however, on an origin basis. Converting it to a destination basis would require (among other things) that appropriate amounts of both profits tax and salaries tax be refunded to exporting businesses; with this form of consumption tax, such border tax adjustments would be very difficult to calculate and to administer adequately.

Consumed income tax

From a macroeconomic as well as an individual perspective, total consumption in a given period may be calculated not only by summing all consumer purchases, but alternatively as the difference between income (from both labor and capital) and net savings. Reasonably comprehensive proposals to reform existing income taxes by allowing net savings to be deducted from the base were presented in the United States, the United Kingdom, and Sweden in the late 1970s—though the idea of such a tax is much older. None of these proposals for radical income tax reform has been adopted (or seems likely to be adopted).[54]

However, discussion of the proposals has increased awareness of the fact that personal income tax systems in OECD countries treat some forms of savings, including most savings for retirement, in the manner that would be appropriate in a consumed income tax rather than a pure income tax: contributions to pension schemes (and similar arrangements) are, typically, deductible from taxable income; the pension funds themselves are not taxed; but tax is payable in full on pension income. Income tax systems that incorporate such arrangements for a major component of personal savings are appropriately seen as hybrids of an income and consumption tax, rather than as pure income taxes. Even though it seems unlikely that radical proposals to generalize the treatment of certain retirement savings to *all* forms of saving will be adopted by any country in the short term, personal income tax systems could, nevertheless, evolve gradually towards consumed income taxes in this manner.

A slightly less obvious approach to a consumed income tax would provide no tax relief for savings when they are made, but instead would exempt from tax the return on those savings. From a consumption tax perspective, the tax paid on income that is saved can be regarded as a prepayment of the individual's tax liability on his or her ultimate consumption of that saved income (together with the accumulated return on the savings). This "tax prepayment" approach would collect the same amount of tax from an individual over his or her lifetime, in present value terms, as an income tax with a full deduction for net savings.[55] A practical implementation of such a system would consist of a personal income tax confined to wage and salary income, together (optionally) with a tax on a cash-flow measure of business

[54] For a recent description of the proposal in the United States, see Laurence S. Seidman, *The USA Tax: A Progressive Consumption Tax* (MIT Press, 1997).

[55] This equivalence proposition assumes, among other things, that the income tax rate facing the individual is not expected to change, and that he fully consumes his income over the course of his lifetime. In more realistic circumstances, the tax prepaid form of individual consumption tax would not be fully equivalent to a tax on income with a deduction for net savings.

profits, which would raise no tax from marginal investment projects. By a rather different route, therefore, the tax prepayment approach to a consumed income tax arrives at a tax structure equivalent to the flat tax variant of an addition-method GST.

F. Summing Up

The purpose of this appendix has been to survey alternative ways of taxing consumption, rather than to argue a case for the adoption of any particular method. But it seems worth highlighting some of the points made, which seem particularly relevant to the present debate in Hong Kong SAR on the introduction of a broad-based consumption tax.

- Hong Kong SAR already has—in its profits tax and salaries tax—a system that approximates quite closely to a consumption tax. From this perspective, the debate is not about whether consumption should be taxed, but about whether an *additional form* of consumption tax should be introduced (for instance, to expand the tax base to those whose earnings are below the threshold for the salaries tax, or as one means of stabilizing the tax base).

- Although a RST and a GST can be analytically equivalent, in practical application they are not. A GST scores heavily over a RST in its ability to (1) remove the cascading of tax at intermediate stages of the production and distribution chain, and (2) ensure adequate compliance in cases where this is likely to be weak. It is doubtful whether a GST has any disadvantages compared with a RST in respect of administration and compliance costs of collection, to set against these major advantages.

- The relative merits of a standard credit-invoice GST and the accounts-based subtraction-method GST seem more finely balanced—especially if the GST is designed to have a single rate and few exemptions. In choosing between them, crucial issues are (1) the benefits (and costs) of the new audit trail that is created by a standard credit-invoice GST, and (2) the differences in the way in which these different forms of tax might be perceived both by businesses and by consumers. In most countries, the balance of advantage has been seen to favor the credit-invoice GST—which remains the international norm.

ALTERNATIVE GST TREATMENTS OF FINANCIAL SERVICES

Financial services, like the supply of any other goods or services, could be taxed, exempted, or zero-rated under the GST. The policy decision on the GST treatment of such services involves a balancing of the revenue impact, the administration and compliance costs, and the economic distortions that would result from the different treatments. It is easier to balance the competing considerations when financial institutions charge explicit fees for their services. Difficulties arise if, as is frequently the case with these institutions, the service fees charged are implicit as, for example, when they bundle financial intermediation and other services as part of their finance charges on loans and interest payments on deposits. In such cases, it would be difficult to ascertain the basis on which the GST should apply.

If the value of certain financial services is to be taxed, the service provider must identify and value the taxable services, including the implicit charges for services buried in interest rates. If a bank or insurance company provides both taxable and exempt services, the firm must allocate the business inputs between the two categories of services because only the GST on inputs attributable to taxable services qualifies for the input credit. In either case, the correct application of the GST poses formidable administrative challenges.

This appendix elaborates on the nature of the problem in taxing financial services, discusses possible alternative GST treatments of such services, surveys country practices, and assesses the merits and limitations of each treatment.

A. Nature of the Problem

Financial institutions often provide, in addition to intermediation between depositors and borrowers, a host of services such as asset management, investment advice, and a variety of insurance products. Some of these services may be bundled with the intermediation services or be rendered for explicit fees. GST complications are largely associated with the intermediation services and services rendered for implicit fees.

Intermediation services

Banks provide intermediation services both to depositors and borrowers. The value of these services provided can be measured by the spread between the interest received on deposits and the interest charged on loans. For example, assume that the deposit rate is 3 percent and the loan rate is 8 percent, and that what is referred to as the pure cost of funds (such as the rate on short-term government securities[56]) is 5 percent. The spread of 5 percent (8 percent less 3 percent) is then the value of the total intermediation services provided—split between the borrower (the 3 percent premium he pays relative to the pure cost of funds) and the depositor (the 2 percent interest he forgoes relative to the pure cost of funds).

[56] See Satya Poddar and Morley English, “Taxation of Financial Services Under a Value-Added Tax: Applying the Cash-flow Approach,” *National Tax Journal*, Vol. 50 (March 1997).

Under a credit-invoice GST, a registered person's tax liability generally is measured by the difference between the tax charged on taxable sales and the tax paid on taxable purchases for the tax period, on the basis of special GST invoices issued by registered persons. Banks cannot use this traditional method to compute their tax liabilities because many of the costs that should be considered business inputs (such as deposits received) are purchased from consumers who are necessarily unregistered persons for GST purposes and, therefore, are not permitted to issue GST invoices. Another problem associated with taxing intermediation services is that there is no established method to calculate the value of these services on a transaction-by-transaction basis in a manner that allows the banks to impose the GST and notify their business customers of the amount of the GST so charged—which is necessary if the businesses are to claim input tax credit for the GST they paid on their purchases of the taxed intermediation services.[57] If these services are exempted from the GST because they are buried in interest rate spreads and are, therefore, administratively impractical to tax, then banks would be denied input credits for the GST they paid on purchases related to providing the exempt intermediation services. Exempting such services is thus equivalent to breaking the credit chain—and results in cascading—whenever they are purchased by businesses as inputs in making taxable sales.

Financial institutions other than banks may also provide intermediation services. Hence, the GST treatment of these services should be uniform across all service providers to prevent the creation of incentives to channel funds through particular types of financial institutions.

Financial services with explicit fees

Explicit fees for services rendered by banks and other financial institutions (e.g., nonlife insurance companies) can be easily included in the base of a credit-invoice GST without imposing significant administrative and compliance costs for both businesses and the tax authorities. If a GST is charged on such fees, businesses which purchased the fee-based services would be able to claim input credits for the GST paid to the extent that they used these services in making taxable sales. For example, if a bank charges fees on cash withdrawals from an automated teller machine (ATM), such fees could be subject to the GST. It then follows that the bank is rendering a taxable service, so it can claim input credit for the GST paid on purchases used in providing the service. If a consumer purchases the ATM service, the consumer bears the GST on this service. If it is purchased by a business making taxable sales, the business can recover the tax charged on this service by claiming it as an input credit on its GST return. Hence, financial services with explicit fees can be taxed just like any other goods or services.

[57] See Alan Schenk, "Taxation of Financial Services Under a Value Added Tax: A Critique of the Treatment Abroad and the Proposals in the United States," *Tax Notes International* (September 12, 1994).

Financial services with implicit fees

The difficulty in taxing implicit fees on financial services, that is, fees that are incorporated into interest rate spreads, is formally equivalent to that in taxing intermediation services. If exempted from the GST, cascading would result for much the same reason as exempting intermediation services. In addition, the exemption of intermediation services and other services with implicit fees would lead to substantial administration and compliance costs if the service provider also provides taxable services (e.g., services with explicit fees). These costs occur because the provider must calculate the proportion of the input tax that is not creditable, that is, the proportion of purchases that is related to the exempt services—and the tax authorities must verify that this allocation is correct. Experience in a number of countries indicates that there are frequent disagreements between financial institutions and the tax authorities over the appropriate amount of input tax that is creditable.

Exempting services with implicit fees can also lead to a distortion in that financial institutions may attempt to provide many of the inputs it needs in-house (i.e., vertically integrate) to avoid paying noncreditable GST on such purchases used in rendering exempt financial services. Thus, for example, instead of purchasing bank forms and stationery from an outside printer (and paying the GST on the purchase), a bank could operate its own print shop if doing so would be less costly on account of the tax saving. Suppliers to banks may thus protest the loss of business solely due to this consequence caused by the GST. Some countries attempt to discourage vertical integrating by imposing the GST on the value of self-supplied inputs (known as a "self-supply rule").[58] For example, the bank could be required to report as a taxable purchase the value of the forms and stationery it supplies to itself. The difficult problem is, of course, to identify the inputs that should be subject to the self-supply rule.

To date, no country with a GST has found it administratively feasible to tax intermediation services or services with implicit fees rendered by banks or other financial institutions to their business customers in a way that provides the latter, on a transaction-by-transaction basis, with an input credit for the tax imposed on these services. While the prospective removal of the ceiling on deposit rates in Hong Kong SAR may well induce some financial institutions to convert many of their implicit fees to explicit fees for competition reasons, it is still likely that some services would continue to be bundled with intermediation services through adjustment in the interest rate spreads. Hence, financial services with implicit fees would remain a challenge for the GST.

[58] The Sixth Directive of the EU contains a self supply rule. Australia attempts to limit vertical integration by providing targeted partial input tax credits associated with exempt supplies. Singapore also grants partial input tax credits to exempt financial service providers, but largely for somewhat different reasons (see below).

B. Alternative GST Treatments and Country Practices

A number of different approaches—with varying degrees of merits and limitations—are available to address the difficulty in taxing financial services under the GST. Country practices also vary. A brief assessment of these approaches and practices is given below.

Exempting financial services

The difficulty in identifying the value of intermediation services and services with implicit fees has led most countries with a GST to adopt the exemption approach. Under this approach, financial services are generally exempt from the GST, except that *certain* fee-based services rendered by financial institutions could be taxed, and exported financial services are zero-rated. The is the model adopted by the EU and followed by many other countries. More recently, a number of countries (e.g., Australia, New Zealand, and Singapore) have expanded their GST bases beyond that of the EU model by taxing *most* fee-based services rendered by financial institutions.

EU model

In the EU, member states are required to harmonize their GSTs consistent with the rules in the Sixth Directive. The Sixth Directive mandates the exemption of a broad range of financial services that include insurance,[59] but allows member states to grant their taxpayers the option to treat such services as taxable. Germany and France have availed themselves of this optional provision to a limited extent.

While practices vary, most member states exempt “core” financial services that relate to lending; bank accounts; and dealings in money, shares, and bonds; but they tax certain fee-based services (so-called “secondary” services) rendered by financial institutions, such as financial advisory services and safety deposit boxes. Financial services are zero rated if supplied to customers outside the EU or directly linked to exported goods.[60] Thus, financial institutions can claim input credits for taxes paid on purchases used in rendering exported financial services. By and large, the EU model has been adopted by most OECD countries.[61]

Merits and limitations

Exempting financial services clearly avoids the necessity of ascertaining the value of intermediation services and other services with implicit fees, thus lowering both the administrative costs of the tax authorities and the compliance costs of the taxpayers.

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[59] Article 13(B)(a) and (d).

[60] Article 17(3)(c) of the Sixth Directive.

[61] For a survey of OECD country practices, see *Consumption Tax Trends* (OECD, 1995).

However, since credits for taxes paid on inputs associated with the provision of exempt financial services are denied, cascading would result, as noted earlier, if the exempt services are in turn used as business inputs by registered GST persons.

The exemption of financial services also results in price distortions affecting households and businesses differently. The consumption of such services by the former would be undertaxed relative to other taxed goods and services (because the value-added of the exempt services would escape the tax net) while consumption by the latter would be overtaxed (because of cascading). To the extent that the value of fee-based services could be readily ascertained, exempting them would unduly narrow the tax base and reduce revenue.

While administration and compliance costs of valuing financial services are lowered by the exemption approach of the EU model, it generally leads to complications in ascertaining the portion of input taxes that would be creditable for any financial institution that also renders taxable services. The complexity in computing allowable input tax credits naturally rises with that of the product lines and activities of the financial institution.

South Africa model

South Africa follows the EU model in exempting core financial services, but goes beyond the EU model in that it taxes most fee-based financial services, including nonlife insurance (see below), that are supplied to domestic customers (all exported services remain zero rated). This model has been followed by a number of countries (e.g., Australia and Singapore) that have recently introduced GSTs, albeit to a lesser extent.

Merits and limitations

By taxing most fee-based financial services, exemption of the financial sector is limited mainly to intermediation services and other financial services with implicit fees, which leads to a lower degree of cascading and distortion than the EU model. At the same time, however, with a broadened scope of taxed (fee-based) financial services, the incentive by financial institutions to convert such services, when supplied to households, to exempt ones with implicit fees would also increase (this incentive is likely to be marginal, however, if the GST rate is low). Likewise, a distortion could be introduced between different types of financial institutions—some traditionally more fee-based than others—that offer similar services.[62]

The South Africa model does not resolve the administrative and compliance costs of the EU model in dealing with the problem of apportioning allowable input tax credits. To lower such costs and to further reduce the remaining cascading stemming from exempted financial

[62] The extent of this distortion would clearly depend on the degree of substitutability between such services (e.g., between an account in a deposit bank and one with an asset management firm), which tends to correlate positively with the depth and breadth of the financial sector.

services used as business inputs—and thus to preserve the competitiveness of the financial sector—Singapore has allowed financial institutions to recover the GST on their inputs on the basis of fixed proportions differentiated by type of financial institution. Since the fixed GST recovery ratios apply to all the GST paid on inputs, the need to compute allowable input tax credits based on taxed services, exempt services, and exported services is obviated.[63]

Taxing financial services on the basis of addition method

While difficult to ascertain directly on a transaction-by-transaction basis, the value-added of financial services provided by a financial institution can nevertheless be calculated by the sum of its wages and profits (the so-called addition method in determining value-added). The GST can then be applied directly on this sum.

Israel currently taxes the full value of financial services rendered by financial institutions (including nonlife insurance companies) on the basis of the addition method. This tax is administered by the income tax authority outside the regular (credit-invoice) GST regime. As a consequence, banks are not allowed to claim input tax credits for the regular GST paid on their purchases; nor can the tax on the services provided by the financial institutions be recovered by registered businesses that purchase such services.

Merits and limitations

The Israeli approach allows financial services provided by banks to households to be taxed at relatively low administrative and compliance costs, since the tax base can be computed directly from the banks' accounts. However, this approach results in more cascading than the EU model on that part of the banks' financial services that are supplied to businesses. Under the EU model, cascading is limited to the banks= purchased inputs (inclusive of any GST paid). Under the Israeli approach, cascading extends to the value-added originating from the banks themselves.

Taxing financial services on the basis of cash-flow

A novel approach to taxing financial services (inclusive of intermediation services and other financial services with implicit fees) has been proposed by Poddar and English on the basis of the cash-flow method.[64] The basic idea behind this method can be illustrated by a relatively simple example. Assume that a bank charges 8 percent on its loans and pays 3 percent on its deposits, so that the interest spread is 5 percent. The cash-flow method taxes

[63] See Jenkins and Khadka (1998), op. cit. The fixed GST recovery ratios range from 40 percent (life insurance companies) to 98 percent (off-shore banks).

[64] See Poddar and English (1997), op. cit. The authors' proposal has formed the basis of a detailed report recently submitted by Ernst & Young to the European Commission entitled *The TCM/TCA System of VAT for Financial Services*. This report is available directly from the EU.

(say, at 10 percent) the bank on all its inflows but provides a credit on all its outflows. For a deposit transaction of 100, the bank incurs a tax of 10 when the deposit is received, but gets a tax credit of 10.3 when the deposit is withdrawn with interest. The combined tax effect of this deposit transaction is a net tax credit of 0.3. However, the bank typically engages in a loan transaction associated with the deposit. When the loan of 100 is made, the bank gets a tax credit of 10, but incurs a tax of 10.8 when the loan is repaid with interest. The combined tax effect of this loan transaction is a net tax of 0.8. Taking both the deposit and loan transactions into account, the overall tax effect is thus 0.5, which is the tax rate on the interest spread. In general, these financial flows have mirror images in the depositor's and borrower's accounts, which have been omitted for simplicity from the above description.

Merits and limitations

While the cash flow method does allow the taxation of all financial services under a credit-invoice GST without leading to cascading, it is not without limitations. Rules are required, for example, to distinguish between debt and equity flows—the latter flows being outside the scope of the GST. Furthermore, all taxpayers—not just the financial institutions—would be required to calculate the tax on their cash flows. The administrative and compliance costs associated with this requirement are unclear but could be substantial.[65]

The cash-flow method of taxing financial services as proposed by Poddar and English is currently being considered by the EU. No other country has so far adopted such a method. There is, therefore, substantial uncertainty about its administrative implications.

Zero-rating financial services

To overcome the difficulty in directly taxing intermediation services and other financial services with implicit fees under a credit-invoice GST, to obviate the need to allocate input tax credits between taxable and exempt services, and to avoid the problem of cascading if such services are simply exempted, one could instead zero-rate these services (fee-based services would still be taxable as usual). With zero rating, all financial services are formally fully in the GST net, thus allowing financial institutions to claim full input tax credits on their purchases. No cascading can, therefore, result.

[65] To alleviate such costs, Poddar and English have proposed a system of tax suspense accounts (known as "tax calculation account"—hence the name TCA associated with their proposal) for registered taxpayers that essentially obviates any actual tax payment before a financial transaction is unwound. However, since an intertemporal dimension is being introduced in this regard, the "time value of money" would need to be taken into account, which in turn necessitates the problematic choice of an appropriate discount rate. For details, see Poddar and English (1997), op. cit.

Merits and limitations

The zero rating approach would not only eliminate cascading completely, it would also substantially reduce administrative and compliance costs, since no apportioning of input tax credits would be needed. Zero rating does not imply that the value-added of zero-rated financial services purchased by businesses would escape the tax net, since such value is incorporated into the value of the output of the businesses that purchased the financial services as inputs. It does mean, however, that financial institutions would not bear any burden of the GST, since input tax credits are fully recoverable by them. The competitiveness of the financial sector is, therefore, preserved.

Zero-rating intermediation services and other financial services with implicit fees does have limitations. First, the value added of such services provided by financial institutions escapes the tax net when such services are purchased by households, thus distorting the relative prices of financial services and other taxed nonfinancial goods and services in household consumption. To the extent that financial services have no close substitutes, this distortion is, in all likelihood, minimal. Second, compared to the exemption approach, there is a revenue cost with the zero-rating approach—stemming from the granting of input tax credits to financial institutions under the latter approach that would not have been allowed under the former. The magnitude of the revenue cost would depend clearly on the applicable tax rate.[66] Finally, if fee-based services are taxed but other services are zero-rated, financial institutions would have an incentive, similar to that under the exemption approach, to convert the former into the latter.

C. Alternative GST Treatments of Insurance and Country Practices

In discussing the different GST treatments of insurance, it is important to distinguish between life and nonlife insurance. The reason for this is that, while all types of insurance are a form of fee-based financial services (the fees being a part of the insurance premiums), a significant part of life insurance premiums represents additions to the savings of the insured and, therefore, should not be taxed under the GST.

Life insurance

Life insurance is universally exempted under the GST, irrespective of a country’s GST treatment of other financial services. This exemption would not lead to cascading, as the primary purchaser of such insurance is the final consumer. However, to the extent that the bulk of the premium of a life insurance policy should not be taxed at all, exempting it from the GST would still allow some GST elements to remain in the premium. This tax burden

[66] Of course, the difference in the revenue cost between the two approaches could be small if, under the exemption approach, exempt financial institutions are still allowed, as in Singapore, a partial recovery of their input taxes.

could be reduced by granting life insurance companies partial recovery of the GST paid on their purchases (as in Singapore), or completely removed by zero rating them altogether.

Nonlife insurance

For GST purposes, most countries treat nonlife insurance in the same way as they treat other financial services. Hence, nonlife insurance is exempt in the EU; taxable in countries like Australia, New Zealand, Singapore, and South Africa where many fee-based services are taxed; and taxed in Israel under the addition method.

The economic and administrative consequences of exempting nonlife insurance are substantively similar to exempting other financial services, including those related to cascading and costs of administration and compliance. If, instead, nonlife insurance premiums are taxed, overtaxation of insurance services would result, since a part of the premiums covers expected losses and does not, therefore, represent value added. To overcome this problem, New Zealand has developed, in consultation with accountants and the insurance industry, an approach that involves the grossing-up of indemnity payments by a “deemed” GST. This deemed GST can be claimed as an input tax credit by the insurer.

The New Zealand approach to taxing nonlife insurance can be illustrated as follows. The GST is charged on insurance premiums. If the insured is a GST-registered business, then the GST on the premiums could be recovered as input tax credits under the normal credit mechanism of the GST. The GST on the premiums would not be recoverable if the insured is a nonregistered person (i.e., a final consumer or exempt business). When an indemnity payment of, say, 1,000 is made by the insurer, this payment is grossed up to 1,100 (assuming the applicable GST rate is 10 percent) on account of the deemed GST. The insurer suffers no burden from the grossing-up procedure because the 100 in deemed GST is recoverable.

If the indemnity payment is received by a GST-registered business, it must report the deemed GST as an output tax. Hence, neither tax revenue nor the insured is affected by the grossing-up procedure. If the recipient is a final consumer or exempt business, the government recovers the revenue loss (stemming from allowing the insurer to claim a tax credit for the deemed GST) when the insured uses the proceeds of the indemnity payment (inclusive of the deemed GST) to purchase taxable replacement goods. Again, the grossing-up procedure has no impact on either tax revenue or the insured.[67]

Australia and Singapore follow broadly the New Zealand approach in taxing nonlife insurance.

[67] See Thomas S. Neubig and Harold Adrion, “Value Added Taxes and Other Consumption Taxes: Issues for Insurance Companies,” *Tax Notes* (November 22, 1993); and Schenk (1994), op. cit.